report

Nottinghamshire County Council



meeting PLANNING AND LICENSING COMMITTEE

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Corporate Director (Communities)

NEWARK AND SHERWOOD DISTRICT COUNCIL REF.NO. 3/07/01793/CMW

CONSTRUCTION AND OPERATION OF AN ENERGY RECOVERY FACILITY THROUGH THE INCINERATION OF WASTE TOGETHER WITH ANCILARY INFRASTRUCTURE INCLUDING A WASTE BULKING/TRANSFER STATION, ADMINISTRATION/VISITOR CENTRE, LANDSCAPING AND CREATION OF NEW INTERNAL HAUL ROAD.

LAND AT FORMER RUFFORD COLLIERY, RUFFORD.

APPLICANT: VEOLIA ENVIRONMENTAL SERVICES NOTTINGHAMSHIRE LIMITED.

Purpose of Report

To consider a planning application for the construction and operation of an Energy Recovery Facility (ERF) with ancillary infrastructure including a waste bulking/transfer station, administration/visitor centre, landscaping and creation of a new internal haul road on land at the former Rufford Colliery, Rufford. The key issues relate to compliance with waste management policy, in particular Planning Policy Statement 10: Planning and Sustainable Waste Management, the selection of the former Rufford Colliery site for the development and how it satisfies local planning policies, and an assessment of the potential environmental impacts of the development, with particular reference to climate change, landscape, and ecology.

The site lies within an area designated as countryside. Accordingly the application has been treated as a 'departure' from the Development Plan. The recommendation is to grant conditional planning permission subject to the applicant entering into a Section 106 legal agreement and referral to the Government Office for the East Midlands.

1. **Executive Summary**

- 1.1 This planning application raises a number of complex policy, technical and environmental considerations, and in order to assist Members' understanding of all the issues, the report has been broken down into a number of discrete sections.
- 1.2 Section 2 deals with the background to the application, including a description of the site and its location. The site forms part of the pithead of the former Rufford Colliery, approximately one kilometre north of Rainworth. The site is intermittently used for coal stocking by virtue of a planning permission granted in 1996 and which expires in 2011. The site is accessed from the A617 Rainworth By-Pass, linking to the Mansfield Ashfield Regeneration Route. A number of important sites with nature conservation interest lie close to the application site.
- 1.3 The description of the development is set out in Section 3. The application is for a Energy Recovery Facility through the incineration of waste. The plant has been designed to have an annual throughput of some 180,000 tonnes of waste, brought to the site directly by either refuse collection vehicles, or by larger vehicles carrying bulked waste from one of a number of waste transfer stations. The larger part of the building contains two chimneys, rising to a height of 75 metres above ground level.
- 1.4 Waste brought to the site as part of the Council's Waste PFI Contract – that dealing with municipal solid waste and generally collected by the District Councils in the locality – would be burned in two furnaces. The heat produced would be used to generate up to 15mW of electricity, of which 13mW would be released to the national grid, the remainder being used to power the plant. Potentially heat could be used to supply adjacent premises, although at this stage this is a potential supply and not a realistic practical proposition.
- 1.5 The main residues from the process would be Incinerator Bottom Ash and Flue gas treatment residues, both of which would be taken off site for processing and usage elsewhere. The flue gases would be released to the air through a series of filters prior to emission via the two chimneys.
- 1.6 Sections 4-6 deal with publicity, consultations and the collection of data necessary to deal with the issues raised. The application is one that is supported by an Environmental Impact Assessment. The regulations governing this require that any additional information which arises during the consultation process should be made known to all consultees. This has resulted in a second major tranche of consultation.
- 1.7 The main 'technical' consultees are the Environment Agency, Natural England, Nottinghamshire Wildlife Trust, Health Protection Agency,

and OPUN (on design advice). A wide range of the Council's own staff have made comments.

- 1.8 Regional bodies and other local authorities have been consulted. Newark and Sherwood District Council, in whose area the application lies, has objected from a planning perspective principally on the grounds of being contrary to policy. Mansfield District Council have raised no objections in principle. Rainworth Parish Council have objected.
- 1.9 The application has been advertised in accordance with the Council's adopted Statement of Community Involvement, and in line with statutory requirements. A total of 105 letters of objection have been received, of which 34 are pro-forma style letters. Two of the letters are from the Sherwood House Nursing Home, incorporating a petition signed by 63 of the residents. One letter has been received in support.
- 1.10 The predominant opposition is from a local action group, People Against Incineration (PAIN) which has made detailed objections at both the initial and later consultation stages. The substance of their objection is set out in some detail in the report, but principally relates to the need for the proposal, the choice of incineration to deal with the Council's Municipal Waste, the impact of the proposal on surrounding communities and local habitats, health issues, traffic, potential pollution and impact on climate change.
- 1.11 Sections 7 13 set out the Council's observations on the issues raised through the consultation process. Following a brief introductory section (section 7), the next section (section 8) examines the European, National and Regional policy context, particularly the National Waste Strategy which reinforces the waste hierarchy whereby disposal to landfill is considered the least favoured waste treatment option and should be replaced by more sustainable solutions such as energy recovery. The government is committed to reducing the amount of waste sent to landfill in order that it can comply with the European Landfill Directive. Historically within Nottinghamshire municipal waste has been disposed to landfill (other than that which goes to the Eastcroft incinerator in Nottingham).
- 1.12 Section 9 deals with the provision of waste management facilities within the county, with some explanation of the Waste PFI contract, and how this proposal forms a crucial component of that contract,
- 1.13 The following section, section 10, examines the options for residual waste management that fraction of the waste stream that remains after waste reduction and a variety of recycling initiatives. The section looks at assumptions made about waste growth, drawing on information from national and regional strategies, the Waste PFI contract, and the emerging Waste Development Framework. A

comparative assessment of other waste management options is considered.

- 1.14 Section 11 sets out the waste planning policy context. As well as national, regional, county and local planning policies, any decision made on the application will also be guided by the County's waste planning policy. It is recognised that the current Waste Local Plan, although still the statutory waste planning policy document, is becoming out of date and has yet to be replaced by the new style Waste Development Framework, with revised issues and options for a new waste core strategy not likely to emerge until later this year.
- 1.15 Planning Policy Statement 10 (PPS10) on Planning and Sustainable Waste Management features high in the consideration of the application, and the objectives which PPS10 sets out are tested on an individual basis.
- 1.16 Section 12 deals with the suitability of Rufford Colliery for the development of an Energy Recovery Facility, noting that the site is not allocated for waste development in the Waste Local Plan and is on land designated as countryside within the Newark and Sherwood Local Plan. For this reason the application is being treated as a departure from the Development Plan.
- 1.17 However, employment development at former Colliery sites is considered to be an allowable exception to the Local Plan. It is known that the land owners, UK Coal, are promoting a large part of the remainder of the pit head site for business use, and have already submitted a scoping opinion in advance of an anticipated planning application.
- 1.18 The development of this site also complies with aspirations set out in Regional and sub-regional documents.
- 1.19 Section 13 deals with the assessment of the potential environmental impacts. Of particular relevance are potential impacts on sustainability and climate change, pollution and health issues, the design of the plant, transport and traffic issues, landscape and visual assessment, ecology, hydrology and flood risk, hydrogeology, ground contamination and ground stability, noise and vibration, odour, treatment of ash and other residues, and archaeology.
- 1.20 Section 14 looks at other implications, including Human Rights Act issues.
- 1.21 Section 15 draws together all the information considered into a conclusion. The report highlights the importance of this proposal as a means of managing Nottinghamshire's waste. It notes that the Waste Local Plan, although a 'saved' document by the Secretary of State, is not up to date, and in those circumstances, PPS10 carries significant weight.

- 1.22 The National Waste Strategy seeks to move the management of waste further up the waste hierarchy, which this proposal would achieve. Regional policies point to this site as being in a suitable location for such a development. It is accepted that the site is situated within land designated as countryside, and this fact is balanced against other planning policies which support development at the former Rufford Colliery. Prematurity of the potential wider redevelopment of the former Rufford Colliery is only one aspect, and a decision has to be made taking in a wider range of policy and detailed considerations, not least the weight given to the policies in PPS10 as material considerations which may supersede policies in a development plan.
- 1.23 It is concluded that this method of waste management is tried and tested, and a number of Waste Authorities have moved, or are moving to, such an approach. Members have seen at first hand how such modern plants operate.
- 1.24 Matters around the impact of the proposal in terms of climate change have been given comprehensive coverage, and whilst other technologies may, under certain circumstances, result in lesser impact, energy recovery is nevertheless considerably better than landfill. Should the heat produced by the plant be able to be harnessed to provide heat for adjacent development at some point in the future, then the climate change impacts are lessened even further.
- 1.25 A wide range of environmental issues are raised by the application, and it is concluded that these can be satisfactorily dealt with by means of design and operation of the plant, through the granting of this permission incorporating suitable conditions and by a legal agreement covering the management of certain issues that cannot be controlled by conditions. The development would also require authorisation by the Environment Agency on the parallel Pollution Prevention and Control permitting process.
- 1.26 Finally, Section 16 sets out the recommendations, which are to refer the application to the Government Office for the East Midlands as a departure, for a Legal Agreement to be secured, and upon completion of both of those stages, for planning permission to be granted subject to conditions.
- 1.27 The report concludes with a reference to background papers, appropriate plans, and appendices covering a key fact sheet, a glossary of terms used, a summary of objections provided by PAIN, the Heads of Terms for the Legal Agreement, and the Schedule of Conditions to be attached to any planning permission granted.

2. Background

The Site and Surroundings

- 2.1 The application site lies within a larger area of land which comprises the former pit head and associated infrastructure of the closed Rufford Colliery, owned by UK Coal. The site is located approximately 5.5km to the east of the centre of Mansfield and 1km to the north of the village of Rainworth. For identification purposes the general location of the site is shown on Plan 1. Access to the site is obtained from the A617 Rainworth Bypass via a signal controlled junction at its intersection with Colliery Road, this road in turn providing access to the existing private internal colliery access road.
- 2.2 Members will recall visiting the site on 12 December 2008.
- 2.3 The boundaries of the planning application site are identified on Plan 2 and have a total site area 5.4ha. The application site includes the private colliery access road, the main development site for the ERF and an area to the north of the main site to provide for an alternative internal colliery access road to replace the route that would be lost by the development
- 2.4 The main development site is situated to the west of this access road and is roughly rectangular in shape, measuring approximately 200m by 250m and 4.05ha in site area. The development site is generally despoiled in character and comprises an essentially level surface of compacted colliery waste to the west, a hard surfaced former car park to the east and a central area of vegetated undulating land which runs north-south across the site dividing these two areas.
- 2.5 The land immediately surrounding the application site to the north is unrestored and retains visible signs of the former mining activity. Although many of the colliery buildings have been cleared and the shafts capped, the site's despoiled character retains a weighbridge office, storage buildings, areas of hard standing, car parking, roadways and lighting gantries. The most prominent lighting gantry is situated approximately 200m north of the main development site and is approximately 50m in height. A disused railway line is situated approximately 60m to the west.
- 2.6 The nearest residential properties are located approximately 550m to the south on Colliery Road. These properties comprise Sherwood House Nursing Home and a pair of semi-detached houses (1 & 2 Colliery Road). Further to the south and west beyond the A617 Rainworth Bypass is Rainworth village. The closest properties within this village are approximately 800m from the development site. Properties in Helmsley Road, Rainworth are approximately 1.1km to the south-west. The site is remote from residential properties on its eastern and northern boundaries, the nearest properties being

Rufford Forest Farm some 2.3km to the east and properties in Clipstone village some 3km to the north.

- 2.7 The site is situated within the Sherwood Special Landscape Area and Greenwood Community Forest Area. Rainworth Heath and Rainworth Water Mature Landscape Areas are situated immediately to the south-west.
- 2.8 The application site is not covered by any statutory nature conservation designations. The closest area with a statutory designation for its nature conservation interest is Rainworth Heath Site of Special Scientific Interest (SSSI), some 150m south of the site at its closest point and which includes both wet and dry heath. An area of scrub and a strip of birch woodland forms a connecting link from Rainworth Heath SSSI to the proposed development site and this is locally designated as a Site of Importance for Nature Conservation (SINC). Rainworth Water, a Local Nature Reserve (LNR) can be found 250m to the south-east of the site.
- 2.9 The local ecological designations are identified on Plan 3. Within the wider surrounding area there is one European designated site, the Birklands and Bilhaugh Special Area of Conservation (SAC) which lies approximately 8km to the north, and 13 SSSIs within 10km of the site. Within a 2km radius of the site there are 12 SINCs and one LNR.

Relevant Planning History

- 2.10 Rufford Colliery closed in 1993 and most of the buildings and colliery infrastructure were demolished when the site was cleared in 1994/95. The colliery site has been used for the stocking and blending of coal for a long time, planning permission having been originally granted for this use in 1958 and thereafter periodically renewed. The most recent planning permission (ref 3/95/1289) for the continuation of coal stocking activities was granted in April 1996. This permitted site is identified on plan 4. Although coal stocking continues on the site, the amount of material stored and movements associated with this activity are now relatively low.
- 2.11 The permission was granted for a temporary period expiring on 24th April 2011 (or earlier in the event that the use of the site ceased). Conditions attached to the planning permission require the site to be restored to heathland/woodland in accordance with a scheme to be submitted to and agreed by the County Council upon the cessation of coal stocking.

Waste PFI Contract

- 2.12 In June 2006 Nottinghamshire County Council signed a 26-year PFI waste management contract with Veolia Environmental Services Nottinghamshire Ltd (hereafter referred to as 'Veolia') for the management of Nottinghamshire's municipal waste. The contract requires Veolia to make a capital investment of £140m over the term of the contract in the phased development of new recycling, composting, treatment and delivery facilities, as well as plant and equipment, to deliver the requirements of the PFI Contract.
- 2.13 Proposed facilities include a Materials Recycling Facility in Mansfield, a new Composting facility, new and upgraded Household Waste Recycling Centres and Transfer Stations, as well as the construction of an Energy Recovery Facility.
- 2.14 The contract is performance based and includes key performance indicators (KPIs) to monitor Veolia's performance, which are primarily aimed at achieving government performance standards for recycling, composting and landfill diversion and a range of customer focused and sustainable outcomes. Key contract targets include:
 - a) Reaching a recycling and composting level of at least 52% by 2020.
 - b) Improving on the statutory Landfill Allowance Trading Scheme (LATS) targets for Nottinghamshire, and having virtually no biodegradable material sent direct to landfill by 2012.

3. **Proposed Development**

Legislative framework

- 3.1 ERFs are deemed to fall under Category 10 of Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. An Environmental Statement (ES) and Non-Technical Summary have therefore been submitted to support the planning application, prepared under the requirements of the 1999 Regulations. The purpose of the ES is to enable an assessment of the significance of any environmental impacts which may occur as a result of the development and identify measures proposed to mitigate any such impacts. The ES includes an appraisal of alternative sites. A Planning Supporting Statement and Design and Access Statement have also been submitted which explain the scope of works seeking planning permission.
- 3.2 The development proposals are summarised on a 'Key Facts Sheet' attached as Appendix 1 and discussed within the following section.

Choice of Site

- 3.3 To assess the most appropriate location for the development of the ERF the applicant has reviewed the municipal waste arisings within Nottinghamshire on a ward by ward basis. This process has identified a belt of land within mid-Nottinghamshire which ensures the overall average distance waste is transported within the contract area is minimised.
- 3.4 Within this mid-Nottinghamshire area of search, the applicant has undertaken an assessment of potential sites. A total of 118 sites were identified as part of this first level site selection spread across the area of search, the sites being situated within the administrative areas of Ashfield, Mansfield and Newark and Sherwood.
- 3.5 A second stage sequential desk top appraisal of these 118 sites, taking into account site size, availability, compatibility with development plan policy and proximity to incompatible uses, reduced the number of potential sites to 36. These sites were further examined at a third stage which involved a site visit and a reassessment of their suitability. This third tier appraisal eliminated all but four sites.
- 3.6 A final fourth level sequential appraisal was undertaken of the remaining four sites those at Portland Industrial Estate, Ashfield; land off Old Newark Road, Mansfield; land at Mile Hill, Mansfield and land at Rufford Colliery using the following criteria:-
 - Planning vision for the area;
 - Site specific allocation
 - Sensitive receptors
 - Landscape considerations
 - Natural environment
 - Cultural heritage
 - Road access
 - Alternatives to road access
 - Energy utilisation
 - Flooding
- 3.7 As a result of this process the former Rufford Colliery site was selected since it was considered to have more positive attributes than the other sites. The applicants' study concludes that the Rufford site offers significant potential for regeneration and redevelopment, being situated within the footprint of a former colliery, has policy support through the adopted local plan which permits employment redevelopment of such sites, is remote from sensitive receptors to noise, dust and odour, is located within a special landscape area although impacts can be mitigated through design, has no ecological designations although designated land adjoins the site, has no cultural heritage considerations, is served by good road access with

direct access to the strategic highway network and connection to railway lines and is not susceptible to flooding.

3.8 Whereas, the site currently has no market for community heating, the redevelopment of adjoining land may offer potential for a community heating project in the future.

Buildings and Works

- 3.9 Planning permission is sought to erect an ERF for the incineration of waste and associated development. The main elements of the development comprise:
 - the main ERF building;
 - an administration and education building incorporating gatehouse;
 - traffic, access, landscaping and external works.
- 3.10 A plan showing the general proposed site layout is attached as Plan 5. Although not identical in terms of design Members will recall visiting similar ERF plants at Portsmouth and at Chineham near Basingstoke on 15 October 2008.

ERF Building

- 3.11 The main ERF building would be located within the western part of the application site. The building has been positioned such that it would be parallel to the existing Colliery Road and in general alignment with the railway line so that the narrowest façade of the building faces Rainworth village.
- 3.12 The building would be constructed with a maximum length of 133m and width of approximately 98m. This area would be covered with a perimeter skirt which has a maximum height of 16.25m and is supported around its edge by steel columns and bracing, rising out of a perimeter grassed bund. The perimeter skirt encloses the tipping hall, processing and residue output areas as well as circulation routes. The central part of the building is elevated with a curved roof rising from 24.7m to a maximum height of 39.5m.
- 3.13 The ERF has been designed using modern materials, being of a steel construction predominantly clad with non reflective aluminium sheeting, translucent polycarbonate panels and metallic ventilation louvres. Two chimneys each with a diameter of 1.36m would rise out of the ERF building to a height of 75m. The outer surfaces of the chimneys are proposed to be finished in a non-reflective matt grey finish.
- 3.14 The ERF building would also provide a waste and recyclables transfer station/bulking facility comprising five transfer bays. Each bay would be 10m long by 6m wide and would be constructed from

reinforced concrete walls 4m in height. The facility would deal with approximately 10,000 tonnes per annum (tpa) of locally derived recyclable material delivered by the waste collection authorities, Veolia and others. The bays would be positioned under the northern canopy of the facility.

Administration and Education Building Incorporating Gatehouse

- 3.15 The administration and education building would be detached and sited to the east of the ERF building, but connected by two enclosed overhead walkways. This square building is, approximately 22m by 22m, being a three storey flat roofed construction with a maximum height of 11.95m.
- 3.16 The materials proposed for the outer surfaces of the administration and education building have been designed to deliberately contrast with the ERF building using a predominantly glazed ground floor and timber cladding above.
- 3.17 The building would provide offices, meeting rooms and facilities for staff including mess rooms, kitchens and washing/changing facilities and would also incorporate the weighbridge gatehouse. The building would also provide conference facilities and an education/visitor centre which would provide a base to develop links with local educational establishments for teaching about waste management, recycling and energy recovery.

Traffic, Access, External Works and Landscaping

- 3.18 General access to the site is via Colliery Road which links to the A617 Rainworth bypass to the south. Existing road marking on the Colliery access would be replaced and a CCTV security monitoring system would be installed on this road. No street lighting is to be installed.
- 3.19 Staff and visitor parking facilities consisting of 35 staff parking spaces (2 disabled), 10 visitor parking spaces and 1 parking space for buses/coaches would be provided at the front of the ERF building. Covered parking for eight bicycles would also be provided adjacent to the administration building. Two 18m surface mounted weighbridges are to be provided on the entrance and exit of the site. An emergency access road would be provided around the outer periphery of the building for fire appliance access and building maintenance.
- 3.20 Approximately 180m of new road would be provided along the north of the ERF site to replace that part of the internal colliery road removed as a result of the proposed development. The road would be used to access UK Coal's land situated to the north.

- 3.21 Surface water from roofs of buildings and hardstanding areas would be directed through separators/interceptors and discharged into two infiltration ponds designed to provide adequate drainage for a 1:1000 year flood event. The ponds are proposed on the eastern side of the ERF building and would be seasonally wet due to the permeable character of the soils. The applicant proposes to landscape the ponds.
- 3.22 Landscaping is principally focussed on the eastern half of the site towards the site entrance and parallel to the existing colliery access road. This enables a landscape area to be created within the key public areas of the facility around the site access, car parking area and visitor/administration building.
- 3.23 The perimeter of the ERF site would be enclosed by a continuous 2.4m high galvanised steel security fence.
- 3.24 The concept external lighting for the site has been designed to minimise light pollution and visual impact on the local environment whilst maintaining appropriate health and safety standards. The only external lighting would be within the car park area which would be switched off outside core working hours. It is not proposed to illuminate the external faces of the ERF building although downward lighting below the flat roofed building would be required for operational reasons.

Site Operations

- 3.25 The proposed ERF is designed to handle a throughput of 180,000tpa of residual municipal solid waste, equating to 85% of the theoretical maximum capacity of the plant, allowing for plant downtime and annual maintenance works. The plant has two furnace lines each having a capacity of 12 tonnes per hour. A two line plant provides operational flexibility during periods of maintenance, enabling one line to be shut down whilst the second continues to operate. The facility would operate 24 hours a day, 7 days per week.
- 3.26 Incoming vehicles carrying municipal waste for combustion would be directed to the gatehouse where they would pass over the surface mounted weighbridge. The vehicles would thereafter proceed along a one-way clockwise circulation system under the canopy of the ERF building to an enclosed tipping hall with a fast operating door where they would discharge their load into a waste storage bunker.
- 3.27 The waste storage bunker is designed to provide 5,500 cubic metres of storage capacity which equates to approximately three days storage. Additional storage capacity can be achieved through the 'stacking' of waste through the use of an overhead crane. The base of the waste bunker is proposed to be excavated 12m below existing ground levels.

- 3.28 The overhead grab crane would transfer waste into the feed hoppers of the furnaces with bulky waste being previously shredded. Unsuitable feedstock for combustion would be sorted and removed. Waste would be fed into the furnaces by gravity, a hydraulic ram system and moving grates. Air is fed into the combustion area to feed the furnace. The furnace is designed to ensure a minimum temperature of 850°C with a minimum of two seconds flue gas residence at this temperature to ensure the destruction of dioxins, furans, polycyclic aromatic hydrocarbon (PAHs) and other volatile matter. At the end of the combustion grate, only the inert or incombustible material remains, known as 'bottom ash'.
- 3.29 The heat released by the combustion of the waste is recovered within a water boiler which converts the water to high pressure steam which in turn feeds a steam turbine to generate 15MW of electricity. The operation of the site would use approximately 2MW leaving approximately 13MW for export to the national grid, via an underground cable. After its use within the turbine the steam is allowed to cool within condensing units and the water is re-used although it is possible for this heat energy to be exported off-site for use within a community heating scheme or industrial processes, were there to be a local demand, a process known as combined heat and power (CHP). Since no local markets have been identified at Rufford for heat energy, CHP is not proposed as part of the development.
- 3.30 After leaving the heat recovery boiler, combustion gases would be cleaned prior to their release to the atmosphere. This is achieved by means of 'an oxides of nitrogen (NOx) reduction system', gas scrubbing system and fabric filters. Each processing line would discharge into a chimney, the height of which being determined by the dispersion modelling of the emissions.
- 3.31 The main material produced by the ERF would be incinerator bottom ash (IBA). The output would be approximately 25% of input tonnage or 45,000tpa (based on 180,000tpa annual capacity). The IBA is cooled by water. Ferrous metals are removed by magnet. The IBA is then expected to be transferred to an off-site reprocessing plant where it would be recycled to form material suitable for use in the construction industry.
- 3.32 Flue gas treatment (FGT) residues comprise quantities of fine ash which are contained in the flue gas, together with the dry reaction products from the flue gas treatment process. These would be stored within enclosed storage silos within the ERF building prior to transferral to a facility in the West Midlands where the alkaline nature of the material can be used to neutralise acidic wastes prior to disposal.
- 3.33 If granted permission construction is planned to take 36 months and employ up to 250 people. Construction hours would generally take

place between 0700-1900 Mondays to Fridays and 0700 – 1300 Saturdays.

- 3.34 Once operational the applicant estimates the plant would employ 36 staff and generate 254 traffic movements per day (127 in and 127 out). The key traffic components would be:
 - a) waste collection vehicles, bulk haulage vehicles and others delivering and collecting waste 154 movements;
 - b) vehicles collecting bottom ash or FGT residues for disposal 26 movements;
 - c) vehicles delivering FGT process consumables and boiler water treatment consumables 2 movements;
 - d) staff and visitors vehicles 72 movements.
- 3.35 With specific reference to waste deliveries, municipal and street cleaning wastes collected from Ashfield, Mansfield, Gedling and part of Newark and Sherwood would be delivered directly to the ERF within refuse collection vehicles. Residual municipal waste from Bassetlaw, south Nottinghamshire and part of Newark would be bulked at district transfer stations and delivered within bulk containers. The ERF would also provide a treatment facility for municipal waste from Household Waste Recycling Centres (HWRCs) throughout Nottinghamshire.
- 3.36 The facility has been designed to a capacity which equates to Nottinghamshire's municipal residual waste arisings. However, in the event that quantities of such waste are lower, the facility may receive other wastes including commercial and industrial waste. In the event that such waste is received, traffic figures are unlikely to vary significantly from those stated above.

Submission of Additional Information

- 3.37 Following the receipt of consultation responses to the original submission it became apparent that there was a need for clarification and the submission of additional environmental information. The applicant was therefore served with a formal request for information under Regulation 19 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 in a letter dated 1st September 2008 (Reg. 19 request).
- 3.38 The applicant subsequently responded to this letter with a detailed report. This report did not alter the overall design concept of the development but it did provide the necessary level of environmental information to satisfy the Council that the Environment Statement

provides a full assessment of the potential environmental impacts of the development. The report was split into the following sections.

- Section 2 Climate Change Impacts: Alternative Technology Appraisal
- Section 3 Energy Recovery
- Section 4 Anaerobic Digestion
- Section 5 Penalties for NCC not delivering sufficient waste to the ERF
- Section 6 Design Issues
- Section 7 Ecological Issues Survey Work and Mitigation
- Section 8 Ecological Issues Emissions and their impact on Ecology (Natural England Observations)
- Section 9 Landscape and Visual Impact
- Section 10 Connection of electricity grid
- Section 11 Alternative Site Appraisal
- Section 12 Night Time Lorry Movements
- Section 13 Low Carbon Construction
- Section 14 Recycling of Bottom Ash
- Section 15 Traffic Figures
- Section 16 Air Quality Measurement.
- Section 17 Post Submission Clarification Statements.
- 3.39 The issues raised within this response are assessed in detail within the planning considerations section of this report.
- 3.40 Following the submission of this information it became apparent that a carbon assessment report which had been submitted as a background paper to inform the response to Section 2 Climate Change Impacts: Alternative Technology Appraisal, contained some errors in the way carbon emissions had been calculated. The applicant submitted a corrected addendum to this report as part of a supplementary Reg. 19 submission on the 19th November 2008. This addendum also provided further clarification regarding waste collection figures. The issues raised within this response are assessed in detail within the planning considerations section of this report.

4. **Consultations**

- 4.1 **Government Office for the East Midlands:** Have acknowledged the planning consultation but have not provided a written response.
- 4.2 **East Midlands Regional Assembly (EMRA):** The Regional Assembly, acting as the Government's regional planning body generally supports the development insofar that it supports policies within the Regional Spatial Strategy and Regional Waste Strategy aimed at achieving zero waste growth at regional level by 2016, reducing the amount of waste sent to landfill in accordance with the EU Landfill Directive, exceeding Government targets for recycling and

composting, with the objective of bringing all parts of the region up to current levels of best practice, and taking a flexible approach to other forms of waste recovery on the basis that technology in this area is developing very quickly and is difficult to predict over a 20 year period.

- 4.3 In terms of technology chosen, Energy from Waste (EFW) is an established technology in the UK and clearly has a part to play in reducing the reliance on landfill and moving waste management up the hierarchy. Nevertheless EFW has climate change impacts. Whilst the plant would generate electricity, there appears to be no intention to utilise the considerable heat which is generated by the technology.
- 4.4 Within the current draft Regional Spatial Strategy, the former Rufford Colliery site in Rainworth is part of the Northern Sub-Area. This subarea contains the sub regional centres of Chesterfield, Mansfield, Newark and Worksop. It is also a regeneration priority area with former colliery land around Mansfield to the east and a strong pattern of recycling facilities around Chesterfield to the west.
- 4.5 The broad pattern of facilities should reflect these strengths and seek to combine a centralised strategy of larger facilities on previously used land (including former colliery land) with the expansion of existing facilities. The Regional Assembly would therefore support the development of the Rufford Colliery site as the project is in general conformity with the Regional Plan.
- 4.6 **East Midlands Development Agency (EMDA):** EMDA supports the development and recommends approval. An aim within the Regional Economic Strategy 'A Flourishing Region' (RES) is to transform the way society uses resources and uses and generates energy to ensure a sustainable economy, a high quality environment and lessen the impact on climate change. EMDA advise that the current proposals will assist in achieving this. A priority action in the RES is to maximise the economic and environmental benefits of renewable energy technologies by promoting their development and deployment.
- 4.7 **Department for Environment, Food and Rural Affairs (DEFRA):** Have not responded. Any response received will be orally reported.
- 4.8 **Paddy Tipping MP:** Considers it is inappropriate for Nottinghamshire County Council to make a decision on the application since Nottinghamshire County Council is a partner with Veolia in delivering the PFI waste contract. It is considered that the most appropriate way forward in terms of transparency and fairness is for the application to be determined by the Secretary of State following a public inquiry. With regard to the application itself, concerns are raised regarding:

- a. The application site is designated to be returned to heathland and should therefore be considered as a greenfield rather than a brownfield site.
- b. The site is in the heart of Sherwood Forest and the Sherwood Forest Special Landscape Area, Greenwood Community Forest Area and adjoined by Nottinghamshire Wildlife Trust's Rainworth Heath reserve. Restoration of the site would support the County Council's aim of regenerating Sherwood Forest.
- c. The development should be placed in and around the urban fringe rather than a rural setting. The site selection process has been circumspect and regeneration benefits exaggerated.
- d. The application is premature. The application should be part of a comprehensive submission with development on adjoining colliery land.
- e. The process does not recover heat energy, this is against practice advocated both at EU level and by the Environment Agency. As a result the carbon savings of the plant are relatively modest and other waste treatment methods perform better.
- f. As a result of increased recycling there will not be sufficient waste to feed the plant resulting in a necessity to import waste from some distance or use commercial waste. Given this there is a danger that recycling rates in Nottinghamshire will remain relatively low to try to meet the needs of the incinerator.
- g. Concerns are raised regarding potential pollution of drinking waters within the Sherwood Aquifer.
- h. The carbon modelling has been challenged and the methodology and justification has yet to be resolved.
- i. NCC is reminded of Newark and Sherwood's, the Environment Agency's and Natural England's reservations/objections to the scheme.
- 4.9 **Newark and Sherwood District Council:** The application was considered at the 9 December 2008 Planning Committee where it was resolved to object to the development on the following grounds:
 - a. The development does not properly recognise the status of the site as Greenfield land as a result of the restoration conditions which apply contrary to the advice in criteria (ii) of paragraph 21 of PPS10 and Draft EMRP Policy 37;
 - b. The development represents a departure from Newark and Sherwood Local Plan Policy NE1 and Joint Structure Plan Policy 2/10 which related to development in the countryside; and

- c. The development does not adequately justify the emphasis placed on the potential for the wider colliery site to provide regeneration benefits and a synergy with an ERF facility.
- 4.10 The District Council also provide the following comments/suggested planning conditions which they request NCC take account of within any decision made:
 - a. In considering this site against the others shortlisted in the final stage of assessment, the shortlisting assessment places undue emphasis on the regenerative potential of the wider colliery area without any definite proposals actually having been submitted for consideration and does not pay sufficient regard to its Greenfield status or location within the open countryside.
 - b. In view of the conclusion from the carbon assessments by the applicant and the EA, that there are other options that produce a better impact on carbon emissions (including ERF with combined heat and power), it is not considered that the applicants have justified the suitability of the scheme on Greenfield land in the open countryside.
 - c. Whilst it is agreed that none of the other sites provide a significant level of demand for CHP, the wider colliery site does not have any level of certainty attached to it for redevelopment in the context where there is neither a formal planning permission in place nor an allocation in the emerging LDF process. It remains the situation that the ERF application has been submitted in isolation from the surrounding land and not as part of a comprehensive scheme. Also, it is recommended that NCC should ensure they are satisfied that the proposals do comprise an energy recovery facility as defined under EU or national policy before determining the application.
 - d. It is recommended that NCC are satisfied that the proposals comply with the comments made by its consultees on air quality matters and in particular, a planning condition is attached to any grant of planning permission to ensure that details of the best practicable measures be employed for the suppression of dust on site during the period of construction.
 - e. Consideration of the landscape and visual impact of the proposals is a critical issue in the assessment of this application as it relates to two criteria contained in the Newark and Sherwood Local Plan Policy E17 – namely, impact on the openness of the countryside and on the amenities of local residents – as well as on other specific policies, NE1, NE8 and NE9, relating to the impact of new development on designated landscape areas and on open countryside.

- f. It is evident that while the ES provides a thorough assessment of the impact of the proposals on the existing landscape, it does not consider the proposals against the site as restored to woodland and heathland. Rather, it makes reference to the potential for adjacent land at the pit-head to be developed – land which is not subject to either a planning application or approved scheme. The Council remain concerned that the approval of this scheme, in isolation from the rest of the wider colliery site, would be premature in terms of the assessment of the impact of a comprehensive scheme on important landscape features.
- g. The County Council should follow the advice of its consultees with regard to the imposition of planning conditions or planning obligations to ensure that sites of nature conservation interest and protected species or their habitats are not detrimentally affected by the development proposals.
- h. The County Council should follow the advice provided by the Environment Agency in respect of preventing pollution to the water environment and requiring the submission of a detailed surface water drainage scheme and measures to limit surface water run-off.
- i. If minded to grant planning permission, the County Council should attach a condition (as suggested in the consultation response from the Environmental Health Officers) requiring the submission of investigations into ground conditions across the site and a scheme of remedial works together with the other assessments listed above.
- j. It is recommended that planning conditions to control the hours of construction working and operation of the site be attached in accordance with comments made by the Environmental Health Officer; including that prior consent application under Section 61 of the Control of Pollution Act 1974 would be welcomed.
- k. It is recommended that NCC should have regard to the comments made by the EA with regard to Incinerator Bottom Ash prior to the determination of the application and that planning conditions to control litter and dust generation during the construction phase of development are recommended.
- I. If minded to grant planning permission, it is recommended that a planning condition be attached to ensure that an Archaeological Watching Brief is carried out.
- m. The ES does not assess the impact on the future use of the site as woodland and heathland when restored as a requirement of the condition attached to extant planning permission ref: 3/95/1289.

4.11 After the resolution to object to the development was made a further discussion took place regarding the action to be undertaken should Nottinghamshire County Council be minded to grant the permission. The following motion was submitted and agreed as follows:

'that if Nottinghamshire County Council are minded to approve the application Newark and Sherwood District Council request the Secretary of State to "call in" the application and if the "call in" is not agreed, authorisation be given to the Head of Legal Services to seek Counsel opinion in respect of potential legal position.'

- 4.12 **Mansfield District Council:** Raise no objections in principle to the application, subject to all matters concerning Environmental Health issues raised in a joint response by Mansfield and Newark and Sherwood District Council's Environmental Health Services being given full and proper consideration and subject to conditions to cover the following issues:
 - a) The applicant shall ensure that any approved scheme shall incorporate provisions to allow any future surplus heat generated from the process to be used in nearby developments;
 - b) Landscaping including off-site landscaping works;
 - c) The submission of a sustainability statement for built structures of the development, to include details of construction methods, material and material sources, to demonstrate how the building could achieve a zero/low carbon footprint and how best sustainable practices for the operation of the facility will be used;
 - d) Provision of wheel washing facilities;
 - e) Provision of a litter management plan.
- 4.13 **Newark and Sherwood District Council/Mansfield District Council Environmental Health Officer:** Have responded jointly to the planning application following the receipt of the additional information submitted under the Reg. 19 Response. The following observations are made:

<u>Needs and Alternatives:</u> This technology remains the preferred option to ensure landfill diversion targets are met.

<u>Noise and Vibration:</u> The information provided with the application indicates that the combined effects of noise from this development will not have a major impact on the sensitive locations identified.

<u>Hydrogeology and Ground Conditions:</u> Prior to commencing the development, there are a number of further investigation works that are necessary to provide additional clarification of the contamination

at the site. However provided these are controlled through appropriate planning conditions, this department has no objections to the development based on land contamination.

<u>Air Quality:</u> Some original questions regarding the air quality assessment have now been resolved. There is therefore no objection to the development based on air quality impacts.

- 4.14 **Mansfield Eastern Area Assembly:** Have not responded. Any response received will be orally reported.
- 4.15 **Nottingham City Council:** Raise no objection in principle to the application, subject to the County Council being satisfied that there would be no significant detrimental impacts on neighbouring communities and suitable safeguards are in place to ensure compliance with relevant emission standards. Comment that the development would help to reduce the amount of waste sent to landfill by managing it further up the waste hierarchy.
- 4.16 **Rainworth Parish Council:** Object to the planning application on the following grounds:
 - a) The application is full of inaccuracies and does not contain sufficient information concerning environmental impacts;
 - b) Climate change impacts are not assessed. The facility will release 201,000 tonnes of CO₂ each year;
 - c) The application does not adequately consider the restoration controls relating to the site and could prejudice plans to create a Sherwood Forest Regional Park. Due to these controls the site must be considered as a greenfield site;
 - d) The development would result in adverse ecological impacts;
 - e) The development does not make any provision for the care and protection of Rainworth Water Local Nature Reserve, Rainworth Heath SSSI site & Rainworth Gorse SINC ;
 - f) The application is a departure to development plan policy;
 - g) The facility will not qualify as a recovery facility according to EU/UK definitions;
 - h) There is no information as to how electricity is fed into the grid;
 - i) The facility will not utilise excess heat generated through the process;
 - j) Traffic figures are based on a 180,000tpa facility and not a 210,000tpa facility;

- k) The application does not acknowledge the location of the nearby nursing home and residential properties;
- The Regional Waste Strategy calls for the use of emerging technologies, such as anaerobic digestion rather than incineration;
- m) The facility will incinerate waste which could otherwise be composted;
- n) Concerns regarding potential contamination of the aquifer and pollution of watercourses;
- Difficulties with the measurement of emissions by the Environment Agency;
- p) Pollution and its effect on humans, fauna and flora;
- q) Additional congestion on the surrounding highway network;
- r) Concerns regarding the lack of publicity;
- s) The chimney will be highly visible;
- t) Concerns that the facility will import waste from areas outside Nottinghamshire for incineration.
- 4.17 **Farnsfield Parish Council:** Raise no objections to the application. The Parish have requested that as much of the service traffic should operate outside of the working day to utilise the highway network during quieter periods.
- 4.18 **Blidworth Parish Council:** The Parish Council support the application subject to the applicant adhering to the 17.5 tonne weight restriction on the local highway network through Blidworth village.
- 4.19 **Clipstone Parish Council:** Raise objections to the development on the grounds of potential emissions from the site. The Parish support the Local MP in his request for a Public Inquiry to determine the planning application.
- 4.20 **Rufford Parish Council:** Raise objections on the grounds of air pollution, although the Parish acknowledges that the choice of location is a good one.
- 4.21 **Environment Agency:** From a planning perspective the Environment Agency (EA) raises no objections in principle. The EA confirms that the design of the ERF should be capable of meeting emission standards. The EA however raises concerns that energy recovery potentially has not been maximised. If planning permission is

granted it suggests a number of planning conditions be imposed. A more detailed summary of the issues raised is listed below:

<u>Emissions</u>

- 4.22 The Rufford ERF is subject to the Pollution Prevention and Control (PPC) Regulations 2007. An application for the PPC permit was made to the EA in December 2007 and is currently in the process of being determined. The proposed facility is also subject to the requirements of the Waste Incineration Directive (2000/76/EC) implemented through the PPC permitting regime. Without prejudice to the outcome of the determination of the PPC permit application the EA advise:
 - a) A new incineration plant is expected to meet the requirements of the Waste Incineration Directive (WID) as a minimum. This includes, in particular, minimum temperature and residence time requirements for the combustion chamber, and emission limit values which must be adhered to.
 - b) The general design features of the Rufford ERF, including a moving grate combustion system and emissions abatement plant (comprising selective non-catalytic reduction equipment, semi-dry lime and activated carbon injection and a fabric filter) is expected to be capable of meeting the combustion requirements and emission limit values specified in the WID.
 - c) The stringent emission limit values specified by the WID are expected to ensure that impacts on local air quality, and through that effects on human health and the natural environment, are small and no significant impacts arise. The magnitude and significance of environmental impacts arising from the plant is being assessed in detail by the EA at the present time. At this stage the EA can say that the description of impacts included in the Environmental Statement accompanying the planning application is consistent with the findings of other assessments of modern incinerators.
 - d) It appears at this stage that the proposal is capable of satisfying the requirements of the PPC Regulations.

Energy Recovery

4.23 The EA acknowledges that incineration has a role in waste management but believes that the energy generated should be recovered as far as practicable. It is a requirement of the WID (Article 6(6)) that "Any heat generated by the incineration or the co-incineration process shall be recovered as far as practicable" e.g. through combined heat and power, the generating of process steam or district heating.

- 4.24 In the case of the Rufford ERF the energy produced would be used to operate a steam turbine and generate electricity. Based on the information submitted with the application the installation would have an efficiency of approximately 21%, increasing to 32% when recovered energy is used to heat the boiler feed water and air. A modern combined heat and power (CHP) plant has the ability to recover up to about 75% of the energy in the waste, if the surplus heat is utilized by nearby residential, commercial or industrial premises. The EA notes that whilst the plant would be provided with a take-off point for waste heat there are no identified proposals for development that might utilize heat energy over and above that which would be consumed within the plant itself.
- 4.25 The issue of energy utilisation has been one of the factors considered in the appraisal of alternative sites, although it does not feature specifically until Stage 3 when a large number of sites have already been screened out. The Rufford site is quite different from the other three short listed sites in having no potential users of the waste heat in the immediate vicinity. However, the Rufford site has arguably more potential for the development of CHP infrastructure due to its currently undeveloped condition.
- 4.26 These differences between Rufford and the other sites, whether they be considered positive or negative, are not brought out in the appraisal since all sites are scored as "neutral" in the non-numeric scoring system adopted in Stage 3. Thus it appears that the issue of energy utilisation does not feature strongly in the site selection process. In the EA opinion, the planning application does not demonstrate that all opportunities to maximise energy recovery have been considered in the selection of the Rufford site.
- 4.27 However, the EA appreciates that a large number of factors are required to be considered in the decision of where to site a new incinerator. Whilst the EA has concerns regarding the location of this facility, it has no direct regulatory remit as regards this aspect of the proposal, and the decision as to the most appropriate location will be the responsibility of the planning authority.
- 4.28 If the decision is to proceed with this proposal at this site, the EA would strongly encourage the County Council and Newark and Sherwood District Council, as appropriate, to actively consider the issue of energy utilisation in preparing any plans for the redevelopment of the wider site, and in determining individual planning applications for other developments at the site. The emerging Newark and Sherwood Local Development Framework presents such an opportunity.

Suggested Planning Conditions

4.29 Planning conditions are suggested to require further details in connection with the methodology for surface water disposal including

soakaways and limitation to prevent increased risk of flooding; the submission of a scheme to ensure contamination on the site is satisfactorily addressed, including the setting of specific target values to ensure drinking water standards within the aquifer are protected, and further methodology regarding the foundation piling. Controls over oil storage are also requested.

4.30 **Health Protection Agency (HPA):** The HPA has prepared a position statement on the health impacts of municipal solid waste incineration (MSWI). It concluded that:

'Incinerators emit pollutants into the environment but, provided they comply with modern regulatory requirements, such as the Waste Incineration Directive (WID), they should contribute little to the concentrations of monitored pollutants in ambient air. Epidemiological studies, and risk estimates based on estimated exposures indicate that the emissions from such incinerators have little effect on health.'

- 4.31 Air dispersion modelling and risk assessment indicates that the facility would operate within appropriate limits, that emissions to air would not lead to exceedances of relevant standards, and that potential worst case exposure (via inhalation and deposition of pollutants) is not considered to pose a significant risk to health. The information presented in the application asserts that the proposed facility does not present any meaningful risk to health. Treatment will be designed to comply with WID requirements which will be enforced by the Environment Agency through the facilities IPPC (Integrated Pollution Prevention and Control) permit.
- 4.32 Planning conditions should ensure that emissions to water do not create a danger to health. Controls should be imposed to deal with ground contamination issues. Conditions are suggested to prevent off-site noise nuisance. A pre-operational accident management plan should be developed; operational accident management is controlled as part of the IPPC permit.
- 4.33 **Nottinghamshire County NHS Teaching Primary Care Trust:** The Nottinghamshire Teaching Primary Care Trust is advised on matters concerning the health aspects of planning applications by the HPA and do not wish to add any supplementary information to that which has already been provided by the HPA. Research has shown that there are no effects on the health of local residents from properly constructed, maintained and regulated incinerator plants.
- 4.34 **Natural England:** Natural England objects to the application on the basis that the ES does not contain sufficient information to allow a full and accurate assessment of the likely air pollution impacts.
- 4.35 At Rainworth Heath SSSI emissions from the process contribution of the incinerator of Nitrogen Oxide and Sulphur Dioxide are likely to

have undesirable impacts on vegetation growth. Reservations are also expressed regarding the level of hydrogen fluoride emissions from the process. With regard to aerial pollution from traffic on the access road, no figures for Nitrogen Oxide are given for the increased traffic contribution and no figures are presented for Nitrogen Oxide deposition so a calculation of the combined impact of the ERF and increased road traffic is not possible. This is important because the critical load at the SSSI is exceeded already. The ERF would add an extra 1.9%-2.37% pollution load onto the habitats present on site and the road contribution would be added to that.

- 4.36 Natural England comment that whilst the landscape and visual assessment is comprehensive, they raise concerns regarding the undervaluing of sensitivity of impacts at Rainworth Heath and Water MLA which together with residential property and therefore the magnitude of change assigned to viewpoints, is lower than might be expected. Natural England cannot therefore agree with the overall assessment that there would be no major adverse effect from any viewpoint.
- 4.37 Natural England consider that there will be significant adverse effects on the landscape character of this part of the Sherwood Forest Landscape Area generally and the Rainworth Heath and Water MLA, which would perpetuate and increase the industrialisation of the landscape and significantly diminish the effect of landscape restoration on the former colliery areas. The proposal is not therefore in accordance with the policies for Sherwood Forest Landscape Area.
- 4.38 Visual impacts of plume from the chimney have not been satisfactorily addressed. Significant adverse effects on visual amenity are considered to arise within those parts of Rainworth and Mansfield from where the development can be seen, the A617, the public footpath along Rainworth Water and Rainworth Heath.
- 4.39 Natural England comment that from the information provided the application does not appear to affect locally designated nature conservation sites. However they suggest the views of the County Ecologist and Nottinghamshire Wildlife Trust should be sought on these issues.
- 4.40 Natural England advise that the proposal would have no discernable impact on the Birklands and Bilhaugh SAC site and therefore an appropriate assessment under Regulation 48(3) of the Conservation (Natural Habitats & c) Regulations 1994 is not necessary. Natural England does not have any objection to the development on the grounds of the presence of legally protected species subject to appropriate mitigation through planning conditions.
- 4.41 **Nottinghamshire Wildlife Trust (NWT):** Strongly object to the development on the grounds of its sustainability, policy and

biodiversity impacts. A more detailed summary of the issues raised is set out below:

Sustainable Development

- 4.42 a) The development would discourage and stifle increased recycling and innovation in recycling and re-use;
 - b) The development would be inefficient since it would not reuse significant quantities of heat generated in the process;
 - c) RSS Policy 2 guides development towards the reuse of previously developed land only where it is located close to existing urban centres and well served by public transport, which this site is not;
 - d) The land cannot be described as brownfield since there are planning controls requiring the restoration of the site;
 - e) The development would preclude the restoration of the site to a heathland habitat.

<u>Policy</u>

- 4.43 The development fails to comply with the following planning policies:
 - a) PPS9 the development would compromise linkages between habitats, will be detrimental to protected species and have indirect negative impacts on SINCs and SSSIs;
 - b) RSS Policy 2 since the development is not well connected to public transport, is not on derelict land and would have impacts on natural biodiversity;
 - c) RSS Policy 27 since the development does not protect and enhance the region's natural assets;
 - RSS Policy 28 since the development would adversely impact regional Biodiversity Action Plan targets, negatively affect large scale habitat creation projects and affect a wildlife migration corridor;
 - e) RSS Policy 29 due to loss of potential woodland;
 - RSS Policy 30 since it is considered the development of a large incinerator with associated lorry movements would not protect and enhance the natural and heritage assets of Sherwood Forest;

- g) RSS Policy 39 since the use of incineration will discourage alternative waste management technologies which may achieve higher recycling rates;
- h) Joint Structure Plan (JSP) Policies 1/1, 2/2, 2/3, 2/4 & 2/5 since the development would adversely affect a large heathland habitat;
- i) Joint Waste Local Plan Policies W3.23 & W3.24 mirror JSP and the harm on designated nature conservation sites;
- Newark and Sherwood Local Plan (NSLP) Policy NE1 since the development is inappropriate development within the countryside;
- NSLP Policy E28 since the development would affect the amenities of nearby residents and sites of nature conservation importance;
- NSLP Policy NE7 since the development will not protect the countryside;
- m) NSLP Policy NE18 relating to heathland management.
- 4.44 Ecological Impact Assessment
 - a) Cumulative impact on nightjar populations arising from employment and windfarm developments in the area have failed to be assessed in the ES;
 - b) Cumulative impact arising from NOx emissions from the development and employment development in the area have failed to be assessed;
 - c) Emissions from HGVs:
 - d) The development will result in the loss of part of a potentially ecologically rich heathland habitat that is proposed to be provided as part of the approved restoration of the former colliery;
 - e) The baseline for HGV traffic movements and associated impacts on the Rainworth Heath SSSI uses data from when the colliery was in production rather than the current levels of low traffic and therefore may underestimate impacts on fauna on nearby sites;
 - f) Streetlighting proposals for the access road are not clear and could adversely affect bats and crepuscular (night-time) birds;
 - g) Concerns are raised over the use of mains water and ecological impacts at its source of abstraction;

- h) Reversing alarms and their impact on fauna have not been assessed;
- i) Potential impacts from emissions on heathland habitats;
- j) Concerns are raised that the Ecological Surveys have failed to identify all species on and around the site and therefore it has failed to assess the full ecological impact of the development;
- k) A review of the common lizard translocation strategy is requested;
- I) Toad migration paths have not been identified;
- m) NWT disagree with the conclusion that the development would result in a net conservation benefit, principally because the scheme would result in the loss of a heathland habitat which would otherwise be provided following the cessation of the current coal stocking operations and the restoration of the site.
- 4.45 **Royal Society for Protection of Birds (RSPB):** Have not responded. Any response received will be orally reported.

NCC Conservation Group (Nature Conservation)

- 4.46 In light of the survey work it is concluded that the footprint of the development does not directly affect statutory or non-statutory nature conservation sites and the existing site has limited ecological value. However, the development of the site would preclude this part of the site being restored to heathland in accordance with the restoration masterplan for the site. NCC's Conservation Group lack the specific expertise to comment authoritively on predicted air quality impacts. However it is understood that this advice is being sought from Natural England. Confirmation should be obtained that an appropriate assessment of impacts on the Birklands and Bilhaugh Special Area of Conservation (SAC) is needed under Regulation 48 of the Conservation (Natural Habitats & c) Regulations 1994.
- 4.47 Concerns are raised regarding the methodologies for mitigating some ecological impacts and further details are requested prior to determination.
 - a) Common Lizards: it will be necessary to trap and remove the small population present on the site prior to commencement of site development. Further details of temporary exclusion fencing to prevent reptiles re-entering the site are required. A suitable receptor site needs to be found.
 - b) The proposal to re-use the substrate currently present on the development site as a semi-improved neutral grassland holding

bee orchids and other grassland species is supported. However a more detailed methodology of material storage is required.

- c) The proposals to floodlight the building could have potential negative impacts on nature conservation interests and the adjoining SSSI.
- 4.48 Planning conditions are suggested to ensure all site clearance works are undertaken outside the bird nesting season and appropriate plant species are used within site landscaping. A planning condition is suggested requiring monitoring of bryophyte and lichen communities on adjacent SSSIs.
- 4.49 **NCC Countryside Access Team:** No definitive paths would be affected by the development.

4.50 **NCC Conservation Group (Archaeology):** No objections

4.51 **NCC Acoustic Engineer:** The results of the noise assessments submitted in support of the planning application indicate that the operation of the ERF and associated HGV movements would not give rise to unacceptable levels of noise at the nearest noise sensitive properties, during both daytime and night-time.

NCC Landscape and Reclamation Team:

Reclamation Comments

4.52 The application is supported by a Phase 1 Desktop Study and a Phase 2 Detailed Investigation. These studies identify that contamination is present in the site's soil, in particular Total Petroleum Hydrocarbons (TPH) and Polynuclear Aromatic Hydrocarbons (PAH). A strategy to remove/make safe ground contamination is therefore required, the precise details of which should be agreed prior to commencement of the development.

Landscape comments

4.53 The impacts of the development are considered greater than that set out within the landscape appraisal which supports the planning application. The main reason for this is that the landscape assessment has been undertaken against a baseline condition with the coal stocking yard in an un-restored condition rather than it being assessed against the site having undergone restoration to a heathland habitat which would be provided through the existing planning conditions for the site. Impacts are therefore underestimated. Particular impacts are identified to the open rural character of the Forest Sandlands landscape area and Rainworth Heath and Water Mature Landscape Areas.

- 4.54 Although the landscape is large scale with several detracting features such as the light towers, colliery features and views of industrial areas to the west, the setting of the proposed development is open and rural. The development would therefore be a large alien feature in the countryside. In order to protect the integrity and remote rural character of the Forest Sandlands landscape planning policies seek to contain and concentrate new development in and around existing settlements and discourage development in open countryside, an approach in line with Policy NE1 of the NSLP. The development is considered to have a detrimental impact on Rainworth Heath and Water Mature Landscape Areas.
- 4.55 Since the existing landscape of the site itself is of poor quality, the development as assessed would have a limited impact on this existing environment. However, given the proposals to restore the site to heathland, potential impacts could be greater than those identified in the landscape assessment. Therefore further landscape assessment work has been requested to take account of these landscape conditions.

Visual Impact Comments

- 4.56 Views of the site from the west, north and east are largely restricted because of tree cover and landform. The main visual impact of the proposals would be on residents of Rainworth to the south, residents of Sherwood House Nursing Home and two properties off Colliery Road and users of the roads and public rights of way.
- 4.57 Residents of properties to the north and east of Rainworth would have clear views of the ERF development which upon restoration of the coal stocking site would be the only detracting feature within the otherwise rural landscape. Impacts from a number of viewpoints including Sherwood House Nursing Home, residential properties in Rainworth and surrounding roads and footpaths are considered to be greater than set out within the applicants' assessment. Floodlighting of the building would add to visual impacts during night-time.

Mitigation of Landscape and Visual Impacts

- 4.58 Mitigation is largely limited to planting within the site to help reduce the visual impact from the south. The building could be moved slightly to the north to allow more tree planting to take place to the southern corners of the site, and wet heathland habitats could be created in the infiltration pond area. Further clarification could be provided regarding the lighting proposals and detailed planting proposals should be submitted. The provision of additional off-site planting to the south east (currently arable land) should be provided.
- 4.59 **NCC Spatial Planning Team:** Raise no strategic planning objections to the development subject to a number of provisos outlined below.

<u>General</u>

- 4.60 The development would contribute to achieving many of the core aims of Policy 1 of both the Regional Spatial Strategy for the East Midlands (March 2005) (RSS) and the Draft East Midlands Regional Plan (September 2006) (DRP) such as promoting prudent use of resources, improving economic prosperity and employment opportunities, addressing social exclusion through regeneration of disadvantaged areas, increasing the level of biodiversity and promoting good design.
- 4.61 The development would conform with national and regional waste planning policies. In particular, the proposal complying with the overall objective of PPS10 to move waste management up the waste hierarchy thus making it more sustainable and providing a facility for the Nottinghamshire community to manage their own waste within close proximity to its origin.
- 4.62 The development is therefore also consistent with RSS Policy 38 which seeks to reduce the amount of waste sent to landfill and taking a flexible approach to other forms of waste recovery, and Policy 39 which encourages regional self sufficiency for waste management. DRP Policy 37 seeks to promote proposals which result in waste being treated higher up in the waste hierarchy.

Location

- 4.63 Policy 2 of both the RSS and DRP and Policy 1/1 of the Nottinghamshire and Nottingham Joint Structure Plan (JSP) seek to achieve a sustainable pattern of development, setting out a sequential approach to site selection with highest priority being given to suitable previously developed sites within urban areas and lower priority to suitable sites outside urban areas, which are or will be well served by public transport, particularly where this involves the use of previously developed land. Although the selection of this site is not in accordance with the sequential approach being located in the countryside 1km to the north of Rainworth village it is recognised that there would be difficulties in according with this approach given the nature of the development and its particular locational requirements which (RSS Policy 3 and DRP Policy 2 part 2) do allow for.
- 4.64 RSS8 Policy 6 and DRP Policy 5 allow for development in rural areas which maintain the distinctive character and vitality of rural communities, strengthen rural enterprise, facilitate access to jobs and encourage opportunities for the use of non-car modes of transport. JSP Policy 2/10 seeks to protect the character and qualities of the countryside and allows for development which will sustain and diversify the rural economy provided it is located and designed to respect the character of the surrounding area.

- 4.65 It also stipulates that priority must be given to the re-use of derelict land. The proposed development, in principle, would not be contrary to these policies provided that the issue of accessibility by non-car modes of transport is addressed and the character of the surrounding countryside would not be adversely affected. These matters are examined below under the headings of 'Accessibility' and 'Landscape' respectively.
- 4.66 DRP Policy 37 does not preclude the development of waste management facilities in rural areas provided that the more strategic facilities are accessible to an appropriate catchment area. Accessibility issues are discussed below.
- 4.67 The proposed development is located within the Northern Sub-Area of the Region and DRP paragraph 3.3.62 states that in this regeneration priority area the broad pattern of waste management facilities should involve a 'strategy of larger facilities on previously used land (including former colliery land)...'.
- 4.68 Although the application site is not specifically allocated for development in the NSLP, Policy E17 states that planning permission will be granted for the redevelopment of the pit head area of disused collieries for employment development, subject to the site being redundant for coal mining and certain environmental, transport and amenity criteria being met. In principle, therefore, the proposed development could be considered acceptable in this location.
- 4.69 RSS8 Policy 9 and DRP Policy 8 state that regeneration of the Northern Sub-Area is a priority, with an important element of this being the provision of new jobs. The proposal would create 36 permanent jobs and can therefore be viewed as making a positive contribution by providing additional employment opportunities in the area, in accordance with this aspect of the policies.

Alternative Site Appraisal

4.70 Although an alternative site appraisal has been undertaken, amendments to the methodology used for the final site selection are requested including an increased weighting to the use of previously developed land in accordance with Planning Policy Statement 10 (PPS10) guidance, a more detailed justification of why the Rufford site was selected and the application of a relative score for each site when compared against each other at the stage 3 analysis.

Accessibility

4.71 The proposed site has good access to the strategic road network and enables waste to be dealt with sustainably given it is in relatively close proximity to the major waste producing areas within its catchment area, thereby avoiding the need for waste to be transported over long distances. The development only utilises road based transport, an approach which is not strictly in line with PPS10 and Planning Policy Guidance Note 13 'Transport' (PPG13) guidance which support the use of alternative transport modes. It would be preferable if there was a commitment to investigate further the viability of using rail transport in the future.

4.72 However, given the difficulties in utilising rail for waste transport, particularly the lack of facilities for loading waste close to its sources and for receiving bottom ash at its destination, it would seem unlikely that any other suitable site would be better placed to facilitate transport by rail. Provided that any permission is subject to a requirement to implement a Travel Plan which promotes accessibility to the development by non-car modes of transport strategic planning objections are not raised to the development.

Biodiversity, Landscape and pollution/Health Issues

- 4.73 Reference is made to a number of policies which aim to protect and enhance the environment. No strategic planning objections are raised to the development provided that:
 - a) specialist advice is obtained to ensure that the proposal will be in accordance with these policies; and
 - b) in respect of biodiversity, any permission is subject to conditions and/or planning obligations to ensure implementation of appropriate mitigation measures and a long-term habitat management plan.
- 4.74 **NCC Urban Design Officer:** Considers the design concept utilising a central main building and surrounding curtain canopy at a lower level with a link to a more modest office/visitor centre helps break down the building mass and provides an undercover circulation area important to the function of the building. However, the building is very large/tall in the context of the surrounding landscape and the following observations are raised in an attempt to address this issue:
 - a) An alternative site choice within a disused mineral void may reduce the visual impacts of the development;
 - An opportunity to break the central building into 3 sections may reduce the visual impact of the building and should be investigated further;
 - c) A non-shiny exterior material should be used;
 - d) Light pollution from the structure should be kept to a minimum;
 - e) How is disabled access to be considered?

- 4.75 **OPUN:** (part of Regeneration East Midlands, a Government body who undertake a design review process aimed at delivering sustainable, high quality and well-planned developments) generally consider the scheme is of a very good design which could act as an exemplar for buildings of a similar function. The site is considered to be appropriate for this development and undoubtedly provides a far more acceptable use than the previous colliery. A desire to see the railway brought back into use is expressed.
- 4.76 The overall form of the ERF building is liked in principle but it was felt that it could be improved through:
 - a) More closely resembling the 'tortoise-shell' form indicated by the small sketch in the Design and Access Statement.
 - b) The visual impact of the slab sides to the central element could be reduced by creating a roof that has a three dimensional curve.
 - c) The ridge line to the lower skirt could be removed giving a smooth flowing curve to this element.
 - d) The angular termination at the lower eaves at the higher sloping roof would benefit from being made as smooth as all the other eaves lines.
 - e) The surface planting to the bund earth bank should be reconsidered.
 - f) The form and bulk of the materials in the office/visitor block should be reconsidered.
 - g) Operational hours for transport into and out of the site should be reconsidered having due regard to the location of the nursing home.
- 4.77 **NCC (Highways):** Nottinghamshire County Council Highways Development Control Team raise no highway objections are raised on the basis that the traffic assessment submitted with the planning application concludes that the A617/Colliery Road junction and the surrounding highway network has sufficient capacity for the traffic generated by the development. Planning conditions are suggested requiring the provision of wheel cleaning facilities and a staff travel plan.
- 4.78 **Nottinghamshire Police Crime Prevention & Architectural Liaison Officer:** Have not provided a responded. Any response received will be orally reported.
- 4.79 **Severn Trent Water:** Raise no objections subject to the imposition of a planning condition requiring submission of drainage details.

- 4.80 **e.ON Central Networks:** No objections.
- 4.81 **National Grid (Gas):** Have not provided a response to the planning consultation, any response received will be orally reported.
- 4.82 **Network Rail:** No objections in principle, however Network Rail request a series of planning conditions are imposed to protect the nearby railway line.
- 4.83 **Rolls Royce:** Have been consulted due to the proximity of the development to Hucknall Airfield. Rolls Royce raises no objections regarding the impact of the development on aircraft safety.
- 4.84 **Coal Authority:** raise no observations.
- 4.85 **Forestry Commission:** Have not provided a response to the planning consultation, any response received will be orally reported.
- 4.86 **Greenwood Partnership:** Have not provided a response to the planning consultation, any response received will be orally reported.

5. **Publicity**

- 5.1 The application has been publicised by the posting of nine site notices within Rainworth Village and adjacent to the development site. Press advertisements have been published the Nottingham Evening Post, Mansfield Chad and Newark Advertiser as well as the Rainworth parish newsletter. Notification letters were posted to occupiers of nearby properties. These notification procedures are in accordance with the County Council's adopted Statement of Community Involvement and the publicity requirements set out within the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999
- 5.2 A total of 105 letters of representation/objection have been received in response to the Council's first round of public consultation of which 34 letters are pro-forma style letters.
- 5.3 Two of the letters originate from Sherwood House Nursing Home and incorporate petitions signed by the residents of the home totalling 63 people. The petition reiterates many of the concerns raised by local residents regarding the greenfield status of the site; impacts on heathland; the application being a departure; climate change impacts; ecological impacts; traffic impacts; use of alternative waste management techniques; inefficiency of EFW process; need for the facility; potential aquifer impacts and emissions.
- 5.4 One letter has been received which supports the principle of waste incineration/energy recovery but would like to see the development in a different location.
- 5.5 The issues raised within these letters are summarised below and considered within the Observations section.
- 5.6 <u>Development Description/Procedure</u>
 - i) The description of the development as an Energy Recovery Facility is inaccurate since the process recovers little energy and does not make use of heat. UK/EU Directives define energy recovery as a facility which recovers and uses 60-65% of the energy inputted. This plant operates well below this efficiency level.
 - ii) The site address is incorrectly advertised.
 - iii) It is not clear whether the application proposes a 180,00tpa facility or 210,000tpa facility.
- 5.7 <u>Alleged Inaccuracies of Planning Submission</u>
 - i) The population of Rainworth is actually 7385 as opposed to 5139 which is quoted in the planning submission.
 - ii) The application does not identify the location of the nursing home and residential property on the colliery access road.
 - iii) Figures quoted in the application stating that Nottinghamshire produces 460,000tpa of municipal solid waste are incorrect. The amount of waste produced in 2006/07 is nearer 400 -430,000tpa.
 - iv) The application states that the facility will generate 15Mw of energy however this is misleading since 2Mw of this would be used within the plant.
- 5.8 Public Consultation
 - i) Veolia's pre-application public consultations were not well publicised and leaflets were sent out after one of the public display dates.
 - ii) The liaison group set up as part of the pre-application discussions did not include sufficient numbers of the local community.
 - iii) The timing of the planning submission over the Christmas/New Year period limits the public opportunities to input into the planning process.
- 5.9 PFI Contract
 - i). The PFI contract, which forms the basis to NCC's decision to incinerate waste, was not subject to sufficient public consultations.
 - ii) The details of the PFI contract should form part of the background to the planning application since these documents form the background to the decision to develop an incinerator. NCC have failed to make parts of this contract available despite Freedom of Information (FOI) requests.

- iii) The application should be re-advertised following the publication of additional background information in connection with the waste contract.
- 5.10 <u>Determination Procedure</u>
 - NCC have a prejudicial interest in the planning application, having appointed Veolia as preferred waste disposal contractor, agreed an incinerator as the preferred option under the waste contract and negotiated the PFI contract with Veolia. NCC should therefore declare an interest in the planning application and not determine it themselves.
 - ii) The application should be 'called in' by the Secretary of State and therefore take the determination of the planning application away from NCC.
- 5.11 Planning Policy Objections
 - i) The Newark and Sherwood Local Plan (NSLP) does not identify or allocate the site for industrial development.
 - ii) The application is a departure to the development plan policies.
 - iii) The land is not 'brownfield' as described by the applicant in the Environment Statement. The site should be considered as greenfield due to the restoration controls imposed on the site.
- 5.12 <u>Choice of Site</u>
 - i) An alternative site may offer greater potential to re-use heat generated through the incineration process.
 - ii) The facility should be located within the Mansfield/Ashfield area, closer to the origin of waste produced.
- 5.13 <u>Waste Management</u>
 - i) The facility fails to comply with the waste hierarchy in that waste incineration should not be used in preference to waste reduction, reuse, recycling and composting
 - ii) Alternative waste management techniques should be used. There is no evidence that these alternatives have been costed.
 - iii) Anaerobic digestion should be used as a more environmentally acceptable option, an approach encouraged within the National Waste Strategy. The development of the incinerator would result in the incineration of kitchen waste contrary to the objectives of the Waste Strategy.
 - iv) Mechanical Biological Treatment (MBT) of waste should be undertaken.
 - v) Recycling rates should be increased to minimise the amount of waste requiring disposal/incineration.
 - vi) Incineration will act as a disincentive for additional recycling.
 - vii) The facility will burn recyclable waste.
 - viii) Recycling targets set out within the planning application are not sufficiently demanding.
 - ix) The facility does not meet European targets for energy recovery and therefore should be considered as a waste disposal in terms of the waste hierarchy. The facility does not have any back up

facilities to generate electricity in the event there is not sufficient waste to burn.

- x) The figures used within the planning application to calculate waste arisings and recycling rates are not accurate.
- 5.14 <u>Need for Incinerator</u>
 - i) Eastcroft Incinerator could be expanded to process additional waste with support from WLP Policy W6.1. Therefore there is no need for the proposed Rufford Facility.
 - ii) The incinerator is too large and there will not be sufficient waste to burn within the facility.
 - iii) The facility will receive commercial waste.
- 5.15 <u>Sustainability and Climate Change</u>
 - i) Concerns regarding potential climate change/carbon footprint impacts.
 - ii) Concerns regarding the emission of greenhouse gases.
 - iii) The application does not take account of PPS 1 supplement guidance which requires all new developments to take account of climate change.
 - iv) The facility would be inefficient since it does not re-use the heat generated by the incineration process. The proposals do not qualify as Best Available Technology.
- 5.16 <u>Ecological Concerns</u>
 - i) The development would result in negative impacts to ecology.
 - ii) Adverse impacts will occur to migrating toads on the Rufford Colliery Access Road.
 - iii) Operating noise will affect bird populations.
 - iv) Adverse impacts would occur to plants, moths, nightjars, newts, lizards frogs, toads. – Dingy Skipper butterfly, Angled – striped sallow moth, map winged swift moth, Woodlark, Skylark, Corn Bunting, Nightjar, Spotted Flycather, Tree Sparrow, Grey Partridge, Song Thrush, Yellowhammer, Great Crested Newts, Common Lizard, Noctule and Leister Bats, Damselflies, Dragonflies, Frogs, Toads, Badgers, Foxes, Purple Moor Grass.
 - v) Adverse impacts will occur within surrounding heathland habitats particularly as a result of incinerator emissions. Nitrate releases would have a potentially negative impact on habitats including heathland.
 - vi) Adverse impacts will occur at Rainworth Water LNR, Rainworth Heath SSSI and Rainworth Gorse SINC. The application incorporates no measures to ensure these areas are protected.
 - vii) The application does not provide information stating how electricity will be fed into the grid. The installation of a cable connection could potentially negatively impact the adjoining SINC.
 - viii) External lighting would result in adverse impact to surrounding ecology, particularly birds.
- 5.17 <u>Visual/Landscape Impacts</u>

- i) The development would be visually intrusive, particularly from Rainworth village.
- ii) The chimney would be dominant in the skyline.
- iii) The site adjoins a Site of Special Scientific Interest, a Mature Landscape Area, is within the Sherwood Forest Heritage Area and the Greenwood Community Forest and will impact on these landscape, biodiversity and heritage designations.
- iv) The development would adversely impact the Sherwood Forest Special Landscape Area.
- 5.18 Traffic
 - i) The development would add to traffic (particularly HGVs) and congestion in the surrounding area and in particular Oak Tree Lane and Kirklington Road, with impacts upon road safety.
 - ii) The A617 regularly has major congestion with traffic at a standstill due to congestion at its junctions, particularly the junction with the A614.
 - iii) The Rufford Colliery access road traffic light junction with the A617 is extremely dangerous due to drivers being blinded by sunlight.
 - iv) New employment development approved on the south of the Colliery access road will add to congestion at the Rufford Colliery junction.
 - v) The development will result in additional traffic within Rainworth village.
 - vi) The Traffic Assessment does not take account of recent and planned developments on the MARR Road, A617 and A614.
 - vii) Traffic figures are based on transporting 180,000tpa of waste, not the potential 210,000tpa of the facility if operated at 100% capacity.
 - viii) Concerns are raised regarding construction traffic.
- 5.19 <u>Odour</u>
 - i) Odour concerns are raised in connection with emissions from the plant and from waste delivery vehicles on the highway network.

5.20 Noise & Vibration

- i) Concerns are raised regarding noise impacts as a result of increased traffic, particularly at night-time.
- ii) Noise and vibration impacts may occur at Sherwood House and the adjacent houses.
- iii) Operations within the ERF could be noisy.
- 5.21 <u>Air Quality, Pollution and Emissions</u>
 - i) The development would negatively affect air quality and result in increased pollution.

- ii) Mansfield District is a smoke free zone, the operation of an incinerator adjacent to this area is considered to be contrary to this policy.
- iii) Emissions will not be monitored sufficiently regularly (dioxins only monitored twice a year).
- iv) Abnormal operating conditions have not been sufficiently considered.
- v) How will PM2.5, fine and ultra fine particles and nano particles be measured and how often? Dangers from these particles do not appear to have been addressed.
- vi) Potential lapses in pollution emissions/breaches in emission standards may occur with health consequences.
- vii) Concerns are raised regarding dioxin/lead, cadmium mercury fine particle emissions & PCBs.
- viii) Safety concerns are raised regarding fly ash residue and bottom ash. Bottom ash has been shown to contain eco-toxins such as mercury and should not be treated as inert.
- ix) The site is low lying within a bowl of higher land. There is already a problem of low lying mist in the area which could hold down and trap toxic emissions.
- x) Additional traffic would result in air pollution..
- xi) Potential pollution could occur from transporting ash and contaminated water.
- 5.22 <u>Health Issues</u>
 - i) Concerns relating to increased health problems including shortening of lives, breathing heavy metals/fine particles, chronic obtrusive pulmonary disease, DNA mutation, birth defects, cancers, asthma, viral & bacterial respiratory infections, coronary heart disease, heart attacks, strokes, arteriosclerosis, sudden adult death, diabetes type 2, endometriosis and other hormone disruption, clinical depression & suicides, apathy and obesity.
 - ii) The local population includes many former miners who have respiratory problems. This facility could add to the health conditions experienced by these people.

5.23 Local Economy and Regeneration

- i) The development would act as a blight to further regeneration in the surrounding area.
- ii) The development would provide no benefit to the local economy.
- iii) The development would negatively impact surrounding property values.
- iv) The development would negatively impact the local tourist industry.
- v) Increased recycling of waste would create more jobs than waste incineration.
- 5.24 <u>Hydrology</u>
 - i) The facility could result in pollution of the aquifer (Sherwood Stone Aquifer)/watercourses.

- ii) The facility may pollute the local water sewage plant.
- iii) Concerns are raised regarding potential for damage to bunded areas which could cause seepage into the aquifer, particularly as a result of the former mining operations at the site.
- iv) Potential impacts of PCB emissions on water quality and entering the food chain through fish stocks.
- v) The facility could affect nearby fishing facilities.
- 5.25 <u>Colliery Site Restoration</u>
 - i) The approved use of the colliery for coal stocking activities have ceased and NCC should therefore enforce restoration controls which require the Rufford Colliery site to be restored to a heathland habitat.
 - ii) The site should be restored back to a leisure use.
- 5.26 <u>Other Concerns</u>
 - i) Concerns regarding additional litter.
 - ii) Concerns are raised regarding the external illumination of the site.
 - iii) Concerns are raised that the bottom ash will be stocked/disposed on the adjoining Rufford Colliery site.
 - iv) Veolia have been prosecuted for breaches of safety regulations.
 - v) Are fire and rescue services equipped to deal with fires/explosions at the plant?
 - vi) Concerns are raised regarding the amount of development in the Rainworth area and its environmental impact.
 - vii) Concerns are raised that the building is not being constructed using sustainable building practices.
- 5.27 **People Against Incineration (PAIN):** An anti-incinerator campaign group established in the Rainworth Area primarily to oppose this development have submitted a number of detailed objections to the development. PAIN have summarised their own objections within a summary statement which is attached as Appendix 3. The representation raised by PAIN in response to the first planning consultation are summarised below:

Non-compliance with the waste hierarchy

5.28 The proposal is for a waste disposal facility. As such it is to be judged on whether or not waste will be managed in accordance with the waste hierarchy. The proposed facility fails this simple test. PAIN objects to the application on the grounds that proposals do not comply with the waste hierarchy, in that waste incineration should not be used in preference to waste reduction, reuse, recycling and composting (including anaerobic digestion). Concerns are raised that the facility will burn between 60,000 – 140,000 tpa of organic matter that could otherwise be composted through anaerobic digestion. The facility will 'lock' the County Council into a long-term contract to deliver waste to the incinerator and therefore stifle new initiatives to recycle additional waste and as a result of the development will encourage waste maximisation.

Non-compliance with the National Waste Strategy

5.29 The May 2007 National Waste Strategy encourages Local Authorities to use anaerobic digestion for biodegradable waste. This is based on recent research demonstrating "that anaerobic digestion has significant environmental benefits over other options [including incineration]..." The digestate produced by anaerobic digestion has a range of potential uses on land, including as a fertiliser or soil improver. The building of a waste incinerator is considered to have a detrimental impact on recycling and composting rates. PAIN objects to the application on the grounds that waste incineration will result in non compliance with the National Waste Strategy.

Lack of Need

5.30 No convincing evidence of need is provided by the applicant. Regardless of whether or not a credible case could have been made in 2002 to justify this application, it must now be considered in light of the current and likely future situation. Figures provided by the applicant demonstrate that any incinerator would have to rely upon either Municipal Solid Waste imported from outside the County, in violation of the proximity principle, and/or upon Commercial and Industrial Waste. PAIN objects to the application on the grounds that evidence of need has not been supplied. PAIN put forward a model which assumes waste arisings in 2019/20 will reduce (400,00tpa as against Veolia's predicted 513,806tpa), recycling rates will increase to 62% (as against 52% predicted by Veolia) and with continued use of landfill there is not a need for an incinerator to dispose of Nottinghamshire's residual household waste.

Disposal not recovery

5.31 The proposed waste incinerator fails to meet the requirements for a recovery operation. In the event of a shortfall of waste, alternative fuels will not be used to generate energy, and the efficiency of energy generation falls well short of the 60%-65% minimum required of energy recovery facilities. Veolia's use of the term 'energy recovery facility' in the application is technically incorrect, and therefore misleading. PAIN objects to the application on the grounds that it is not for an energy recovery facility.

Climate Change

5.32 Without definitive arrangements for heat capture Veolia's proposals are inconsistent with the Key Planning Objectives set out in PPS 1 (Supplement), and planning permission should therefore be refused. PAIN objects to the application on the grounds that it does not accord with PPS 1 (Supplement), and does not adequately address a host of additional related concerns.

- 5.33 Within Scotland, the Scottish Environment Protection Agency (SEPA) (equivalent to the Environment Agency in England) in their role as consultee commenting on planning applications have objected to EFW developments where the applicant has failed to demonstrate sufficient need, failed to demonstrate that heat energy from the process will be recovered and sought to achieve between 60-75% energy efficiency, failed to provide adequate controls to avoid water pollution, not imposed sufficient control to ensure that only residual waste is burnt and failed to provide adequate measures to control environmental impact.
- 5.34 Waste incinerators typically emit between 0.7 and 1.3 tonnes of CO2 per tonne, and therefore the Rufford facility would emit between 126,000 and 234,000 tpa of CO2 each year. The electricity energy recovered at Rufford represents only about 20% of the calorific value of the material fed into the incinerator. This compares unfavourably with the 35-50% efficiency of a coal-fired power station. This means that an EfW incinerator which produces electricity but does not otherwise recover the heat energy produces around 33% more CO2 for each unit of electricity than a gas fired power station with associated climate change impacts. The proposals therefore do not represent Best Available Technology.

Pollution to water

5.35 PAIN has serious concerns regarding the prospect of irreversible damage befalling the aquifer (drinking water) and the potential contamination of ground water and fisheries. Veolia's proposals are not sufficiently detailed to properly assess these risks, and they offer little by way of information to assess whether or not their proposed mitigations will be sufficient to ensure water safety for the next 25 – 50 years. PAIN objects to the application on the grounds that a more cautious approach to protecting water safety should be adopted.

Site status

5.36 The application misleadingly uses the phrase 'brownfield in character' and claims that coal stocking is ongoing. PAIN understands that the site is classed as greenfield (due to restoration condition) and that coal stocking and blending activities ceased sometime between June and October 2007. PAIN understands that the site is described as the missing piece of the planned Sherwood Forest Regional Park. Veolia's planning application acknowledges that if an incinerator were built the site would no longer be included in these plans, and there could be wider implications that are considered of regional, national and even international significance. PAIN objects to the application on the grounds that a greenfield site is not suitable for the development proposed.

Nature Conservation

5.37 PAIN does not feel that adequate attention has been given to the application's potential negative impacts on local nature habitats and biodiversity. PAIN objects to the application on the grounds that the risk posed to nature conservation is unacceptable, there will be unacceptable impacts on Rainworth Heath SSSI and local SINCs, particularly in terms of nitrate emissions, and that Sherwood Forest is unsuitable for the development proposed.

Non-Compliance With Other Policies

5.38 Not least the January 2006 Regional Waste Strategy, the Regional Spatial Strategy, Mansfield District Council's emerging Green Infrastructure Plans, Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste (Article 4).

Ground Instability

5.39 The development would be constructed on top of a former colliery and the ground is therefore potentially unstable. Evidence suggests that there have been ground shifts in the area. Further ground instability could result in damage to the building and release of contamination.

Bottom Ash Safety

5.40 Concerns are raised that incinerator bottom ash is not inert (as stated by the applicant) and it contains elevated Zinc and Lead which categorise it as hazardous.

Ozone/Smog Emissions

5.41 The incinerator will add to existing pollution in the area including pollution from cars, power stations, industry and properties, the primary pollutions consist of nitrogen oxides, sulphur oxides, hydrocarbons, carbon dioxide. These pollutants can react with sunlight and atmospheric conditions and fall to the ground and can have adverse impact on sensitive ecosystems. PAIN request that studies to estimate the impact of pollution on the surrounding area are undertaken, in particular Sherwood and Clipstone Forest. Local environmental conditions which result in foggy conditions in the area are highlighted.

Emissions, Pollution and Impacts on Human Health

5.42 Concerns are raised regarding how PM 2.5 and smaller (nano) particles will be controlled. The accuracy of the units used for the existing background measurement is questioned. Waste incineration produces Persistent Organic Pollutants (POPs) which persist in the

environment for many years and include toxic dioxins, furans and PCBs. European legislation (the Stockholm Convention) aims to eliminate the production of such pollutants. Since waste incineration produces POPs PAIN question whether further incinerator developments are legal and in the spirit of the Stockholm Convention.

5.43 Concerns are raised that the development will result in a shortening of lifespan by up to 12 years, increased diseases including heart attacks, cancers, lung disease, behaviour problems, lower IQ, diabetes, allergies, arthritis, clinical depression, obesity problems and birth defects arising from the emissions of waste incinerators. PAIN state that a 75m high chimney would spread effects some 17miles. Concerns are raised regarding the nitrogen dioxides emissions from the facility which equate to driving approximately 900 million miles, the frequency of emissions monitoring, nano (small) particle emissions and their effect on health, breaches of emission standards at operational incinerators including Eastcroft.

Waste Disposal on adjoining sites

5.44 Veolia state in their submission that adjacent to the east of the quarry is a former municipal waste disposal site. PAIN consider this statement is misleading since the site has an approved restoration scheme and therefore it should not provide a pretext for by-passing restoration conditions for the Rufford Coal Stocking site. PAIN state that this municipal waste site has not been fully operated as a landfill because of concerns regarding pollution of the aquifer and question why the current development is acceptable in a similar location.

Other Issues:

- 5.45 Concerns are also raised about:
 - a) the Chimney stack height,
 - b) low levels of employment generated by the development,
 - c) impact on property values,
 - d) Incineration is considered to be an unsustainable process which destroys resources,
 - e) will negative air pressure within the tipping area be controlled through planning condition?
 - f) Are the waste bunkers of a sufficient capacity?
 - g) Is a bottom ash recycling facility proposed at Rufford?
 - h) Public concern should be taken as a planning consideration,

- i) An environmental assessment of emissions during abnormal operating conditions should be undertaken,
- j) PAIN have reviewed the Environment Statement and questioned/commented on numerous details contained within the submission. In the interests of brevity these very detailed comments are not set out within this summary. However the issues raised are addressed within the planning considerations section of this report,
- k) Sherwood House is registered as an independent hospital with residents who suffer from paranoid delusions and may be vulnerable to being seriously disturbed by the proximity of the chimney. Public concern is a material planning consideration and should be taken as a valid planning reason when considering the application,
- Incineration of plastic packaging is the worst option in terms of CO2 emissions and global warming potential and therefore the incineration of plastic cannot be seen as the best available technique,
- m) Concerns regarding the format of the liaison group.
- n) Concerns that the failure of Nottinghamshire to disclose the full contractual arrangements of the Waste PFI contract means that important environmental information has been held back, in particular the justification supporting the need for the facility.

<u>Call In</u>

5.46 The application should be called in for determination by the Secretary of State for a variety of reasons including a conflict of interest arising from the fact that the development will benefit NCC and therefore concern is expressed that the Council will not act impartially. PAIN also restates many of the objections outlined above to support the request for the application to be called in.

6. Additional Consultation response

Consultations responses received following publicity undertaken upon receipt of additional Regulation 19 information.

6.1 Following the submission of the planning application there has been two further submissions of additional information from the applicant. These submissions have both been made in response to formal requests for information made under Regulation 19 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (Reg. 19 Response) and have been advertised in accordance with the regulations.

- 6.2 In accordance with the legal requirements set out within the regulations all statutory, technical consultees and community groups who received a copy of the original Environmental Statement have been supplied a copy of the additional information and re-consulted for their observations, also press notices have been published within the Mansfield Chad, Newark Advertiser and Nottingham Evening Post and site notices were erected adjacent to the site and within Rainworth Village. In addition to the statutory requirements of the legislation every resident/individual who has written to the Council in connection with the first Regulation 19 submission.
- 6.3 The following is a summary of the responses which have been received to the two rounds of additional consultation undertaken:

East Midlands Regional Assembly

6.4 Wish to raise no further comments in addition to their original observations dated 29th January 2008.

Blidworth Parish Council

6.5 Wish to ensure that there is a total ban of movement of waste at all times through the village of Blidworth.

Environment Agency

- 6.6 The EA comment that in their original consultation letter they advised of the need for a more detailed appraisal of alternative sites in terms of energy utilisation. The applicant's response to the Reg. 19 request has appraised alternative sites and reached its conclusions. The EA advise that the County Council will need to satisfy themselves that the evidence submitted is adequate and acceptable. The EA welcome the clarifications provided regarding bio-diversity. The EA would wish to see the use of pitfall traps for the capture of reptiles and the continuation of trapping for a longer period to ensure that the population in its entirety is trapped; furthermore the EA would wish to see monitoring of trans-located bee orchids to assess the successfulness of the process.
- 6.7 The EA has undertaken a detailed review of the carbon assessment report submitted as part of the Reg. 19 response. The EA's response has been informed by the applicants addendum Reg. 19 submission which provides corrected carbon calculations for process emissions and a report prepared by PAIN who have undertaken their own assessment of carbon emissions. As part of this response the EA has also undertaken their own appraisal of carbon emission using their 'in-house' assessment software. Overall the EA conclude that there is some variability in carbon performance depending on which model is used.

6.8 However the EA are satisfied that the methodology used by Veolia in the preparation of their assessment and the assessment results are credible. The EA concludes that an ERF performs better than landfill in terms of providing a reduction in carbon emissions although some MBT waste treatment options outperform better. A more detailed assessment of the EA's observations is provided as part of the sustainability and climate change appraisal contained in the planning considerations section of this report. (Section 13, Paragraphs 13.1 – 13.37)

Health Protection Agency

6.9 Wish to raise no further comments in addition to original observations dated 9th January 2008.

Natural England

6.10 Natural England withdraws its objection on the basis that the additional information submitted demonstrates that emissions from the ERF and its associated traffic would not adversely affect ecology in surrounding areas. A planning condition is requested to require a survey of the vegetation of Rainworth Heath SSSI every three years for a 21 year period to assess for any changes to the ecosystems. Natural England withdraws its objection on landscape grounds since it only pursues objections in designated landscapes such as National Parks and Areas of Outstanding Natural Beauty. Nevertheless Natural England continues to believe that the development will cause significant adverse affects on an essentially rural landscape and that plume visibility will significantly increase the distance from which the facility will be noticeable.

Nottinghamshire Wildlife Trust

- 6.11 The Wildlife Trust is now satisfied that adequate surveys of the application site and adjoining sites have now been undertaken. The results of these surveys show that the land adjoining the application site is of county importance for birds and from the results of the breeding bird survey it would qualify as a bird SINC and of national importance in relation to populations of nightjar and wood lark, which have nationally important populations in the Sherwood area. The Wildlife Trust advise that their negotiations with the applicant regarding the management of the Spring Hill site does not signify that they now support the development of the ERF and wish to maintain their objections to the development on environmental grounds.
- 6.12 The Wildlife Trust considers the following issues have not been satisfactory addressed.
 - a. Overall sustainability of the project in terms of its location and the impacts of the technology being proposed.

- b. A thorough cost-benefit analysis of the development that takes into account the loss of area that could have been restored to heathland plus the negative impacts of the development set against the proposed mitigation measures. This needs to take into account that opportunities for heathland creation (and, therefore, Biodiversity Action Plan targets) are constrained by the availability of suitable sites and that creating heathland next to existing sites is preferential to give larger areas that will be more robust to external influences, allow natural colonisation and reduce the probability of extinction events for heathland flora and fauna.
- c. Impact of NO_x emissions on adjacent heathlands and cumulative impacts of this development when considered in conjunction with other applications in the area.
- d. It is unclear whether there has been an assessment of the projected noise impact against revised baseline data for when the colliery ceased operation.
- e. The landscaping scheme includes pines in the tree planting which could colonise adjacent heathland sites.
- f. Specific mitigation for the common toad population crossing the access road (e.g., toad tunnel and fencing) has not been included.

NCC Conservation Group (Nature Conservation) Team

6.13 Welcome the updated extended Phase 1 habitat survey and its supporting target surveys. A number of planning conditions are suggested to ensure ecological interests are adequately protected during the development and operation of the ERF including controls over site clearance works, translocation of common lizards and bee orchids, protection of toad crossings, external lighting and planting. The intention to undertake habitat improvements in the Spring Hill SINC are welcomed and will require agreement as part of a Section 106 agreement.

NCC (Countryside Access Team)

6.14 Wish to raise no further representation on the basis that the development affects no definitive footpaths or rights of way.

NCC Conservation Group (Archaeology)

6.15 Wish to raise no observations

NCC Landscape and Reclamation Team

- 6.16 Have reviewed the landscape and visual assessment following the submission of the Reg 19 response and the supplementary landscape and visual assessment. Using a baseline of 15 years after restoration of the coal stocking yard to heathland, the impact of the proposed development on the landscape character of the area has increased from slight adverse significance in the original report to moderate/substantial adverse. The assessment identifies that the restored stocking yard would have higher landscape sensitivity.
- 6.17 In terms of impact on the physical landscape, the revised assessment also identifies that the loss of restored heathland would increase the significance of effect to moderate adverse. Although the applicant assess that visual impacts will not be increased as a result of this revised landscape baseline, concerns previously raised regarding the undervaluing of landscape and visual assessments remain. Overall it is assessed that concerns previously raised regarding the level of landscape and visual impacts resulting from the development remain.

NCC Spatial Planning Team

6.18 The additional information sets out more detailed reasons to demonstrate why the Rufford site emerges as the preferred site rather than any of the other three sites. The additional information therefore provides a more robust analysis of the background to the alternative site appraisal and addresses concerns previously raised.

NCC Urban Design Officer

6.19 The additional information has addressed concerns that the main building should be split into three elements and is now satisfied that a single section is appropriate. Otherwise, the additional information has not significantly changed the design views on the scheme because the design has not changed and therefore concerns remain that the building is too high and should be set lower so as to reduce its landscape impact.

NCC (Highways)

6.20 The traffic impact of the re-assessment results in an additional one lorry movement pre hour during the working day. This would not have an impact upon the capacity of the access junction and as such there are no highway objections.

Severn Trent Water

6.21 Raise no objections subject to the development being provided with satisfactory drainage.

E.on Central Networks

6.22 The company advise that they have network within close proximity to the development.

Network Rail

6.23 Wish to raise no further comments in addition to their original observations dated 4th January 2008.

Local Community

- 6.24 Five further letters of representation/objection have been received from the local community. These responses re-iterate a number of issues previously raised regarding raise the following issues:
 - Impact on views from property.
 - Impacts on Wildlife
 - Concerns regarding viability of toad crossing
 - Impact on Rainworth village.
 - Alternative sites should be considered, particularly where there is greater potential for heat and power to be used.
 - Emissions and their impact on Climate change.
 - Impact of power cable installation on heathland habitats.
 - Noise emissions.
 - Impacts on Sherwood House Nursing Home which is classed as a registered hospital.
 - Concern over accuracy of traffic figures.
 - The only correct way to assess landscape and visual impacts is to compare the site against a restored heathland habitat.
 - Concerns regarding the need for the facility, particularly with regard to the waste figures.
 - Adverse impact on climate change
 - Concerns regarding air and water pollution.
 - Concerns regarding the greenfield status of the site.

PAIN

- 6.25 Have submitted further documents raising detailed planning objections to the development (Part 2, Part 3 & Part 4 and a summary) and provided detailed reports regarding incinerator bottom ash, final comments on bottom ash issues, carbon impacts, renewable energy status of waste and critique of waste figures. PAIN has also submitted numerous e-mails. A copy of PAINs own summary of their planning objection is attached as appendix 3.
- 6.26 This additional correspondence revisits many of the concerns originally raised by PAIN regarding the submission and restates the following objections:

- a. Non-compliance with the Waste Hierarchy and the Waste Strategy for England 2007.
- b. Non-compliance with the Regional Waste and Spatial Strategies: particularly regarding the need for the facility in terms of RSS targets for energy recovery.
- Climate change impact: PAIN has commissioned a detailed C. appraisal of Veolia's carbon assessment report. PAIN's report considers Veolia's assessment contains some basic errors regarding incorrect assessments of biogenic carbon content of wastes, that assumptions that biogenic carbon can be ignored in carbon assessments is not reasonable. unreasonable comparisons with alternative waste technologies have been made and that Veolia's figures contain some errors. The report considers the cost of incineration to be greater than recycling and MBT options. The low efficiency of the ERF process means that by definition the operation is disposal not recovery (as defined under the European Council of the Waste Framework Directive). The report assesses that due to the lack of CHP (which would increase efficiencies) the Rufford site is fundamentally unsuitable for the development.
- d. Disposal not Recovery: Due to the efficiency of energy generation the facility falls well short of the 65% minimum required to be defined as energy recovery within EU legislation.
- e. Incinerator Bottom Ash (IBA): PAIN have provided a detailed report which criticises Veolia's claims that IBA is inert and due to concentrations of Lead and Zinc IBA actually will need to be treated and disposed to landfill as hazardous waste. PAIN also raise concerns that IBA is not being recycled at Hampshire facilities.
- f. Danger to Human Health/Emissions.
- g. Deficiencies in Waste Local Plan: Insofar that it has not been subjected to Best Practicable Environmental Option (BPEO) assessment as was required at the time, and has not been subjected to Sustainability Appraisal and Strategic Environmental Assessment as would be required now.
- h. Concerns about waste inputs: From commercial and industrial origins and neighbouring authorities.
- i. Concerns regarding hydrogeology, nature conservation, ozone/smog/air quality, architectural appearance, fire hazards, ground instability, employment, house prices, highway concerns, misleading site history.

- j. Waste Growth Predictions and the Veolia Waste Contract: PAIN raise concerns that there has not been a full release of the Waste PFI contract details so that the public can evaluate Veolia's claims in relation to the need for the facility. Concerns are raised that Veolia has made miscalculations in the preparation of other evidence, the figures used within the application do not accord with actual historic waste management figures and use exaggerated waste figures and low recycling performance to support the need for the facility. PAIN has also raised concerns that the figures of waste generation within Nottinghamshire quoted within the planning application are higher than DEFRA audited figures.
- k. Concerns regarding the failure to release the full contractual arrangements of the Nottinghamshire PFI Waste Management contract.
- 6.27 PAIN raise the following additional comments in direct response to Veolia's Reg. 19 submissions of information:
 - a. The further information fails to justify Veolia's conclusions that the facility has no significant environmental impact.
 - b. The information fails to satisfy PPS 1 Supplement regarding securing the highest viable standards of resource / energy efficiency and its overall aim to reduce carbon emissions.
 - c. The facility is oversized and will burn material which should otherwise be recycled or composted.
 - d. Heat utilisation has not satisfactorily been considered in site selection.
 - e. The development is premature of any comprehensive redevelopment of the Rufford site.
 - f. Concerns remain regarding emissions and their cumulative impacts to ecology, the common toad crossing point, impact of installing electricity grid connections and the greenfield status of the site.
 - g. The nearest property is a registered hospital.
 - h. Concerns regarding the definition of waste incineration as renewable energy.

7. **Observations**

Introduction

- 7.1 Within Nottinghamshire disposal through landfill has historically provided the main option for the management of waste, particularly municipal waste. However, significant changes brought about as a result of European, national, and regional waste management policy and legislation require waste to be diverted from landfill and recycled/recovered as far as practicable. As a result there is an urgent need to develop new waste facilities to ensure that waste is managed more sustainably.
- 7.2 The development of the Rufford ERF seeks to provide a facility as part of an integrated waste contract for the management of Nottinghamshire's municipal waste. This following sections of the report considers the acceptability of the development against relevant waste management legislation, national, regional and local planning policies and assesses its environmental impacts. The Observations section also deals with the observations and representations received as part of the consultation process. The section is structured as follows:

<u>Section 8</u> reviews waste management policy and legislative changes to explain why there is a need for development of new waste management facilities. The section explains how the management of waste through its incineration fits into these waste management practices.

<u>Section 9</u> reviews the Municipal Waste Strategy for Nottinghamshire and the County Council's PFI waste contract and in particular how the development of the Rufford ERF together with other new facilities delivered as part of contract comply with Government waste management policy.

<u>Section 10</u> assesses the options available for the management of Nottinghamshire's residual waste, in particular the size of facility required and the choice of incineration against other waste technologies.

<u>Section 11</u> assesses the choice of waste incineration against national, regional and local waste planning policies.

<u>Section 12</u> considers the suitability of land at Rufford Colliery for the development of an ERF in the context of the Development Plan policy for the area.

<u>Section 13</u> assesses the significance of the environmental, social, transport and economic impacts against the relevant Development Plan policies and other material considerations.

8. European, National and Regional Waste Management Policy and Strategies

8.1 The following section provides a summary of the key European, national and regional waste legislation and strategies. The overarching message contained within all these documents is that current waste management practices, which are reliant on landfill for disposing of waste, must be reviewed and more sustainable waste management practices be introduced aimed at diverting waste from landfill by encouraging waste reduction, re-use, recycling and recovery (including energy recovery through incineration). The key documents are considered below:

EU Landfill Directive

- 8.2 The Landfill Directive, more formally Council Directive 1999/31/EC of 26th April 1999 of waste, is a European Union directive issued by the European Union to be implemented by its member states.
- 8.3 The Landfill Directive required a step change in the way the UK disposes of waste and will help drive waste up the hierarchy through waste minimisation and increased levels of recycling and recovery. The Directive's overall aim is "to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill". The Directive sets demanding targets to reduce the amount of biodegradable municipal landfilled.

The National Waste Strategy, Waste Strategy 2000

8.4 This strategy identified that an essential part of achieving EU Landfill Directive targets is through the drive towards more household recycling and composting, establishing a national target of 25% by 2005.

The Landfill (England and Wales) Regulations 2002

- 8.5 These regulations implement the requirements of the EU Landfill Directive (1999/31/EC) within England and Wales. The regulations seek to encourage a major change in the way the UK manages its waste, directing Government policy on waste to move away from landfill as the main disposal option and push waste management up the waste hierarchy (see paragraph 8.12) by concentrating on minimisation, reuse, re-cycling or recovery options.
- 8.6 A key focus of this legislation is the requirement to reduce the amount of biodegradable municipal waste (BMW) (defined by the Directive as waste which is capable of undergoing anaerobic or aerobic digestion,

such as food and garden waste, paper and cardboard) going to landfill and the promotion of alternatives such as recycling, composting and energy recovery from waste.

- 8.7 In England, the targets set are:
 - by 2010: to reduce the amount of BMW landfilled to 75 percent of that produced in 1995;
 - by 2013: to reduce the amount of BMW landfilled to 50 percent of that produced in 1995; and
 - by 2020: to reduce the amount of BMW landfilled to 35 percent of that produced in 1995.

Landfill Allowance Trading Scheme (LATS)

8.8 The Government introduced a Landfill Allowance Trading Scheme (LATS) in 2005. The scheme progressively limits the amount of municipal waste that can be sent to landfill each year between 2005 and 2020. The scheme requires waste disposal authorities to reduce the materials sent to landfill, trade permits with other better performing authorities or risk a fine of £150 per tonne for any biodegradable municipal waste sent to landfill over the set limit.

Regional Waste Strategy

- 8.9 Produced and published by the East Midlands Regional Assembly in January 2006, the East Midlands Regional Waste Strategy (RWS) is a key element of regional policy, providing a strategic framework for the region to rapidly progress to more sustainable ways to produce and consume goods, and then recycle or recover as much value as possible from that waste which is produced. The strategy generally reflects the policies contained within the Waste Strategy for England 2007 (although it predates it), applying the aims and objectives of the national strategy to the East Midlands region.
- 8.10 The strategy identifies a number of priority issues including that of 'Planning our future waste management infrastructure'. The Strategy sets out the pressing need to develop waste treatment and disposal capacity, to provide alternatives to burying waste in landfill sites, to meet legislative requirements and to ensure the region has sufficient infrastructure in place to cope with future waste growth in the amount of waste arising.

Waste Strategy for England 2007

8.11 In May 2007, the Government published a "Waste Strategy for England 2007" to replace the Waste Strategy 2000. This revised strategy reflects the Government's current thinking on waste management methods and sets out key objectives in terms of waste management for the future. These objectives are set out below:

- To decouple waste growth (in all sectors) from economic growth and put more emphasis on waste prevention and re-use. With specific reference to household waste, the strategy identifies a need to increase recycling and composting levels to at least 40% in 2010, 45% in 2015 and to 50% by 2020;
- To meet and exceed the Landfill Directive diversion targets for BMW in 2010, 2013 and 2020 by requiring minimum recovery rates of at least 53% by 2010, 67% by 2015 and 75% by 2020;
- To increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and nonmunicipal waste;
- To secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste; and
- To 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.
- 8.12 The strategy reinforces the importance of the waste hierarchy (illustrated in table 1, below). The waste hierarchy seeks to encourage waste prevention/reduction, followed by reuse, recycling and recovery of value, disposal is treated as the last option.
 - Table 1:The Waste Hierarchy



- 8.13 The strategy identifies key proposals for action which are relevant to this planning application. These include:
 - a) Incentivise efforts to reduce, re-use and recycle waste and recover energy from waste. Proposals include increases in the tax to dispose of waste within landfills. The current standard rate of landfill tax is £32/tonne for active wastes (those that give off emissions). This is planned to increase by £8/tonne per year to £48/t in 2010/11.
 - b) Reform regulation to drive the reduction of waste and diversion from landfill while reducing costs to compliant businesses and the regulator. Proposals include the introduction of further

restrictions on the landfiling of biodegradable wastes or recyclable material.

- c) Target action on materials, products and sectors with the greatest scope for improving environmental and economic outcomes. Specific action has been identified to take action on paper, food, glass, aluminium, wood, plastic and textiles.
- d) Stimulate investment in collection, recycling and recovery infrastructure, and markets for recovered materials that will maximise the value of materials and energy recovered. The Government view the key to more efficient recovery of materials and energy is the greater segregation and sorting of waste at or close to its source by households and businesses, which can only be achieved by investment in collection, sorting, reprocessing and treatment facilities by local authorities, businesses and the third sector. The strategy identifies the role of Private Finance Initiatives (PFI), Enhanced Capital Allowances and/or Renewable Obligation Certificates (ROCs) to encourage a variety of energy recovery technologies so that unavoidable residual waste is treated in the way which provides greatest benefits to energy policy. The Government identify the importance of ensuring Regional Spatial Strategies and local development plans conform to national planning guidance on waste so that waste infrastructure projects needed to deliver the aims of the waste strategy receive planning approval.
- e) Improve national, regional and local governance, with a clearer performance and institutional framework to deliver better coordinated action and services on the ground.

9. **Provision of Municipal Waste Management Facilities within** Nottinghamshire

Existing Landfill Capacity within Nottinghamshire

- 9.1 Nottinghamshire has historically been very dependant on landfill for the disposal of the majority of its residual waste. Currently approximately 288,000tpa of residual waste is disposed of by landfill and the remaining 60,000tpa disposed of at the Eastcroft Incinerator.
- 9.2 The application is submitted at a time when permitted landfill space for municipal, commercial and industrial (i.e. non-hazardous) waste within Nottinghamshire is severely limited. The total volume of waste disposed of to landfill can vary considerably from year to year, making it difficult to give a precise estimate of remaining landfill life. Previous estimates suggested that there was roughly 2-3 years remaining based on annual disposal rates at the time. The most recent Environment Agency figures for 2007 show a reduction in landfill rates which, if continued, could increase this to between 4-5

years. However, this still remains critical in terms of future provision and falls well below the Government's recommended level of maintaining 10 years' capacity, set out within PPS10.

- 9.3 Nearly all of this is disposal capacity is contained within three sites Dorket Head near Arnold, Daneshill near Torworth, and Staple quarry near Newark. A site at Bilsthope is likely to be full by early 2009 and a further small site at Carlton Forest is currently mothballed. Potential new non-hazardous waste disposal capacity is currently limited to a site at Bentinck which is allocated in the adopted Waste Local Plan. This is subject to a planning application submitted in October 2006 that may be determined in early 2009. If permitted, this would increase waste disposal capacity by approximately 4 million cubic metres.
- 9.4 Although this would temporarily increase capacity to just below the recommended 10 minimum landbank, with no other landfill proposals in prospect this would only provide a short-term solution. If the Bentinck proposal is not permitted then the County's waste disposal capacity is likely to fall to critical levels before any alternative suitable proposals (if any exist) could come forward and be developed. There is therefore an urgent need to provide new facilities to ensure that sufficient capacity remains for the disposal of Nottinghamshire's residual waste.
- 9.5 Meeting future landfill requirements will be an issue for the emerging Waste Core Strategy part of the emerging Waste Development Framework, which is still at the issues and options stage. Further consultation on issues and options is expected by mid-2009 which will look at potential strategic sites where these can be identified. Whilst preliminary survey work has yet to be completed it is very evident is that traditional options, namely disused mineral workings such as clay pits which can be geologically suitable for non-hazardous waste or large areas of derelict land, are now very limited.

Nottinghamshire Municipal Waste Management Strategy

- 9.6 Nottinghamshire County Council and the seven district and borough councils of Nottinghamshire, worked proactively with key stakeholders in the late 1990s to develop a strategy for managing municipal waste (waste that the district and borough councils and the County Council have a responsibility for collecting and disposing, but excluding significant quantities of industrial and commercial wastes). The strategy was produced in the knowledge that more sustainable waste management practices were necessary in order to address climate change by moving treatment methods up the waste hierarchy.
- 9.7 The Councils' Municipal Waste Management Strategy (MWMS) for Nottinghamshire was approved in 2001 following a lengthy period of engagement with stakeholders. The MWMS was intended to:

- a. provide a framework for the Councils to plan and manage their waste management services in an integrated way;
- b. increase the sustainability of waste management in Nottinghamshire by promoting waste minimisation, and increasing the re-use, recycling and composting of waste; and
- c. meet the needs of the residents of Nottinghamshire, be environmentally acceptable and affordable to the Councils.
- 9.8 The Strategy set out four key objectives for municipal waste management in the County over the next 20 years:
 - a. To stabilise (and in due course reduce) the amount of municipal waste generated in Nottinghamshire.
 - b. To achieve the national targets for waste recycling, recovery and disposal of waste to landfill.
 - c. To deliver an affordable and environmentally acceptable waste management service.
 - d. To implement solutions that have the support of the public.
- 9.9 The MWMS is now some years old and the performance targets have now been more objectively stated within the Waste Strategy for England 2007, the East Midlands Regional Waste Strategy 2006 and from a planning context, PPS10 and RSS8. Since these strategies and policies provide a more updated view on Government waste policy they have been used as the basis for the assessment of the current development.

Nottinghamshire Waste Management PFI Contract

- 9.10 In June 2006 Nottinghamshire County Council signed a 26 year PFI waste management contract with Veolia. This PFI contract provides a public-private partnership which enables the County Council to gain access to new or improved capital assets. However unlike traditional procurement the public sector does not buy the assets, but rather pays for their use. Veolia are making a capital investment of £140m over the term of the contract in the phased development of new recycling, composting, treatment and delivery facilities, as well as plant and equipment, to deliver the requirements of the PFI Contract.
- 9.11 The contract is performance based and includes key performance indicators (KPIs) to monitor Veolia's performance. These are primarily aimed at achieving government performance standards for recycling, composting and landfill diversion and a range of customer focused and sustainable outcomes. Key contract targets include:

- a) Reaching a recycling and composting level of at least 52% by 2020.
- b) Improving on the statutory LATS targets for Nottinghamshire, and having virtually no biodegradable material sent direct to landfill by 2012.
- c) Undertaking operations in a sustainable and environmentally friendly manner and minimising carbon emissions.
- d) Attaining minimum recycling and composting levels and improved customer satisfaction at the Household Waste Recycling Centres (HWRCs).
- e) Providing appropriate infrastructure for the waste collection authorities with acceptable capacity and a minimum of delay to delivery vehicles.
- 9.12 To enable the delivery of these objectives the waste contract proposes the construction/improvement of a range of new facilities aimed at delivering an integrated solution to municipal waste management within Nottinghamshire and moving waste management to a higher point within the waste hierarchy. The new facilities include:
 - a) The construction of an energy recovery facility capable of incinerating 180,000 tonnes per annum of residual municipal solid waste which cannot be recycled or composted economically with the recovery of energy in the form of electricity from the process. The energy recovered would be fed into the National grid and be sufficient to power 15,000 homes.
 - b) The provision of a materials recovery facility in Mansfield which would handle and sort around 85,000 tpa of recyclable waste such as paper, plastic and cans collected by District and Borough Councils.
 - c) The development of a new composting facility in Central Nottinghamshire and the use of other existing composting sites to handle a total of 100,000 tonnes of green waste per annum.
 - d) The development of new Household Waste Recycling Centre (HWRC) to serve Worksop and upgrade/continued operation of the Council's network of existing HWRC's.
 - f) The development of a network of new transfer stations to receive and handle waste and recyclables from District and Borough Council collections to serve Newark and Worksop, and the use of existing sites at Giltbrook and South Nottingham.

- g) The use of properly planned, constructed and licensed landfill sites to take waste which cannot be converted to energy recycled or composted.
- 9.13 The overarching objectives of the Nottinghamshire Waste Management PFI Contract are in line with the objectives of the Waste Strategy for England 2007. The PFI waste contract ensures that National Waste Strategy targets for recycling, composting and landfill diversion are achieved. The contract also provides for the protection of the environment, best value and affordability, conservation of energy and raw materials, supports waste minimisation, ensures that waste is treated/disposed of using one of the nearest facilities and the most appropriate methods and technologies, allows flexibility to accommodate changes in waste legislation and practice and uses and promotes the principles of the waste hierarchy. Individual proposals for waste management facilities need, however, to be considered on their planning merits.

10. Assessment of the options for residual waste management within Nottinghamshire.

Assessment of the size of residual waste management facility required to serve Nottinghamshire 'Planning for Sustainable Waste Management'

10.1 PPS10 practice guide, paragraph 8.16 advises:

'In the case of waste disposal facilities, applicants should be able to demonstrate that the envisaged facility will not undermine the waste planning strategy through prejudicing movement up the waste hierarchy. Otherwise, if the proposal is consistent with PPS10 and the core strategy there is no need to demonstrate 'need'.

- 10.2 One of the key benefits of the development is that it would divert waste from landfill and ensures energy is recovered from waste thus ensuring waste is managed at a higher level within the waste hierarchy than would otherwise be achieved. PPS10 policy indicates that the applicant is not required to demonstrate a 'need' for the facility.
- 10.3 Nevertheless, representations have been received that the size of the facility is excessively large and as a result could discourage waste minimisation and 'crowd out' improvements to recycling performance thus undermining the ability to manage such waste further up the waste hierarchy.
- 10.4 To assess whether these concerns are reasonable the applicant has undertaken an assessment of future waste arisings up to 2032/33

(the end of the PFI contract). This assessment includes some important assumptions which are considered below:

- 10.5 <u>Assumption 1</u>: Waste arisings will grow by an average of 0.7% in the period 1st April 2007 to 31st March 2015, by 0.26% in the period 1st April 2015 and 31st March 2018 and there would be zero waste growth between 1st April 2018 through to 31st March 2033: For comparative purposes the RWS identifies a realistic model for the prediction of the growth of municipal waste between 2007 and 2015 of 1.7% per annum with zero waste growth from 2016 to 2021. The Nottinghamshire Structure Plan Review (SPR) predicts higher levels of municipal waste growth of 3% per annum.
- 10.6 Although the assumptions taken by the applicant regarding waste growth are different to those contained within the RWS and SPR, when they are averaged out over the 2006/07 2032/33 they identify significantly lower levels of cumulative waste growth than would have otherwise have occurred if government figures were used. The levels of waste growth are therefore assessed as being reasonable when considered against national guidelines.
- 10.7 <u>Assumption 2:</u> The level of recycling/composting performance: Since the applicants calculations identify a quantity of waste collected within Nottinghamshire and then subtract the level of composting/recycling from this overall figure, the level of recycling performance used in the assumption is critical to determining the amount of residual waste which would require treatment. Table 2 (below) provides comparative data of the rates used within the applicants assessment and enables these to be assessed against national and regional government targets.

Key Year	Nottinghamshire CC PFI contract	Regional Spatial Strategy for the East Midlands (RSS8)	National Waste Strategy	
2006/07	30%	25%		
2009/10	42%	30%	40%	
2012/13	47%	30%	40%	
2015/16	48%	50%	45%	
2019/20 to 2032/33	52%	50%	50%	

Table 2: Comparative assessment of recycling/composting rates.

10.8 Table 2 demonstrates that the applicants levels for recycling/composting performance used within their calculations are reasonable when considered against government targets and exceed government targets at all times throughout the contract period with the exception of 2015/16 when performance is 2% short of RSS8 targets (although it exceeds National Waste Strategy targets in this year).

10.9 Having accepted the key assumptions used by the applicant to calculate the amount of waste produced and the level of recycling/composting table 3 (below) shows how this waste is proposed to be managed.

Total Arisings in Nottinghamshire				Recycling/ Composting		Residual Waste		
Key Years	(tonnes per annum)			Annual	Target Tonnage	Treatment (Input tonnes per annum)		Waste Disposal
(starting 1st April)	MSW	Non- Household Waste (1)	Household Waste	Target	per annum (2)	Rufford ERF	Eastcroft EFW	Landfill (tonnes per annum) (3)
2006/07	480,229	37,700	442,529	30%	132,759	-	60,000	288,908
2009/10	498,253	38,459	459,794	42%	193,113	-	60,000	246,216
2012/13	507,401	39,038	468,363	47%	220,130	180,000	60,000	48,071
2019/20	513,806	39,528	474,278	52%	246,624	180,000	60,000	27,748
2025/26	513,806	39,528	474,278	52%	246,624	180,000	60,000	27,748
2032/33	513,806	39,528	474,278	52%	246,624	180,000	60,000	27,748
Total for period 2006/07 to 2032/33	3,727,150	1,058,643	12,668,506		5,992,266	3,884,362	1,620,000	2,253,027

Table 3: Management of Residual Waste Nottinghamshire – Key years during 2006 / 2033

Footnote

(1) made up of WCA Commercial and HWRC rubble

(2) recycling targets based on Household Waste only not MSW

(3) includes residual waste (WCA & HWRC), contract facility process residues and residues from Eastcroft EfW

10.10 In terms of the management of Nottinghamshire's waste, table 3 shows total amount of waste collected (MSW or municipal solid waste) at each key year. The table then identifies the origins of this waste to provide a split between waste collected from households and other waste collected as part of municipal collections (including commercial waste collected from small business and rubble). This split in waste streams is important to identify because the recycling targets set by DEFRA relate only to household waste and not these other waste streams which are collected. To calculate the amount of residual waste requiring treatment the annual quantity of recycling/composting is deducted from the waste arisings to identify the amount of residual waste which requires treatment. Throughout the duration of the PFI contract there is a sub-contract to provide 60,000tpa of residual waste for treatment at the Eascroft Incinerator. Therefore the final column identifies the amount of annual waste remaining which requires treatment.

- 10.11 The table demonstrates that at all times through the waste contract there is in excess of 200,000tpa of residual waste which requires treatment/disposal. If new waste treatment facilities are not provided during this period to manage it, this waste would continue to be disposed at landfill. A 180,000 tpa capacity ERF would ensure that this waste is managed at a higher level within the waste hierarchy. The facility has been appropriately sized therefore, to manage Nottinghamshire's residual waste.
- 10.12 The figures presented in table 3 show that in 2006/07 it was anticipated that Nottinghamshire would produce 480,229tpa of waste. Since the application was submitted DEFRA audited waste figures have been released which show that actual collected waste was 444,748 in 2006/07 and therefore below the level identified within the planning application.
- 10.13 Consultees have argued that this lower level in waste collection demonstrates that there is no longer a need for the ERF development. Although the latest waste collection figures demonstrate that waste growth has currently stabilised, throughout the contract period there is a surplus amount of residual waste sent to landfill which could be re-directed to Rufford and therefore the lower MSW collection figures would build in some reasonable degree of flexibility to respond to the most likely outcomes.
- 10.14 Forecasting waste growth is very volatile, particularly in the current financial conditions. These fluctuations in growth reinforces the need for planning to take account of the need to build in flexibility for both higher or lower levels of waste arisings. Predicting waste arisings can never be an exact science and there will be differences of opinion over the exact figures to be used. What is clear, however, is that the variations between the forecasts used for the planning application and audited waste collection figures does not undermine the basic case of need and the actual level of reduction is not significant in terms of the overall volumes of waste to be managed.
- 10.15 As part of the supplementary information submitted in response to the Regulation 19 request the applicant has provided clarification as to the maximum potential processing capacity of the facility. This information confirms that the 180,000tpa capacity is based on an 85% operating level which the applicant considers is reasonable allowing for planned and unplanned down times. Theoretically, however, it is possible for the plant to operate at a higher level if downtimes are avoided, and up to 92% may be theoretically possible. Operating at this level would increase the annual tonnage from 180,000 tpa to 194,823.5 tpa (i.e. by 14,823.5 tpa) and therefore, the size of the plant would still be smaller than Nottinghamshire's residual waste arisings. The conclusion that the facility is appropriately sized remains valid.

- 10.16 Even though the size of the facility is designed to take account of government forecasts for waste growth and increased recycling, the very nature of future forecasting means predictions, particularly in the longer term, may not be realised. In the event that higher recycling targets were to be achieved, and/or waste arisings do not grow as anticipated, the processing capacity of the proposed facility may exceed the quantity of municipal residual waste collected by Nottinghamshire's waste collection authorities.
- 10.17 In such circumstances the applicant has confirmed that the ERF would look to other waste streams to meet any shortfall, including commercial and industrial waste and waste from waste collection authorities outside Nottinghamshire. Treating this material within the Rufford ERF would assist in driving the management of such waste up the waste hierarchy, providing the opportunity to recover value from that waste by generating electrical power and diverting waste from disposal by landfill thus contributing to meeting the requirements of the EU Landfill Directive.
- 10.18 In light of increasing waste generation, a lack of long term landfill capacity, Waste Strategy policy and Landfill Directive targets for the diversion of biodegradable municipal waste from landfill, there is a compelling argument supporting the need for new waste management facilities for the treatment of Nottinghamshire residual waste.

Assessment of alternative technologies for the management of Nottinghamshire residual waste

- 10.19 The Waste Strategy for England 2007 acknowledges that a significant proportion of the waste stream cannot viably be re-used or recycled. For this part of the waste stream the Waste Strategy for England encourages recovery of energy from waste in preference to its disposal and recognises the role energy recovery from waste plays in a well balanced energy policy.
- 10.20 The Rufford ERF forms part of a treatment option to manage residual municipal waste arisings within Nottinghamshire following the removal of recyclable and compostable material from the waste stream. The facility would be developed as part of the integrated PFI waste contract to enable Nottinghamshire to exceed Government targets for waste re-use and recycling through the provision of waste management technologies further up the waste hierarchy. The development of an ERF for the management of residual waste is therefore considered to comply with the objectives of the Waste Strategy.

- 10.21 The Waste Strategy acknowledges that there are a number of waste treatment options available for the management of residual waste. The Government advise that 'it is not helpful to rule out a particular technology such as incineration in advance, since this unnecessarily restricts options and threatens to raise costs'. However, local authorities and businesses are encouraged to consider using anaerobic digestion, although local circumstances will affect the choice of technology between areas.
- 10.22 Annex E of the Waste Strategy provides 'summary guidance on energy from waste technology' which is intended to act as a guide to local authorities considering waste treatment options and assess the suitability of various waste technologies against their different feedstocks, carbon emissions performance and outputs. (A detailed assessment of carbon emissions is contained within Section 13 of this report).
- 10.23 In terms of efficiencies, the Waste Strategy advises that any given technology is more beneficial if both heat and electricity can be recovered. Particular attention should therefore be given to the siting of plant to maximise opportunities for combined heat and power.
- 10.24 The planning application is supported by a comparative assessment of alternative waste treatment options. The assessment considers the following residual waste management options:
 - a) Landfill (the 'do nothing' scenario).
 - b) ERF generating electricity only.
 - c) ERF generating Combined Heat and Power (CHP).
 - Mechanical Biological Treatment (MBT) facility based upon an Anaerobic Digestion (AD) technology. Organic residues disposed of to landfill.
 - e) MBT facility based upon an aerobic process for stabilising the biodegradable component of the waste in-vessel composting (IVC) technology.
 - f) A Biological Mechanical Treatment (BMT) facility producing a Refuse Derived Fuel (RDF).
- 10.25 The options appraisal provides a 'high-level' comparison of different generic options but does not represent a detailed life cycle assessment of different technologies. The appraisal illustrates the variability in the performance of the waste management options against the following sustainability objectives:

Sustainable Consumption and Production

- What is the level of material recovery?
- What proportion of residuals are disposed to landfill?
- What level of bio-degradable municipal waste diversion is the option likely to achieve?
- What level of energy recovery does the option achieve?

- How reliable is the technology?
- How flexible is the technology to changes in the waste composition?

Climate Change and Energy

• What is the carbon impact of each technology?

Natural Resource Protection and Environmental Enhancement

- What is the landscape impact of each technology?
- What impacts will odour, dust & noise emissions from the technologies have?
- What is the risk in terms of ground and surface water pollution?
- What are the transport impacts?
- What is the footprint for each option?

Sustainable Communities Performance

- What opportunities are there for public engagement?
- How many jobs will be created?
- What is the capital cost?
- What is the operational cost?
- 10.26 The appraisal highlights that all options provide significant potential benefits over the landfill "do nothing" option in terms of managing waste in a more sustainable manner in line with government policy, with waste incineration performing best in terms of its technical reliability. It is recognised that there are different processes which can be used in order to extract energy from wastes (Efw). These techniques have different efficiencies, recovery rates and end products, and some are more commercially developed than others.
- 10.27 However, incineration is a tried and effective technique being developed more extensively in the UK and widely used in Europe as part of waste management strategies that achieve high rates of recycling. The other EfW techniques are currently less proven and in some cases more complex, and it is not yet clear if they will be more practicable in application than incineration.
- 10.28 It is therefore concluded that an ERF component provides a robust deliverable solution in the context of maturity of technology, market risk and costs that ensures Nottinghamshire meets and exceeds its residual waste landfill diversion obligations and the applicant has given due regard to alternative and developing technologies in accordance with advice provided in the Waste Strategy, PPS10 and RSS8 Policy 38.

11. Waste Planning Policy Context

Planning Policy Statement 10: Planning and Sustainable Waste Management (PPS 10)

- 11.1 PPS10 was published in July 2005 and establishes the national policy for land use matters relevant to waste management and is a key material planning consideration within the determination of this planning application. PPS 10 recognises that positive planning has an important role to play in delivering sustainable waste management, in part by providing sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time.
- 11.2 The Government views the planning system as pivotal to the adequate and timely provision of the new facilities that will be needed to bring forward the required number and range of facilities to manage waste in the future to ensure that targets set out in the Waste Strategy for England are achieved.
- 11.3 PPS10 states that the overall objective of Government policy on waste is to protect human health and the environment, by reducing the amount of waste produced and by using it as a resource wherever possible. PPS10 (Para 23) advises in circumstances when planning applications for waste management facilities are considered before development plans can be reviewed to reflect PPS10 guidance, then planning authorities should ensure that proposals and decisions are consistent with the policies in PPS 10.
- 11.4 Paragraph 3 of PPS10 sets key planning objectives which planning strategies and waste development decisions should meet. The objectives are listed below followed by an assessment of the extent to which the application complies with each objective.
 - Objective: help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option, but one which must be adequately catered for;
- 11.5 Sustainable waste development is a key objective of the Waste Strategy for England 2007. Compliance with the Waste Strategy (and therefore sustainable waste development objectives) has been discussed in detail in the proceeding sections of this report. Key to measuring the sustainability of a waste project is compliance with the waste hierarchy, regulated by landfill diversion (monitored by LATs) and meeting recycling targets.

- 11.6 The proposed ERF forms a key component of the Nottinghamshire Waste Management PFI contract and should enable Nottinghamshire to meet/exceed landfill diversion and recycling targets set out within the Waste Strategy. The ERF's size and timing have been planned to ensure it provides adequate processing capacity for Nottinghamshire's residual household waste without providing excessive capacity which may 'crowd out' efforts for increased recycling and composting facilities provided elsewhere within the Council's waste management strategy.
- 11.7 The Government's Energy White Paper, published in May 2007 places EFW in a wider energy policy context. The Rufford ERF would export in the region of 13MW to the National Grid which is sufficient to meet the annual electricity needs of approximately 15,000 homes, thus ensuring waste processed at Rufford would be used as a resource.
- 11.8 It is therefore considered that the development would help deliver sustainable waste development by driving waste management up the waste hierarchy through the recovery of energy, thus ensuring this objective is met.
 - Objective: provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- 11.9 The size of the Rufford ERF has been designed to manage Nottinghamshire's residual waste (excluding waste managed at the Eastcroft Incinerator) at a central point within the county. The timing of the facility alongside the development of waste management facilities such as recycling and composting schemes ensures that the community would have adequate waste management facilities that achieve compliance with Government targets regarding waste recycling/recovery and diversion of waste from landfill. The proposal therefore meets this objective.
 - Objective: help implement the national waste strategy, and supporting targets, are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations 1994;
- 11.10 The proposal would contribute towards European, national, regional and local waste targets for landfill avoidance and recovery of energy from waste as set out in Waste Strategy for England 2007, RSS8 and the WLP. Waste that can be recycled or composted would be removed from the waste stream prior to treatment at the proposed ERF. There would be a significant diversion of waste from landfill. The proposal would be required to operate in accordance with all

relevant controls, such as PPC legislation. The proposal therefore, meets this objective.

- Objective: help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- 11.11 The proposed ERF would use proven technology. The application states that the impact of the development has been addressed by appropriate mitigation measures to minimise its effects, especially in relation to risk to human health and damage to the environment (the environmental impacts of the development are considered later within this report). The plant includes sophisticated treatment of all emissions to meet PPC requirements, and to protect human health and the welfare of the natural environment.
- The applicant has indicated that the location of the facility has been 11.12 selected with the proximity principle in mind, alongside environmental and planning constraints. Overall waste transportation impacts are considered to be minimised by reducing the driven distance by waste collection vehicles, using fewer, larger vehicles to transport waste over longer distances through the use of waste transfer stations and managing wastes as near as possible to the point of arising. The site selection process has been comprehensive and the Rufford site is within the central Nottingham area identified within the Nottinghamshire Waste Management PFI contract as the preferred location for the facility. The proposals therefore meets this objective.
 - Objective: reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;
- 11.13 Significant levels of objections to major waste infrastructure developments are not uncommon. Objections have been received from the local community raising concerns relating to potential environmental impacts from the development. These concerns are considered within this report and although there are some negative impacts, it is necessary to balance these against the requirements of the wider community for the provision of modern facilities which provide for future needs, at a time when there is an imminent shortage of waste management facilities. The provision of such additional facilities meets the needs of waste collection and disposal authorities.
- 11.14 The ERF is designed to meet specific requirements associated with the collection of municipal waste, and therefore the issue of competiveness is generally not applicable. However the proposal has emerged following a competitive tendering exercise associated with the Nottinghamshire Waste Management PFI contract. It is therefore considered that the proposal meets this objective.
 - protect green belts but recognise the particular Objective: locational needs of some types of waste management facilities when defining detailed green belt boundaries and, in determining planning applications, that these locational needs. together with the wider environmental and economic benefits of sustainable waste management, are material considerations that should be given significant weight in determining whether proposals should be given planning permission;
- 11.15 The application site is not within the Nottinghamshire Green Belt and therefore meets this objective.
 - Objective: ensure the design and layout of new development supports sustainable waste management.
- 11.16 The development of an ERF as part of a wider package of waste treatment facilities has a proven track record elsewhere in the Country. In Hampshire the recycling/composting, energy recovery and landfill diversion performance significantly exceeds government performance targets and demonstrates that an appropriated designed ERF for the management of residual waste supports sustainable management. Hampshire was hailed as an example of good practice for its partnership approach to waste management in the 2002 government strategy report 'Waste Not Want Not'. In addition, in 2000-2001, the first year of the awards, Project Integra, the name given to the Hampshire project, was attributed 'Beacon Council Status' in the category 'sustainable development dealing with waste'.
- 11.17 The Rufford ERF development would assist Nottinghamshire meet government's sustainable waste policies as part of a package of waste treatment facilities based on experience of a similar solution provided in Hampshire. The ERF would therefore assist in moving waste treatment up the waste hierarchy by ensuring that waste which would otherwise be disposed of is used as a source of energy. It is therefore considered the development of the ERF therefore would assist in meeting this objective.

Regional Spatial Strategy for the East Midlands (RSS8)

- 11.18 Policy 38 of the RSS8 sets out the principles upon which the regional waste strategy should be based. These are as follows:
 - working towards zero growth in waste at the regional level by 2016;
 - reducing the amount of waste sent to landfill in accordance with the EU Landfill Directive;
 - exceeding Government targets for recycling and composting, with the objective to bring all parts of the region up to the levels of current best practice; and
 - taking a flexible approach to other forms of waste recovery, on the basis that technology in this area is developing very quickly and is difficult to predict over a 20 year period.
- 11.19 Policy 39 sets out the Regional priorities for waste management as follows:
 - Local authorities, national, regional and local bodies should promote a package of policies and proposals that will result in zero growth in all forms of controlled waste by 2016.
 - All Waste Collection Authorities and Waste Disposal Authorities should achieve a minimum target for the recycling and composting of Municipal Solid Waste of 25% by 2005, 30% by 2010 and 50% by 2015.
- 11.20 The development of the Rufford ERF as part of the Nottinghamshire Waste Management PFI contract would assist in delivering the objectives of RSS8 Policy 38 insofar that it would reduce the amount of waste sent to landfill and assist in exceeding Government targets for recycling and composting. The policy supports a flexible approach to waste recovery technologies, identifying that technology in this area is developing very quickly. Paragraph 4.3.43 acknowledges that delivering the objectives of this policy will require the development of some additional waste recovery capacity which may include energy from waste or other technologies such as anaerobic digestion.
- 11.21 In terms of Policy 39 the development (as part of the waste contract) would assist in meeting and exceeding the recycling and composting government targets at all times throughout the contract period with the exception of 2015/16 when performance is 2% short of RSS8 targets (although it exceeds National Waste Strategy targets in this year).

Nottinghamshire and Nottingham Joint Structure Plan (JSP)

11.22 Paragraph 2.67 of the JSP identifies that municipal waste is expected to grow at around 3% per year. The plan identifies the need for additional recycling and recovery facilities to manage a shift away

from landfill. Policy 2/15 is generally supportive towards renewable energy developments. It is therefore concluded that the development is in general conformity with the JSP.

Nottinghamshire and Nottingham Waste Local Plan

- 11.23 The Nottinghamshire and Nottingham Waste Local Plan (WLP) adopted January 2002 makes provision for waste management facilities for a ten year period between 1st January 1995 and 31st December 2004. The plan does not consider the need for facilities beyond this period. Most policies in the WLP have been saved by the Secretary of State as part of the process to update Local Plans before they can be replaced by policies in the new 'Local Development Framework' arrangements.
- 11.24 The WLP promotes waste management in line with the waste hierarchy. However the Plan was prepared at a time when government policy regarding landfill diversion and recycling targets were at an early stage of development and European, National and Regional waste management policies were not as established as they are today. The plan therefore sets no specific targets for recycling of municipal waste and diversion of waste from landfill.
- 11.25 The plan recognises the positive role incineration can provide for the management of municipal waste and the benefits in protecting limited landfill space. This gave support for the expansion of Eastcroft Incinerator through the development of a third line as set out in Policy W6.1. However, the plan did not promote the development of any new incinerators because at the time the Plan was being prepared the comparative cost of building and operating new incinerators made landfill the most cost-effective option for developmers.
- 11.26 The WLP preceded the publication of PPS10 and work on replacement policies is still at a relatively early stage (see paragraph 11.29 below). In such circumstances PPS10 states that:

'In considering planning applications for waste management facilities before development plans can be reviewed to reflect this PPS, (waste planning authorities should) have regard to the policies in this PPS as material considerations which may supersede the policies in their development plan.'

11.27 Although the principles and objectives within the WLP are broadly in line with current national and regional policy, the age of the WLP means that it does take fully into account the recent changes to government waste management policy contained within PPS10 and the national waste strategy. These place an increasing emphasis on diverting municipal waste from landfill. PPS10 policy is therefore a material consideration to the determination of this planning application which supersedes the policies of the WLP insofar as it

relates to the development of new municipal waste incineration facilities.

11.28 Chapter 3 of the WLP contains environmental protection policies of relevance to the determination of this application. These are considered within Section 13 of this report which assesses the environmental impact of the development.

New Waste policies – the Waste Core Strategy

- 11.29 The County and City Councils have commenced work on a Waste Development Framework within which the Core Strategy will set out an overall vision for future waste management, what new strategic and other facilities are needed to meet it and, if possible, where new strategic facilities should be located.
- 11.30 Preparation of the Core Strategy is still at the informal 'issues and options' stage and contains no draft policies that the County Council has endorsed. This means that very little weight can yet be placed on it when determining planning applications. The issues and options were subject to public consultation in October 2006. The consultation paper and supporting background material updated the current waste management situation in Nottinghamshire and considered the implications of new national and regional policy guidance along with an assessment of what realistic options exist to meet expected future requirements.
- 11.31 The issues and options paper identified major shortfalls in landfill capacity and the urgent need to increase recycling, composting and energy recovery of all major waste streams. This was to both meet statutory and other targets and deal with the lack of landfill space and limited options for finding waste disposal capacity. The consultation paper was not site specific so it did not consider the merits of an Energy Recovery Facility at Rufford or anywhere else.
- 11.32 In line with national policy, the consultation paper did not make any distinction between the various types of energy recovery technology as these are all equal in terms of the waste hierarchy. The paper did, however, acknowledge that an increase in the use of energy recovery to manage municipal waste (and indeed commercial and industrial waste) would be one realistic and effective option for significantly reducing landfill requirements.
- 11.33 Since 2006 progress on preparing the Waste Core Strategy has slipped due to problems experienced nationally in implementing the new Local Development Framework planning system. In June 2008 the Government issued revised policy guidance (PPS12 Local Spatial Planning) which significantly changed the scope of Core Strategies and changed the way new planning documents are to be prepared.

11.34 In the light of these changes the County and City Councils have reviewed their approach and intend to carry out further public consultation on issues and options which will now be much more site specific. This has involved a considerable amount of additional evidence gathering which is still on-going. Public consultation on revised issues and options is not expected to begin before June 2009 and it may be 2010 before the County and City Councils will have decided which options and strategic sites (if any) are preferred.

12. Suitability of Rufford Colliery for the development of an ERF

Location of facility within Nottinghamshire – choice of site

- 12.1 The site identification process has been described within the proposals section of this report (Section 3). The starting point for site selection purposes was to locate the building within an area which is central to waste arisings within Nottinghamshire to reduce the distance travelled by waste vehicles and therefore minimise adverse environmental impacts resulting from HGV traffic. This approach is considered appropriate and in general conformity with the approach suggested in PPS10 which encourages waste to be disposed of at the nearest appropriate installation through the use of the most appropriate methods and technologies.
- 12.2 In the absence of a site allocation for the development of an Energy Recovery Facility within the Local Plan/Local Development Document this approach to identifying an appropriate site based on proximity to waste arisings is considered appropriate and sustainable.
- 12.3 The use thereafter of a sequential approach whereby a full list of possible sites was identified and thereafter assessed against a series of questions to assess each site's suitability for development and potential environmental benefits/harm is considered to be an appropriate methodology for site identification purposes. The conclusions that the Rufford site is the most appropriate for the development is therefore considered to be reasonable and appropriate in the context of the study undertaken.

PPS10 Guidance relating to the siting of new or enhanced waste management facilities

12.4 PPS10 envisages a plan led approach for the planning of new waste management facilities and encourages waste planning authorities to identify and allocate sites suitable for waste management facilities within waste development documents. In circumstances where there is not an up to date waste development document document which identifies/allocates such sites, as is the case in Nottinghamshire, planning authorities are advised to make decisions that are consistent with the policies in PPS10.

12.5 Paragraph 21 of PPS10 provides specific guidance relating to the identification of sites for new or enhanced waste management facilities. In the absence of an identified site within the Nottinghamshire Waste Local Plan/Development Framework the advice contained within paragraph 21 is relevant to the determination of this planning application and advises that suitability of developments should be assessed against the following criteria:

'In deciding which sites and areas to identify for waste management facilities, waste planning authorities should:

- *(i)* assess their suitability for development against each of the following criteria:
 - the extent to which they support the policies in this PPS;
 - the physical and environmental constraints on development, including existing and proposed neighbouring land uses (see Annex E);
 - the cumulative effect of previous waste disposal facilities on the well-being of the local community, including any significant adverse impacts on environmental quality, social cohesion and inclusion or economic potential;
 - the capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport.
- (ii) give priority to the re-use of previously-developed land, and redundant agricultural and forestry buildings and their curtilages.'
- 12.7 An assessment of the Rufford ERF against the above policy demonstrates that the facility would support the policies set out within PPS10 and would assist in moving waste treatment up the waste hierarchy by ensuring that waste which would otherwise be disposed is used as a source of energy. (see section 11);
- 12.8 Annex E of PPS10 provides guidance on the factors which should be considered in testing the suitability of sites and areas for their physical and environmental constraints. The factors which Annex E advises should be taken into account are as follows:
 - a) protection of water resources
 - b) land instability
 - c) visual intrusion
 - d) nature conservation
 - e) historic environment and built heritage
 - f) traffic and access
 - g) air emissions, including dust
 - h) odours
 - i) vermin and birds

- j) noise and vibration
- k) litter
- I) potential land use conflict
- 12.9 These factors are assessed within section 13 of this report where it is concluded that overall there are no significant environmental impacts that on balance merit a refusal of planning permission.
- 12.10 There would be no cumulative impacts arising from previous waste disposal facilities on the well-being of the local community. A previous landfill site north of the application site is no longer operational and is awaiting final restoration. The development of an ERF would provide local job opportunities in its own right as well as potentially providing a catalyst for the wider redevelopment of the former Rufford Colliery pit head site for employment purposes, therefore providing regeneration benefits.
- 12.11 The Rufford site is served by the Rainworth bypass and MARR which form part of the strategic highway network of Nottinghamshire. The site is therefore considered to be well served by transport infrastructure sufficient to accommodate the traffic associated with the development (see section 13).
- 12.12 It is therefore assessed that the siting of the ERF at Rufford would generally comply with criteria (i), paragraph 21 of PPS10.
- 12.13 In terms of compliance with criteria (ii) the applicant's description of the land within the planning submission as 'brownfield in character' is considered somewhat misleading when considered against the definition of brownfield land (also referred to as previously developed land) contained within PPS3 (Housing) Annex B which excludes from the definition of brownfield land:

'land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures'.

- 12.14 Since the current use of the former Rufford Colliery for coal stocking activities has the benefit of a temporary planning permission until 24th April 2011 (or earlier in the event that the use of the site ceases before this date) and thereafter is required to be restored to heathland/woodland in accordance with the planning permission, the land clearly cannot be described as brownfield.
- 12.15 Therefore, the ERF is not (by this definition) sited on previously developed land or within redundant agricultural/forestry buildings. The Rufford site therefore does not benefit from the priority given within PPS10 paragraph 21 criteria (ii) relating to the use of previously development land for the development of new waste management facilities. For this reason Newark and Sherwood District Council object to the development since, in their view, the site

fails to meet PPS10 guidance relating to the identification of suitable sites.

- 12.16 Whilst priority is given to the use of previously developed land within paragraph 21 of PPS10 for the siting of waste facilities, this is not the only type of site which PPS10 identifies as being potentially suitable for the development of new waste management facilities. Many industrial locations are suitable for waste development, a fact identified by paragraph 7.29 of the companion guide to PPS10 which acknowledges that most waste management activities are now suitable for industrial locations, particularly where facilities are enclosed in purpose designed buildings, such as the Rufford ERF.
- 12.17 The view of Newark and Sherwood District Council that the Rufford site fails to meet PPS10 guidance relating to the identification of new sites for waste management facilities on the basis that the site has restoration requirements is considered unreasonably restrictive. The Rufford ERF would comply with regeneration policies contained at regional, county and district level and these policies are discussed in greater detail in the next section of this report. It is therefore assessed that the choice of the former Rufford Colliery for the ERF development is supported by the site selection criteria contained within PPS10.

Development Plan Policy relating to Rufford Colliery

- 12.18 The Regional Spatial Strategy for the East Midlands (RSS8) March 2005 published by the Government Office for the East Midlands is currently being reviewed and the proposed changes of the Secretary of State were published in July 2008 (DRP).
- 12.19 Within the adopted RSS8, Policies 2 and 3 support a sequential approach towards the selection of new development sites based on the sustainability of their location. Priority is given to development in urban areas, followed by locations adjoining urban areas which are well served by public transport (particularly where such development is on previously developed land) with the lowest priority being given to land outside and not adjoining urban areas. Since the Rufford site is located in the countryside 1km to the north of Rainworth village it would be considered a lower priority site in the context of the above policies.
- 12.20 Policy 9 of RSS8 identifies that the economic, social and environmental regeneration of the Northern Sub area is a priority. The policy identifies that the Regional Planning Body (East Midlands Regional Assembly – EMRA), working with the relevant local authorities, East Midlands Development Agency (EMDA) and other interested bodies, should develop a Sub-Regional Spatial Strategy for the Northern Sub-area as part of the next RSS Review. Policy 21 also identifies that the Northern Sub-area, with its concentration of

economic, social and environmental problems linked to the decline of the coal industry is a priority area for regeneration.

- 12.21 As part of the current review of RSS8, Policies 2 & 3 have been significantly altered within the DRP insofar that Policy 2 has been removed and Policy 3 has been re-written to provide a greater emphasis to directing development towards the three major cities within the region (Derby, Leicester & Nottingham), the larger towns in the region (including Mansfield) and to assist with the regeneration of the larger settlements. Policy 19 identifies that regeneration should be focussed on areas of greatest identified need, particularly the Northern Sub-area (which incorporates Rainworth).
- 12.22 The DRP also incorporates a Sub-Regional Spatial Strategy for the Northern Sub-area. DRP Northern SRS Policy 1 identifies that Local Development Frameworks should identify development for 'other urban areas' including Rainworth. The plan acknowledges that the decline of mining offers good opportunities for regeneration through employment development. Policy Northern SRS3 states that in reviewing employment allocations, local planning authorities should also consider locations along the MARR which assist in growth and regeneration provided such sites maintain the integrity of green wedges.
- 12.23 To investigate how these policies can be delivered an Employment Land Review has recently been commissioned by a partnership of authorities including Nottinghamshire County Council and Newark and Sherwood District Council. The report identifies that one of the main ways of ensuring regeneration objectives are facilitated is by ensuring that there is a sufficient supply of quality employment land to meet the needs of present and future employers whilst ensuring that employment land allocations support other national, regional and local policy objectives and aspirations.
- 12.24 The Employment Land Review will form part of the evidence base for deciding which sites to allocate for development within the Newark and Sherwood LDF. Rufford Colliery has been identified as a potential employment site within this review and 42.30 ha of land at Rufford could be suitable for a mixed use scheme. The review recognised that the site benefited from close proximity to the MARR bringing advantages in terms of highway access, and noted that it fell within Northern Sub-Regional Strategy's Employment the Regeneration Priority Area. It should be noted, however, that the weight to be attributed to this review is limited at the present time as Newark and Sherwood District Council has not yet embarked on any assessment or consultation on potential employment sites in the District.
- 12.25 DRP Policy 37 provides regional and sub-regional priorities for the provision of waste management facilities. Within the Northern Sub-

area the role that existing recycling facilities play in meeting these targets is acknowledged and a specific need for the development of new larger centralised facilities is identified. Suitable sites for the development of larger facilities include the redevelopment of former colliery land.

- 12.26 DRP Northern Policy SRS 5 seeks to promote a Sherwood Forest Regional Park through the promotion of tourism. The policy identifies that this would be achieved by protecting and enhancing the distinctive landscape, natural, cultural and historic assets of the area. Policies aimed at protecting the landscape, natural, cultural and historic assets of Sherwood Forest are also contained within Policy NE9 of the Newark and Sherwood Local Plan (NSLP).
- 12.27 The application site is located within the Sherwood Growth Zone Partnership area. This is a partnership of local authorities, Nottinghamshire County Council, Nottinghamshire College and the development agency for North Nottinghamshire and North Derbyshire which seeks to promote and deliver developments that will provide jobs, houses and services in the Mansfield and Ashfield area. Its origins lie with the Coalfields Task Force set up in 1997. A key regeneration scheme in the area is the MARR Mansfield-Ashfield Regeneration Route (MARR) which was completed in 2004.
- 12.28 Nottinghamshire and Nottingham Joint Structure Plan (JSP) Policy 4/2 provides a criteria for new allocations and for reviewing existing allocations and commitments for employment land. At criteria (iv) it refers to the need to ensure a supply of strategic employment sites at locations with good accessibility to existing and proposed transport schemes, such as the MARR. Pursuant to this policy over recent years new employment related developments has been constructed on land within Mansfield along the MARR.
- 12.29 The NSLP is a key land use planning document insofar that it sets out policies and proposals for the future development of land within the Newark area initially for the period 1991-2006, although most of the policies of this plan have now been saved beyond this period by the Secretary of State. The proposals map of the NSLP identifies the former Rufford colliery site as being situated within land designated as open countryside.
- 12.30 NSLP Policy NE1 states that planning permission will not normally be granted for development in the countryside except where it is associated with agricultural development (including agricultural dwellings), recreation and tourism facilities, utility installations, change of use of rural buildings and roadside services which are identified as appropriate development in the countryside. Since the development of the ERF does not meet any of the exceptions listed as appropriate development the development must be considered as a departure to NSLP Policy NE1.

- 12.31 SPR Policy 2/10 also provides guidance in terms of development in the countryside. The policy is supportive of limited development in the countryside broadly in line with the categories of development listed in NSLP Policy NE1. However, unlike NSLP Policy NE1, SPR Policy 2/10 does not state that all other forms of development in the countryside should be refused planning permission.
- 12.32 NSLP Policy E17 allows for the redevelopment of the pit head area of disused collieries for employment purposes providing a number of detailed criteria are met. Since the site of the proposed ERF is located within the pit head area of the former Rufford Colliery, occupying 5.4ha of a pit head area measuring approximately 49ha, Policy NSLP E17 is relevant to the determination of this planning application and states that:

'Planning permission will be granted for the redevelopment of the pit head area of disused collieries for employment development provided:

- 1. The site is truly redundant from coal mining;
- 2. The redevelopment would not intrude into the openness of the countryside;
- 3. The proposed use would not create traffic problems; and
- 4. The amenities of neighbouring residents are not adversely affected.'
- 12.33 In terms of compliance with the criteria of NSLP Policy E17, the criteria are assessed below:

E.17 (1)

The site is currently used for coal stocking activities by virtue of a temporary planning permission. However, the levels of activity associated with coal stocking are currently very low and most of the stockpiles have now been removed. It is uncertain whether coal stocking will continue beyond 2011, particularly from the entirety of the 49ha site. In the context of Policy E17, the site is assessed as being redundant for coal extraction/mining activities following the closure of Rufford Colliery in 1993 and subsequent clearance of most of the buildings, colliery infrastructure and capping of the shaft in 1994/95.

12.34 E17 (2)

The effects of the development on the openness of the countryside, traffic generation and amenities of neighbours are considered in more detail later in this report. The development is identified as having an impact on the landscape and therefore would intrude on the openness of the surrounding countryside, thus conflicting with criteria (2) of NSLP Policy E17.

12.35 E17 (3)

The traffic impact of the development is assessed later within the report. However it is assessed that the development would not generate any significant highway problems. The development site is served by direct access onto the A617/ MARR thus ensuring that the site would be well served by good road links.

- 12.36 E17 (4) The impact on residential amenity is assessed later within the report. However it is considered that the development would not result in any significant harmful impacts to residential amenity.
- 12.37 It is therefore concluded that the development would not fully comply with the requirements of NSLP Policy E17 due to the landscape impact of the development and associated impacts on the openness of the countryside. Nevertheless, the development would provide a catalyst for the wider redevelopment of the former Rufford Colliery pit head area in accordance with the objectives of NSLP Policy E17.
- 12.38 Furthermore such a development would link into regional policy objectives which encourage regeneration within the Northern Subarea and along the MARR route. The development would therefore assist in meeting the objectives of NSLP Policy E17 insofar that it would secure the redevelopment of part of a former colliery pit head site for employment development and would generate 36 full time jobs.
- 12.39 The concerns of Newark and Sherwood District Council regarding the prematurely of this development in the context of the wider development of the Rufford site are noted. The ERF planning application has been submitted in isolation from other potential development at the former Rufford Colliery site and this is reflected in the red line which has been tightly drawn around the application site and the supporting assessments.
- 12.40 The ERF, however, would sit within the wider context of the former Rufford Colliery, thus while the ERF development would provide some new jobs in itself, there is the potential for further job creation on a larger scale on the remainder of the Colliery site if the pit head area in its entirety came forward for re-development. This fact is acknowledged by the applicant with references made to the wider regeneration benefits which the ERF could bring to the former colliery pit head as a 'catalyst' for further development.
- 12.41 Plans are currently being developed by the owners of the pit head site, UK Coal, for the comprehensive redevelopment of the wider pit head area in accordance with regional and local planning policy, particularly NSLP Policy E17. The views of Newark and Sherwood District Council and its consultees have recently been sought on the scope of information to be included within an Environmental Impact

Assessment required to support a planning application for such development.

- 12.42 Newark and Sherwood District Council (NSDC) object to the development insofar that it does not provide for a comprehensive redevelopment of the entirety of the pit head site, and therefore the development would fail to maximise potential regeneration benefits and any synergies such a scheme could bring. A particular concern of NSDC is that the surplus heat from the ERF process which could be used by adjoining developments (CHP) is not being exploited within this current scheme which only seeks permission for the ERF in isolation.
- 12.43 Whilst the development of CHP to serve adjoining business units would be desirable, at this present time there is no guarantee that further development on the adjoining site would either be allocated within any future LDF or actually developed. There is however an issue of co-ordinating the timing of any redevelopment of the Rufford Colliery site to ensure that CHP is developed, the problem being that if the ERF was developed first it would have no market for heat, and if the industrial development was erected first it would be extremely unlikely that it would retro-fit a heating system. One solution, if the ERF was developed first, would be to impose as part of a development brief for the larger Rufford Colliery site a requirement for future occupiers to utilise heat energy from the ERF.
- 12.44 Notwithstanding the above, the County Council is required to determine this planning application at the current time, and therefore in the knowledge that there is no certainty that development would be undertaken on the adjoining site, and if such development was undertaken whether it would require heat from the ERF. This fact needs to be balanced against other material planning considerations so that an informed judgement can be made on the planning merits of the scheme.
- 12.45 A key issue regarding the determination of this application relates to its need in terms of waste management policy. PPS10, alongside the Waste Strategy for England 2007 and the Regional Waste Strategy, identifies that there is an urgent need to provide new waste facilities to deliver more sustainable management waste management at a higher point in waste hierarchy. PPS10 states that a refusal of planning permission on the grounds of prematurity will not be justified unless it accords with the policy in PPSI 'Delivering Sustainable Development'.
- 12.46 This document advises that it is only normally appropriate to refuse planning permission on prematurity grounds where the development is so substantial, or where the cumulative effect would be so significant, that granting permission could prejudice the development plan document by predetermining decisions about the scale, location

or phasing of new development which are being addressed in the policy in the development plan document.

- 12.47 The Rufford facility has been submitted as a 'stand-alone' facility pursuant to NSLP Policy E17, which is contained within a saved local plan. It is considered that the development is not of such significance to prejudice or pre-determine subsequent decisions which will be made within the Newark LDF process, and a refusal of planning permission on prematurity grounds could not be justified in the context of guidance contained within PPS 10.
- 12.48 Overall, the designation of the site as open countryside means that any industrial re-development at this site would be a departure to JSP Policy 2/10 and NSLP Policy NE1, and such development would have some adverse landscape impacts which would not fully accord with policies which seek to minimise impacts on the Sherwood Forest Regional Park. Notwithstanding the countryside designation, the site is a former colliery pit head and therefore employment development is supported by NSLP Policy E17. NSLP Policies NE1 & E17 provide conflicting guidance on the future use of the former Rufford Colliery and clearly a judgement has to be made regarding which policy must take precedent.
- 12.49 In support of the development there is substantial strategic policy support for the regeneration of former colliery areas and land along the route of the MARR which justify making a decision in accordance with NSLP Policy E17. A material consideration in the determination of the application relates to the need for the facility and its contribution to landfill diversion, compliance with the waste hierarchy and therefore sustainable waste management. PPS 10 advice states that planning authorities should support proposals which deliver new enhanced waste management facilities and that there is a need for some flexibility within the planning system to ensure the right facilities are delivered on time and where they are needed most.
- 12.50 It is concluded that the former Rufford Colliery site benefits from policy support for employment development and although it would be desirable to deliver the ERF as part of a package of development which deals with the entirety of the Rufford site this is not available at the time this application requires determination. On balance there is a compelling argument supported by PPS10 policy to support the development of the ERF at the former Rufford Colliery, subject to their being no un-acceptable environmental impacts.

13. Assessment of Potential Environmental Impacts

Sustainability and Climate Change

13.1 The overall objective of Government Waste Policy as identified within the Waste Strategy for England 2007 is to make waste management more sustainable. The strategy identifies that better management of waste through compliance with the waste hierarchy can contribute to reducing greenhouse gases, notably methane from landfill sites, but also carbon dioxide emissions, by encouraging waste re-use, recycling and recovery and ensuring waste is diverted from landfill disposal. The importance of sustainable waste management is also a key aim of PPS10.

- 13.2 Within the context of the waste hierarchy, the Rufford ERF seeks to manage residual waste and recover energy from this waste stream. As a result the facility would deliver waste management at a higher point within the waste hierarchy than the 'do nothing scenario', which is to continue landfilling. The proposal thus provides a more sustainable waste management option for Nottinghamshire's residual waste.
- 13.3 There are a number of waste treatment options available for managing residual waste. These options include:
 - Landfill
 - Energy Recovery incineration with electricity only generation
 - Energy Recovery-CHP incineration with combined heat and power plant (CHP)
 - MBT-AD mechanical biological treatment (MBT) with anaerobic digestion process (AD)
 - MBT-IVC mechanical biological treatment (MBT) with in vessel composting (IVC)
 - MBT-RDF mechanical biological treatment (MBT) which produces refuse derived fuel (RDF)
- 13.4 The applicant has undertaken a sustainability appraisal of these residual waste treatment options. The methodology used within this assessment and its conclusions have been discussed earlier in this report within section 10. It is acknowledged that this appraisal does not represent a detailed assessment of the potential impacts and benefits of different technology options and that there is some degree of subjectivity in terms of the issues which contribute towards 'sustainable development' and how much weighting should be provided to each issue. Overall the methodology used and results obtained are considered to provide a representative assessment for the purposes of comparison.
- 13.5 In sustainability terms, the results demonstrate that all of the options have variable performance with detrimental impacts in certain areas (e.g. energy use, residue disposal quantities and economic cost). However all options also provide the potential for significant potential benefits, particularly in terms of sustainable consumption and production and sustainable communities objectives which a landfill option would not bring.

- 13.6 Overall, the thermal treatment options (ERF and ERF-CHP) tend to perform best against the waste hierarchy and technical reliability questions. Within Nottinghamshire the dwindling landfill capacity and need to move away from reliance on this for disposal of residual waste supports the preference for an ERF solution because MBT options are still reliant on sending significant quantities of reject material to landfill.
- 13.7 Since the ERF planning application was submitted the Government has published PPS1 Supplement: Planning and Climate Change. This supplementary policy statement emphasises that climate change impacts are a material planning consideration, that there is an urgent need for action on climate change and that climate change effects should be fully considered when making planning decisions. PPS1 Supplement requires development to secure the highest viable standards of resource/energy efficiency and reduction in carbon emissions.
- 13.8 Although the PPS1 Supplement re-emphasises and re-affirms the Government's planning policy regarding the importance of climate change issues when making planning decisions, in the context of waste management policy it effectively re-states the importance of sustainable waste management, albeit in a more robust style.
- 13.9 Since PPS1 Supplement was published after the submission of the ERF planning application, the environment statement and in particular the supporting sustainability appraisal has not been prepared in the context of the greater emphasis given within PPS1 Supplement regarding carbon emissions and climate change impacts. It was therefore identified that there was a requirement for an increased emphasis to be provided for climate change impacts within the sustainability appraisal to identify whether the choice of waste incineration with energy recovery remained appropriate.
- 13.10 As part of the Regulation 19 request the applicant was asked to undertake a comparative assessment of the annual carbon emissions of alternative waste management techniques based on the treatment of 180,000tpa of residual biodegradable municipal waste and then feed this information back into the sustainability appraisal to check whether its conclusions remain valid.
- 13.11 In response the applicant has provided an assessment to provide an indicative estimate of the operational carbon footprint for the Rufford ERF. For comparative purposes the equivalent greenhouse gas emissions from landfill and various Mechanical Biological Treatment (MBT) and Anaerobic Digestion (AD) options have been calculated. The findings of the report (as amended) are set out within table 4 below:

Table 4: Summary of Results (tCO₂ equivalent)

	Transport	Process	Avoided	Avoided	Total excl Landfill		Total incl. Landfill	
			Low	High	Low	High	Low	High
Landfill (current situation)	2,191	126,852	-82,627	-84,896	46,416	44,147	-	-
ERF-Electricity only	2,591	51,840	-60,999	-70,454	-6,568	-16,023	-52,984	-60,170
ERF-CHP maximise the generation of electricity with								
modest low grade heat recovery	2,591	51,840	-69,729	-81,886	-15,298	-27,455	-61,714	-71,602
ERF-CHP with more optimistic low grade heat								
recovery.	2,591	51,840	-91,679	-109,418	-37,248	-54,987	-83,664	-99,134
MBT–Compost Biodegradation high stabilisation,			-				-	-
rejects landfill	2,902	42,036*	105,190	-105,809	-60,252	-60,871	106,668	105,018
MBT–Compost Biodegradation low stabilisation			-					
rejects landfill	2,902	93,858	106,665	-107,593	-9,905	-10,833	-56,321	-54,980
MBT–Compost Biodegradation high stabilisation							-	-
rejects ERF electricity only	2,902	35,255	-95,297	-98,477	-57,140	-60,320	103,556	104,467
MBT–Compost Biodegradation low stabilisation								
rejects ERF electricity only	2,902	87,077	-96,771	-100,261	-6,792	-10,282	-53,208	-54,429
			-					
MBT-AD High stabilisation rejects landfill	2,902	164,165	172,455	-175,207	-5,388	-8,140	-51,804	-52,287
MBT-AD High stabilisation rejects ERF electricity								
only	2,902	37,056	-32,955	-39,870	7,003	88	-39,413	-44,059

* The credit for landfill refers to the avoidance of emissions arising from the landfilling process. For example, ERF avoids the landfilling of the waste in the first place and therefore also avoids the release of the landfill associated emissions. The results have been presented both including and excluding these emissions. The tonnes equivalent are presented as ranges to encompass the different CO2 intensities assumed for the provision/use of electricity and heat as set out earlier in the report.

- 13.12 Currently within Nottinghamshire the residual waste stream is managed by landfill disposal. Indicative estimations of greenhouse gas emissions from landfill sites for the disposal of 180,000 tonnes of MSW could result in a net 126,000 tonnes total CO₂ equivalent emissions per year.
- 13.13 This equates to a net emission of approximately 44,000 tonnes of CO₂ equivalent emissions because of the off-set provided by the generation of electricity from the landfill gas via onsite landfill gas engines which avoids the need to generate the equivalent electricity using conventional fossil fuel generation. This relatively high level of carbon emissions is due to the fact that methane, the main gas released by landfill when waste decomposes, is in the region of 23 times more damaging a greenhouse gas than carbon dioxide.
- 13.14 If this waste was processed within an ERF and used to generate electricity, the study estimates that the net CO₂ equivalent emissions are 51,840 tonnes (this figure excludes biogenic emissions which are considered to be carbon-neutral since the CO₂ liberated from the combustion of biomass is recycled in plants). This equates to a net positive impact in terms of greenhouse gas emissions of 6,000 16,000 tonnes of CO₂ equivalent emissions as a result of the off-set provided by the generation of electricity and recovery of metals.
- 13.15 If combined heat and power is provided as part of an ERF the model shows that carbon savings are even greater due to the off-set provided by the additional energy recovered from the process with a net positive impact in terms of greenhouse gas emissions of between approximately 15,000 and 55,000 tonnes of equivalent CO₂ emissions depending on the extent of heat recovery.
- 13.16 The various MBT options also produce significant net CO₂ savings as opposed to using landfill disposal. Performance of MBT varies depending on the process used, the amount of stabilisation achieved (the percentage of biodegradable waste remaining following the MBT process) and the process used to manage/dispose of MBT outputs. At best, the MBT process significantly outperforms an ERF (electricity only) in terms of its carbon emissions with a net positive impact of approximately 60,000 tonnes of CO₂ equivalent. However, many of the MBT options, particularly those which achieve a lower level of stabilisation, perform at a significantly lower level with similar carbon emissions to an ERF and therefore would be outperformed by ERF/CHP.
- 13.17 The EA in their role as statutory consultee has reviewed the carbon assessment submitted by the applicants and the technical representations submitted by PAIN and produced their own report which assesses the methodologies, assumptions and conclusions reached within the applicant's assessment. The EA note that the applicant's assessment in common with every life cycle study is highly dependent on detailed assumptions and these assumptions

can make significant changes to the range of results obtained from the assessment. However the EA consider the methodologies and assumptions used in the applicants assessments are reasonable and the results credible.

- 13.18 As a further test of the carbon impact of the development the EA has undertaken their own assessment of carbon emissions using their own in-house modelling software (Wraite). Five different basic waste management options for the management of Nottinghamshire's 180,000 tonnes of residual municipal waste were assessed. The options considered were:
 - Landfill (but with 80 per cent landfill gas recovery)
 - Incineration with district heating (no electricity production)
 - MBT followed by landfill
 - Incineration with electricity generation.
 - MBT with AD followed by RDF burning with electricity production
- 13.19 The results of the EA's model are set out within table 5 below:.

Table 5: A comparison of global warming potential (100 year average)



Total GWP 100 for Notts Residual 3 Revised

Residual waste scenario

- 13.20 The results of the EA's model produces different results than those identified within the applicants own assessment. Although identifying that all options perform substantially better than landfill the EA's model identifies EFW as providing the greatest carbon savings outperforming the MBT treatment options.
- 13.21 The EA advise that these results do not mean that the RPS/Veolia report is wrong, rather the fundamental assumptions agree with the EA's own peer reviewed life cycle model. What it does show is that MBT plants in particular are highly variable and dependent on the proportions of different fractions recycled and the biodegradability of the waste landfilled. EfW plants are less variable, although their impacts are highly dependent on the nature of the energy replaced.
- 13.22 The EA consider that in view of the assumptions made and the uncertainties in the data and the modelling it is probably a fairer assessment of the carbon benefits/disbenefits of each type of plant to use the results of Veolia and group similar results. The EA conclude that this identifies the following ranking of waste treatment options in terms of their carbon emissions:
 - 1= MBT–Compost Biodegradation high stabilisation, rejects going to landfill,
 - 1= MBT–Compost Biodegradation high stabilisation rejects going to ERF electricity only
 - 2 ERF-CHP with more optimistic low grade heat recovery.
 - 3 ERF-CHP maximise the generation of electricity with modest low grade heat recovery
 - 4= ERF-Electricity only
 - 4= MBT–Compost Biodegradation low stabilisation rejects to landfill
 - 4= MBT–Compost Biodegradation low stabilisation rejects to ERF electricity only
 - 4= MBT-AD High stabilisation rejects to landfill
 - 5 MBT-AD High stabilisation rejects ERF electricity only
 - 6 Landfill (current situation)
- 13.23 As a further test of the applicants assessment, comparison can be made with the generic calculations for the estimated carbon emissions of different waste treatment options contained within Appendix E of the Waste Strategy for England 2007. The Waste Strategy figures also demonstrate that all waste treatment options outperform landfill. The results generally support the conclusions of the applicants assessment insofar that they show MBT options can produce greater carbon savings than an ERF.
- 13.24 In conclusion it is acknowledged that the results of the carbon assessments show some variability in performance between different residual waste treatment options. However the clear message from all the studies is that all waste management options would provide a significant reduction in carbon emissions over existing arrangements

which are almost wholly dependant on landfill for disposal. The results demonstrate that other forms of residual waste management may outperform an ERF in terms of its estimated carbon footprint, in particular an MBT which achieves a high stabilisation of rejects but MBTs which achieve lower levels of stabilisation generally perform at a similar level of an ERF.

- 13.25 Although it may be possible to develop residual waste treatment facilities which achieve lower carbon emissions than an ERF, PPS1 and its Supplement acknowledges that sustainable development is not simply limited to minimising carbon emissions but linked to wider issues of social progress, effective protection of the environment, prudent use of natural resources and the maintenance of high and stable levels of economic growth and employment.
- 13.26 The decision to develop an ERF to manage Nottinghamshire's residual waste was justified by the applicant within their original Environmental Statement within a wider sustainability appraisal (part of which considered contribution to climate change). This sustainability appraisal concluded the development of an ERF represented a sustainable way of managing Nottinghamshire's residual waste, particularly in terms of its flexibility to manage its variable composition.
- 13.27 An ERF performed particularly well insofar that it minimises overall land take, assists the WDA in meeting and exceeding its BMW landfill diversion obligations, therefore reducing dependence on increasingly scarce local landfill space. It is noted that many of the MBT options are dependent on landfill for the disposal of their outputs.
- 13.28 The applicant has reassessed the conclusions of the sustainability appraisal in light of the increased importance of climate change emissions set out within PPS 1 Supplement and considers the overall conclusions regarding the choice of waste management technology within the sustainability appraisal remain valid.
- 13.29 It is concluded that the development of the ERF would contribute to meeting the objectives of PPS1 regarding sustainable development and PPS1 Supplement insofar that it contributes to reducing carbon emissions and provides a facility to recover energy from waste, much of which is assessed as being biogenic in its character and therefore for the purposes of calculating carbon emissions, biogenic carbon emissions are considered to be carbon neutral.

Potential for Combined Heat and Power (CHP)

13.30 Annex E (paragraph 4) of the Waste Strategy for England 2007 requires particular attention be given to the siting of plants to maximise opportunities for CHP due to the significant improvements in efficiency and carbon performance that are delivered if both heat and electricity can be recovered. This approach is consistent with

RWS Policy 1.8 which requires that proposed thermal treatment facilities wherever practicable should aim to incorporate combined generation and distribution of heat and power.

- 13.31 Within their original consultation response the EA made reference to Waste Incineration Directive (Article 6(6) which states that 'any heat generated by the incineration or co-incineration process shall be recovered as far as practicable' e.g. through combined heat and power (CHP), the generating of process steam or district heating. The EA originally raised concerns that the planning application does not demonstrate that all opportunities to maximise energy recovery have been considered in the site selection at Rufford.
- 13.32 The applicant was therefore requested to undertake a more detailed assessment as part of their Reg. 19 response to investigate further the potential for CHP as part of an ERF at Rufford. Additionally, to ensure that alternative sites did offer greater CHP potential, the three other sites short-listed at the final stage of the sequential site selection process were also re-assessed for their CHP potential.
- 13.33 To inform this assessment the applicant prepared a detailed heat user study of each of these four sites. This study identified potential heat users within 5km radius of each of the four sites and quantified the potential heat load at each of these potential users to enable an informed judgement to be made regarding the potential for CHP development at each site.
- 13.34 The results of this more detailed assessment confirm the validity of the original report in that none of the sites offer immediate potential for the development of CHP although it was noted that the potential industrial redevelopment at Rufford (subject to planning) could provide potential opportunities for the development of CHP in the future.
- 13.35 The EA have been consulted for their views on this further appraisal and its conclusions in light of their original comments. The EA in their response has noted that the information they originally requested has now been submitted and advise the County Council that they should satisfy themselves that the evidence is adequate and acceptable.
- 13.36 The applicant has also demonstrated that the plant and machinery proposed to be installed within the Rufford ERF maximises the level of electrical energy recovered and that alternative plant could not be installed which would provide significantly improved levels of energy recovery.
- 13.37 It is concluded that the applicant has demonstrated that the potential to increase the efficiency of the plant by the use of CHP has been fully explored within the potential area of search for the ERF facility (which has been determined by its proximity to waste arisings) and that no alternative sites offer greater potential for CHP generation

over Rufford. The development therefore satisfies the requirements of Waste Strategy for England guidance and RWS Policy 1.8 insofar that the potential for CHP maximisation has been fully explored.

Waste Hierarchy – Definition of ERF Process as Energy Recovery

- 13.38 Observations have been received from PAIN that the facility should be assessed as a disposal operation rather than a waste recovery facility in the context of the waste hierarchy. PAIN consider the facility can not appropriately be considered a recovery operation under European Policy (Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives) and the facility should therefore be assessed as a waste disposal facility which falls at the bottom of the waste hierarchy.
- 13.39 The European directive provides a formula to calculate the level of energy recovery and therefore efficiency of the process proposed. The directive states that any facilities which achieve an energy efficiency equal to or above 0.65 (65%) should be assessed as a recovery operation; facilities not achieving this level of efficiency should be assessed as a disposal activity.
- 13.40 As part of the Reg. 19. response, the applicant has supplied calculations of the efficiency of the Rufford ERF Facility based on the actual performance of a similar facility in Portsmouth. These figures show that the process efficiency when calculated using the European waste framework directive formula is 0.66 (66%). The EA has reviewed the energy efficiency figures and concluded that the Rufford ERF could potentially be classified as a recovery operation in accordance with the European waste framework directive formula.
- 13.41 However, the EA comment that it would actually be necessary to consider the actual operation of a final plant design to confirm the efficiency. Since this is not currently possible, a comparative assessment of the facility against a working plant is considered reasonable and therefore it is concluded that the facility could appropriately be described as an energy efficient recovery facility under the terms of this Directive and would contribute to meeting the wider objectives of the European WID which are to reduce the landfill of waste and associated emission of greenhouse gases from landfill sites by promoting the use of waste as a secondary resource.
- 13.42 It should be noted that the complex formula used within the European waste framework to calculate efficiency is different to a more traditional efficiency rating which simply provides a comparison between energy input and energy output. Using such an approach the gross efficiency of the Rufford ERF is 25% and its net efficiency is 21%.

13.43 Notwithstanding the above, the requirements of this new European waste framework directive are not required to be transposed into UK law for two years (i.e. 20th October 2010). Currently national policy for waste management is contained within the Waste Strategy for England 2007. Chapter 5 of this strategy defines energy from waste technologies and includes direct combustion (incineration). It is therefore considered that the assessment of this facility as energy recovery rather than disposal in the context of the waste hierarchy is correct.

Pollution and Health Issues

13.44 PPS10 provides clear advice relating to the control of potential pollution and health impacts and how such concerns should be handled through the planning system. Paragraph 30 & 31 of PPS10 provide relevant advice of this matter:

'30. Modern, appropriately located, well-run and well-regulated, waste management facilities operated in line with current pollution control techniques and standards should pose little risk to human health. The detailed consideration of a waste management process and the implications, if any, for human health is the responsibility of the pollution control authorities. However, planning operates in the public interest to ensure that the location of proposed development is acceptable and health can be material to such decisions.'

'31. Where concerns about health are raised, waste planning authorities should avoid carrying out their own detailed assessment of epidemiological and other health studies. Rather, they should ensure, through drawing from Government advice and research and consultation with the relevant health authorities and agencies, that they have advice on the implications for health, if any, and when determining planning applications consider the locational implications of such advice.'

- 13.45 The operation of the ERF would require authorisation under Pollution Prevention and Control legislation (PPC) which is administered by the Environment Agency. The purpose of a PPC Authorisation is to ensure that the plant can operate without damage to the environment or harm to human health resulting from pollution. Whilst concerns have been raised through the planning consultation process regarding the impact of ERF emissions on local air quality and health, PPS10 advice confirms such concerns are the primary responsibility of the pollution control authorities.
- 13.46 The Waste Strategy for England 2007 provides advice on the potential health impacts of waste incinerators (paragraph 22 of Chapter 5) as follows:

'Concern over health effects is most frequently cited in connection with incinerators. Research carried out to date shows no credible evidence of adverse health outcomes for those living near incinerators. The relevant health effects – primarily cancers – have long incubation times, but the available research demonstrates an absence of symptoms relating to exposures twenty or more years ago, when emissions from incineration were much greater than they are now. Very demanding standards for dioxin emissions now apply. The Health Protection Agency has published a short position statement on the health impacts for municipal waste incineration which reaches similar conclusions.'

- 13.47 Nevertheless, the Council as the relevant planning authority is required to satisfy itself that there are no specific location factors affecting Rufford which may pose particular concern. To obtain this level of assurance advice has been sought to ensure the design of the plant and the processes are appropriate. The EA as part of their consultation response has indicated that the current proposal is capable of satisfying the requirements of the PPC regulations (although the EA is still considering the magnitude of the emissions as part of their detailed consideration of the PPC application).
- 13.48 The EA advises that the stringent emissions limits specified by the WID are expected to ensure that impact on local air quality, and therefore effects on human health and the natural environment, are small and the development should not result in any significant impacts to human health from pollution. This view is shared by the Health Protection Agency and Nottinghamshire County Teaching Primary Care Trust who conclude that the proposed ERF does not present any meaningful risk to health.
- 13.49 Members will recall that at a Members training event on 1 December 2008, representatives of the EA, the HPA and the PCT all confirmed this general conclusion.
- 13.50 A particular concern has been raised regarding the siting of the ERF within a bowl of low lying land which is susceptible to fog and temperature inversions. The concern is that these local climatic conditions could affect the dispersion of ERF emissions and result in emissions collecting in the local area at harmful levels.
- 13.51 The matter has been investigated by the EA and Environmental Health Officers (EHO) of Mansfield and Newark and Sherwood District Councils who have confirmed that the dispersion modelling which has been undertaken has taken account of these factors in determining the design of the plant and height of chimney stacks to ensure satisfactory dispersion of emissions occurs in all conditions. Furthermore the EHOs are satisfied that local gradients would not affect the validity of the dispersion modelling conclusions.

- 13.52 On the basis of the guidance contained within PPS10 it is concluded that the detailed examination of emissions and their potential effect on human health are matters for consideration as part of the PPC process which is currently under consideration by the EA. The ERF plant has potential to emit pollutants into the environment, but these will be regulated by the EA through the PPC process and compliance with the emission standards of the WID.
- 13.53 Therefore in accordance with PPS10 advice, technical advice has been received through consultation with the relevant health authorities and agencies to ensure that the location of the proposed development would contribute little to the concentrations of monitored pollutants in ambient air and emissions, nor pose any significant risk to human health.

Design Assessment

- 13.54 Paragraphs 35 & 36 of PPS10 identify the importance of ensuring that waste management facilities are of a good design to ensure they contribute positively to the character and quality of an area without causing adverse impacts on the streetscene or local landscape. PPS 10 advises that poor design of waste management facilities is in itself undesirable, undermines community acceptance of such facilities and should be rejected. A similar message was reinforced in the DVD 'Planning for Waste Facilities A Guide to Key Planning Issues' produced by DEFRA, EMRA & GOEM amongst others and shown to members on 28th October 2008.
- 13.55 The ERF has been designed by S'Pace architects who have designed some 100 ERF plants worldwide and have been responsible for the design of four Veolia plants operated in the UK, some of which have received prestigious design awards.
- 13.56 The design and access statement submitted as part of the application deals with the design concept of the development. It explains that the objective is to provide an iconic building which is as compact as possible whilst accommodating the minimum height required to enclose the plant and allow unrestricted vehicle movement within the building. This has been achieved by splitting the building into two parts; a central structure/upper building mass measuring from 24.7m to 39.5m in height (to accommodate the technical plant requirements) and a lower surrounding roof with a maximum height of 16.25m.
- 13.57 Neutral, non-reflective colours are proposed within the surface treatment of the building. The chimneys have been designed to be slender and will be externally finished in a non-reflective matt grey finish. The 75m height of the chimney has been determined to ensure that air pollution effects during operation are minimised. The administration block has been designed to deliberately contrast with

the adjacent industrial building to reflect its scale and function and incorporates a glazed ground floor and timber clad upper floors.

13.58 The Council has tested the acceptability of the ERF design through the planning consultation process. Specialist design advice has been sought from OPUN who have undertaken a design review of the scheme and from the Council's Urban Design Officer. OPUN have identified the importance of achieving the best design solution to act as an exemplar for future development and consider the development generally meets these objectives by concluding:

> 'Generally a very good proposal and design which could act as an exemplar for buildings of a similar function, of which many can be expected to be planned in the future.'

- 13.59 The Urban Design Officer is generally satisfied with the design concept of the scheme in terms of a central main building and curtain canopy around at a lower scale to break its mass and a more modest office/visitor centre block at a more human scale using a contrasting style.
- 13.60 Both consultees identify areas where, in their view, the scheme could be altered and modified to provide additional design value. OPUN suggest the building may benefit from a more 'tortoise shell' curved form and would prefer to see the administration building with a form and materials which has empathy to the ERF building. Concerns were expressed regarding the maintenance requirements of the grassed earth bund around the building and 24 hour road access to the site.
- 13.61 NCC's Urban Design Officer considers the height of the building as excessive and queries if there may be an opportunity to split the central tall part of the building into three sections to break its mass. Further information regarding materials were also sought.
- 13.62 These observations were forwarded to the applicant who has responded as part of their Reg. 19 response with a rebuttal statement to the issues raised commenting that:

'As you are aware, whilst good design is an important planning consideration, it is also somewhat subjective. In the light of the positive endorsements to the design principles and overall philosophy we do not consider any of the comments made to be fundamental to the basic design acceptability of the development proposed.'

13.63 The Council has subsequently re-consulted OPUN and the Urban Design Officer with this information. No further response has been received from OPUN. However the Urban Design Officer accepts the applicants' design concept for maintaining one form for the tall part of the building rather than breaking it down into sections and is satisfied

that appropriate, non-reflective materials would be used. Concerns regarding the height of the development are maintained. (Visual impacts are assessed within the landscape and visual impact section).

- 13.64 The government's policy in terms of achieving good design solutions for new waste infrastructure is clearly stated within PPS10. The design and access statement submitted in support of the planning application demonstrates that the applicant has provided a high level of attention to the design of the building and they have used internationally renowned architects within this area of work to develop these plans.
- 13.65 Although some of the suggested alterations have not been incorporated into the design the applicant's view that there is an element of subjectivity and personal preference in these observations is not unreasonable. Overall it is assessed that the proposed ERF would be prominent in the landscape and clearly visible from surrounding viewpoints, but, the design solution developed by the applicant ensures that the building achieves a very reasonable and distinctive solution to the issue of locating a major structure in this location. It is therefore concluded that the development meets PPS10 objectives relating to waste infrastructure design.
- 13.66 With regard to the sustainability of the construction materials, the use of aluminium for the roofing system whilst not immediately an obvious sustainable choice, has been selected as it offers sustainability in terms of its durability, low maintenance characteristics and recyclability. Sustainable features are incorporated elsewhere within the development such as lighting, energy usage, water management, materials and access.
- 13.67 This site has the potential to give rise to substantial quantities of waste from the engineering works to construct the base of the boiler hall beneath the ground and to excavate drainage areas. To minimise environmental impacts associated with the off-site disposal of these materials the site design provides for the re-use of these materials within site landscaping and construction works. A site waste management plan should be submitted as part of the detailed arrangements of any development to provide for the reduction, recycling and reuse of wastes generated by the development in accordance with the requirements of RWS Policy 1.1.

Traffic and Access

13.68 Increased vehicles and particularly HGV traffic associated with the development and operation of the ERF has potential to create negative impacts on the surrounding road network and associated settlements. The key policy in assessing whether traffic levels are acceptable is Policy W3.14 of WLP. This policy states:

'Planning permission will not be granted for a waste management facility where the vehicle movements likely to be generated cannot be satisfactorily accommodated by the highway network or would cause unacceptable disturbance to local communities.'

- 13.69 To enable a judgement to be made as to whether the local highway network can satisfactorily accommodate the additional traffic and therefore comply with the above policy, a Transport Assessment (TA) has been undertaken in support of the application. The TA has been written in accordance with the Guidelines for Traffic Impact Assessment 1984 as published by the Institute of Highways and Transportation in addition to guidance given in Planning Policy Guidance Note 13: 'Transport' (PPG13).
- 13.70 The TA assesses the condition of the existing highway network, quantifies baseline traffic flows and the volume of additional traffic generated by the development. Using this information the TA quantifies the environmental and road capacity impact of this traffic.
- 13.71 Access to the proposed ERF would be via the existing colliery site access road from the A617 Rainworth bypass and MARR route via an existing traffic signal controlled junction. The A617 forms part of the County Council's strategic highway network. Policy 5/8 of the JSP establishes a hierarchy of roads. At the top of this hierarchy are category 1 main roads (also known as the Strategic Road Network). The A617 forms part of the County Council's strategic highway network. The purpose of category 1 roads is to carry traffic between the main towns within Nottinghamshire and the surrounding areas and as such these roads are designed and maintained to a higher standard. Since the A617 is identified within the JSP as a Category 1 Main Road it is appropriate that HGVs servicing the ERF are routed onto this road.
- 13.72 The TA identifies that the development would generate a traffic flow of 254 vehicle movements a day including 182 HGV's. Two-way traffic flows in the morning peak hour are predicted to be 34 vehicles (including 24 HGVs), and 16 vehicles (including six HGVs) in the evening peak. These predicted vehicle movements equate to an increase of some 1% in total flows on the A617 west of the traffic signals junction and less than 0.5% in total flows to the east.
- 13.73 The Highways Development Control staff have considered the findings of the TA and agree with its conclusions that the traffic implications of the development on the existing highway network are insignificant, both for construction traffic and subsequent operational traffic.
- 13.74 The traffic figures quoted within the TA assume the plant would be operating at 85% capacity so allowing for unavoidable down times for planned and unplanned maintenance. As part of the supplementary

information submitted by the applicant in response to the Regulation 19 request, an assessment of the traffic impact of the development has been made if the plant operated at a higher capacity due to less downtime.

- 13.75 The applicants have identified that a theoretical maximum capacity could be 92% and operating at this availability would increase the annual tonnage from 180,000tpa to 194,823.5tpa (i.e. by 14,823.5tpa). The additional traffic generated as a result of this extra capacity would equate to an average eight vehicles per day and less than one additional vehicle per hour. This small scale increase in traffic could be satisfactorily accommodated on the surrounding highway network.
- 13.76 Potential disturbance to local communities arising from vehicle movements are considered in greater detail within the noise section of this report where it is demonstrated that vehicle movements will not adversely affect amenity of local communities. It is therefore concluded that the proposed traffic levels and the means of access to the site are satisfactory and therefore the requirements of WLP Policy W3.14 are met.

Alternatives to Road Transport

- 13.77 WLP Policy W3.16 encourages the use of rail, barge, pipeline or conveyor where it is demonstrated that the use of these transport modes results in an overall environmental benefit. This approach is generally in line with PPG13 (Transport) which acknowledges that while road transport is likely to remain the main mode for many freight movements, land use planning can help to promote sustainable distribution, including where feasible, the movement of freight by rail or water.
- 13.78 The development is totally reliant on road transport for the movement of waste into the site and transport of residuals out of the site, even though the application site is situated adjacent to a former mineral railway line which could provide an alternative to road haulage. The applicants have identified a lack of infrastructure as a constraint to the use of rail facilities. It is noted that many of the waste vehicles that would serve the site are already on the local highway network comprising council operated refuse collection vehicles undertaking direct deliveries from collection rounds in relative close proximity to the facility. Other HGVs carrying bulk waste would travel relatively short distances from Nottingham, Newark, Giltbrook and Worksop. In this instance it is concluded that the use of rail transport would be impractical and would offer little environmental benefit.
- 13.79 The largest and most significant export from the site would be incinerator bottom ash. At the present time a permanent bottom ash reprocessing plant has not been identified. An interim temporary facility which is likely to be used in the Sheffield area has been

identified until such time that a permanent facility is developed. This facility does not have direct rail access.

13.80 Other exported waste would arise in relatively small volumes, some of which lends itself to specialist road vehicles. Given these obstacles and the cost and difficulty of reinstating the onsite rail facilities in any event, the transportation of waste by rail is not proposed at this time. The proposals would not preclude the reinstatement of the rail facilities at some stage in the future and are well placed to make use of this mode of transport should this prove practical and viable.

Transport – Highways Safety and Protection

- 13.81 WLP Policy W3.11 advises that measures should be put in place to prevent damage to the highway including the use of metalled haul roads and provision of wheel cleaning facilities. The application proposes these facilities and measures to ensure haul roads and tipping areas are regularly road swept. The use of planning conditions would ensure that these facilities are provided and maintained and therefore ensure compliance with policy W3.11.
- 13.82 Although the former colliery access road is of a substantial construction which has historically been used for HGV access associated with the movement of coal, it is recommended that a further structural survey be required as a condition of any planning permission to review the structural condition of the road and to undertake any necessary remedial work so as to ensure that it remains in a satisfactory condition to serve this development.

Landscape and Visual Assessment

- 13.83 The site lies within the Forest Sandlands Sub-division of the Sherwood regional character area as designated in the Nottinghamshire County Council Countryside Appraisal/Landscape Guidelines (1997). The Forest Sandlands are described as an undulating, well wooded and in places industrialised landscape, characterised by large arable fields, pine plantations and remnants of semi-natural woodland and heath.
- 13.84 The landscape strategy for the Forest Sandlands is to conserve and strengthen the distinctive heath and well wooded landscape character including identifying opportunities for conserving and restoring areas of heathland and semi-natural oak woodland, conserving the integrity and remote rural character of the landscape by concentrating new development around existing settlements, and to promote large scale woodland planting to contain and soften development.

- 13.85 Rainworth Heath and Rainworth Water Mature Landscape Area's lie to the south of the site. The site lies within the Greenwood Community Forest area. To inform an assessment of the impact the development would have on the landscape the planning application is supported by a detailed landscape and visual assessment. The assessment identifies that the ERF building would be a large feature in the countryside and as such would have an impact on the rural character of the Forest Sandlands landscape. Overall the landscape impact is assessed to be slight adverse by the applicant.
- 13.86 The landscape assessment has been reviewed by NCC's landscape team who generally agree with its findings although overall it is felt the landscape impact is undervalued within the applicant's appraisal and conclude the overall impact should be more accurately described as moderate adverse. (Effects identified as being of substantial or moderate significance may be regarded significant effects when discussed in terms of the Environmental Impact Assessment Regulations 1999).
- 13.87 With specific reference to the impact on the Rainworth Heath and Water MLAs which are situated immediately to the south of the site, the applicant has assessed the landscape impact to be slight adverse, basing this conclusion in the context of the possible abandonment of the MLA Policy in future versions of the Local Development Framework.
- 13.88 Although this is possible, Planning Policy Statement Sustainable 7 -Development in Rural Areas (PPS7) advises that local landscape designations should be maintained where it is clear that criteriabased planning policies cannot provide the necessary protection. Since some views of the development would be prominent, the impact on this mature landscape area from the ERF is considered to more accurately be described as moderate/substantial adverse.
- 13.89 Natural England share the concerns of NCC's Landscape Team that landscape impacts have been undervalued by the applicant. Natural England considers landscape impacts would have significant impacts on the Sherwood Forest Landscape area and Rainworth Heath and Water MLAs.
- 13.90 Rufford Colliery is required by planning condition to be restored to a heathland upon cessation of coal stocking activities, therefore restoring a historic landscape as shown on Sanderson's map (1835). Heathland has suffered a major decline and Great Britain now supports approximately 15% of Europe's remaining lowland heath. Heathland is therefore recognised in international and national guidance and legislation.
- 13.91 At County level this has been addressed by a County Heathland Strategy, Register and Recreation Plan. The creation and protection of heathland is also supported in the Sherwood Study: A Vision for

Sherwood Forest, the Strategic Plan for Greenwood, the 'Heathland Strategy for Nottinghamshire' and the Nottinghamshire Local Biodiversity Action Plan. These documents seek to protect the remaining areas of heathland and to recreate new areas.

- 13.92 The applicant's original landscape assessment considered impacts in the context of the existing site conditions which have a generally despoiled and poor quality landscape character. The original landscape and visual assessment did not consider the impact of the development against a baseline of a restored heathland which would be provided through restoration requirements forming part of the current temporary planning permission for coal stocking, expiring in April 2011. To address this the applicant has submitted as part of the Reg. 19 response a further landscape assessment.
- 13.93 Using a baseline of 15 years after restoration of the coal stocking yard to heathland, the impact of the proposed development on the landscape character of the area has increased from slight adverse significance in the original report to moderate/substantial adverse. The assessment identifies that the restored stocking yard would have higher landscape sensitivity. In terms of impact on the physical landscape, the revised assessment also identifies that the loss of restored heathland would increase the significance of effect to moderate adverse. The reason for these greater impacts is generally because once this land is restored the ERF would be viewed as the only detracting feature within an otherwise rural landscape.
- 13.94 Following re-consultation of this additional landscape information Natural England has withdrawn its objection on landscape grounds on the basis that they only pursue objections in designated landscapes such as National Parks and Areas of Outstanding Natural Beauty, although they continue to believe the development would continue to cause significant adverse impacts.
- 13.95 The visual impact assessment considers views of the site from the west, north and east are largely restricted because of tree cover and landform. The main visual impact of the proposals would be on residents of Rainwoth Village to the south, residents of Sherwood House Nursing Home and the adjoining pair of residential properties off Colliery Road, users of the roads, particularly the A617, and public rights of way where negative visual impacts will result. The applicants have assessed these impacts as generally adverse, although NCC's landscape team and Natural England feel this adverse impact would be greater than that set out within the applicants submission.
- 13.96 The applicant has reassessed the visual impact of the development 15 years after the restoration of the coal stocking yard finding no significant changes, and concluding overall the visual significance of effect is slight/moderate adverse. This conclusion however fails to

take account of previous concerns raised by NCC and Natural England that these visual impacts have been under assessed.

- 13.97 The main landscape and visual impact of the development arises because of the overall scale and height of the ERF building. As part of the further information sought within the Regulation 19 request the applicant was requested to investigate the potential to excavate the building into the ground to reduce its overall height. In response two scenarios have been assessed, one involving an excavation 5m into the ground, the second involving an excavation of 10m.
- 13.98 The applicant advises that a 5m reduction would result in no significant change to the identified impacts. Whilst the applicant acknowledged that a 10m reduction would reduce impacts, undertaking these works would result in significant changes to the layout of the site and particularly the civil and structural design, resulting in the need to remove approximately 322,000 m³ of material equating to 71,600 additional vehicle movements over many months and would have significant impacts to the landscaping and water management on the site. Due to these technical issues the applicant requests the development is considered as originally submitted.
- 13.99 Off-site planting on land to the south of the ERF adjacent to the A617 has also been suggested in an attempt to mitigate the development. Due to the fact that this land is not within the ownership of the applicant it has not been possible to undertake such planting.
- 13.100 In conclusion, the landscape and visual impacts of the development can not be mitigated significantly other than by on-site landscaping or by totally redesigning the building. The impacts of the development most therefore be assessed against planning polices on the basis of the scheme submitted.
- 13.101 From a planning perspective, the distinctive landscape character and scale of ecological, historic and woodland interest of the Sherwood Forest Special Landscape Area is identified within development plans at regional, county and district level. Of particular reference is RSS8 Policy 30 which states that the natural and heritage landscape assets of Sherwood Forest should be protected and enhanced within Local Development Plan Documents.
- 13.102 SPR Policy 2/7 requires that local plans/development plan documents establish a landscape character approach to promote the conservation and enhancement of local landscape character and distinctiveness. NSLP Policy NE1 states that planning permission will not be granted for development in the countryside (waste recovery facilities are not included in the list of exceptions).

13.103 NSLP Policy NE9 specifically relates to development within the Sherwood Forest Special Landscape area and provides the most relevant policy to assess the impact on the special landscape area associated with this development. The policy states:

> Planning permission will be granted for appropriate development within the Sherwood Forest Special Landscape Area, defined on the proposals map, provided the proposal would conserve and enhance the landscape and ecology of the area, and maintains its function as a recreation and tourist area.

- 13.104 In the context of this policy appropriate development is defined within the supporting text and generally comprises development considered appropriate to the countryside, as defined by Policy NE1: Development in the Countryside. Appropriate development within the Sherwood Forest Special Landscape Area in the context of the above policy does not include the redevelopment of collieries pursuant to NSLP Policy E17. Therefore, since the development is not 'appropriate development' in the context of NSLP Policy NE9 and it would result in negative impacts on the landscape, the development does not meet the requirements of NSLP Policy NE9.
- 13.105 NSLP Policy NE8 on mature landscape areas provides guidance to enable as assessment of the impact of the development on the Rainworth Heath and Water Mature Landscape areas. This policy advises:

Development which would have an adverse effect on the visual or nature conservation importance of a Mature Landscape Area will be permitted only where it can be shown that there are reasons for the proposal that clearly outweigh the need to safeguard the area's intrinsic value. Where development is permitted, proposals should minimise the harm to the area. The District Council will make use of planning conditions or negotiate planning obligations in order to secure appropriate conservation measures.

- 13.106 The development would have an adverse impact on the visual importance of Rainworth Heath and Water MLAs. However the policy allows developments which have an adverse impact where it is shown that there are reasons for the proposal that clearly outweigh the need to safeguard the area's intrinsic value.
- 13.107 In the context of this policy, the need for new waste management facilities to ensure that Government target for diversion of waste from landfill and increased energy recovery from waste are considered material. An overall balance of planning issues is contained within the conclusions section of this report which takes into consideration the landscape and visual impacts of the development in coming to a recommendation to support a grant of planning permission.

- 13.108 The applicant has sought to minimise impacts as far as practicable through on-site landscaping utilising planting that is appropriate to a heathland landscape character and through the limiting external lighting to ensure night-time impacts are kept to a minimum. In accordance with NSLP Policy NE8 planning conditions are suggested as part of any planning permission granted requiring the submission of detailed landscape scheme and external lighting details to ensure harm to the mature landscape areas are minimised as far as practically possible.
- 13.109 WLP Policy W3.20 deals with the protection of heathlands. Consultation responses have indicated that the development fails to comply with this policy. Whilst it is acknowledged that the site could be restored to heathland if this development did not progress, the site at the present time is not heathland and it is therefore considered that the development, at the present time, would not conflict with WLP Policy W3.20.
- 13.110 In terms of the minimisation of visual impacts, WLP Policy W3.3 encourages the minimisation of impacts by ensuring buildings, plant and storage areas are:
 - a. Located in such a position as to minimise impact on adjacent land;
 - b. Where practicable, grouped together to prevent the creation of an unsightly sprawl of development and to aid their screening;
 - c. Kept as low as practicable to minimise visual intrusion;
 - d. Of appropriate colour and cladding or otherwise suitably treated to reduce their visual impact;
 - e. Satisfactorily maintained to preserve their external appearance.
- 13.111 An assessment of the development against the above policy concludes that the location of the development would have a landscape and visual impact, although it is noted that is well sited in terms of minimising direct impacts to residential property. The design of the building ensures that all operations are contained within a single building which screens the plant and machinery and minimises sprawl.
- 13.112 In terms of the height of the building, it could potentially be lowered by excavation into the ground, but the applicants have identified a number of reasons why they are not willing to undertake this. In terms of the height of the building itself, it has been designed to be as low as practicable, generally achieved through having a staggered roof height with a central area at a higher level to accommodate taller plant and machinery surrounded by a lower 'skirt' building to generally accommodate more circulation areas. Even if the main
building were lowered, the chimneys may still have to remain at the proposed height to ensure adequate dispersal of emissions.

13.113 The whole development will be externally clad using an appropriate 'non-shiny' coloured cladding which should ensure require minimal maintenance throughout its operational life. It is therefore assessed that the development partially complies with WLP Policy W3.3. Nevertheless, it is acknowledge that the development has a visual impact.

<u>Ecology</u>

- 13.114 Central Government planning policy insofar as it relates to ecology and biodiversity is set out within Planning Policy Statement 9 -: Biodiversity and Geological Conservation (PPS9). The approach set out within PPS9 is that planning decisions should 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.
- 13.115 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 that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.
- 13.116 Policies aimed at preventing harm to biodiversity and geological conservation interests are set out within regional, county and district policy documents and generally reflect the sequential approach towards avoidance of impact in preference to mitigation of impacts as set out within PPS9. These policies. where relevant, are discussed below.

Assessment of the impact to habitats and protected species within the development site.

- 13.117 A range of ecological survey work has been carried to inform the ES submitted in support of the planning application. This work includes a desktop study, an extended phase 1 habitat survey and detailed survey work to target protected species highlighted within the desktop study.
- 13.118 Following the original consultation exercise concern was expressed that much of the survey work was undertaken during the winter period (November 2006 January 2007) and therefore potentially would not identify winter dormant species. To address these concerns further

ecological surveys have been undertaken during the summer months and submitted to the Council as part of the applicant's Reg. 19 response.

- 13.119 These assessments show that the footprint of the development does not directly affect any statutory or non-statutory nature conservation sites and is deemed to have limited ecological value as it contains only small areas of common and widespread habitats. However, there will be a direct impact on a small population of common lizards, a colony of Bee Orchids and potential impacts to breeding birds
- 13.120 With regard to the common lizards, it is proposed that they are trapped and relocated. Further surveys of nearby sites have been undertaken and their results submitted as part of the Reg. 19 response. These surveys have identified the adjoining Rainworth Heath SINC (also known as Spring Hill) as a suitable receptor on the basis of its low existing population, suitable features and habitats present. Appendix 9 of the Reg. 19 response provides a common lizard translocation method statement. It is suggested that the implementation of this translocation strategy be made a requirement of a planning condition.
- 13.121 With regard to the Bee Orchids it was originally intended to safeguard this orchid by storing soils containing the plant during the construction period and then incorporating them into the landscaping for the site. The strategy has subsequently been reviewed and it is now proposed that these soils be translocated to the adjacent Rainworth Heath SINC site to avoid the need for substrate storage and to maximise the potential for success. Appendix 9 of the Reg. 19 response also provides a bee orchid translocation method statement. It is suggested that the implementation of this translocation strategy be made a requirement of a planning condition.
- 13.122 With regard to bird habitats the site is assessed as offering very little to the integrity of the individual bird populations or the overall assemblage of bird species within the wider area. Species noted within the site were all common, both nationally and to the local area with no specially protected birds (as listed under Schedule 1 of the Wildlife and Countryside Act 1981 [as amended]). Additionally, no species listed as priority species under either the UK or Nottinghamshire Biodiversity Action Plan (BAP) was noted.
- 13.123 Nevertheless, the applicant has a legal responsibility to ensure that nesting birds are not harmed under the requirements of The Wildlife and Countryside Act 1981. To ensure the requirements of this legislation are complied with, a planning condition is suggested which could be imposed as part of any permission to ensure site clearance works are undertaken outside the bird nesting season (March –

August) unless a prior ecological survey is undertaken to confirm that no nesting site would be disturbed.

13.124 Subject to the satisfactory implementation of the ecological mitigation measures proposed it is concluded that the development of the site would not result in any significant detrimental impacts to protected species thereby ensuring the requirements of SPR Policy 2/5, NSLP Policy NE17 & WLP Policy W3.22 are met.

Assessment of ecological impacts to adjoining sites

- 13.125 The survey work undertaken as part of the original planning submission did not incorporate a survey of the adjacent land or adequately assess potential impacts within these areas. To address these concerns an extended phase 1 habitat survey has been undertaken to assess the ecology of the wider area and potential impacts. This additional report has been submitted to the Council as part of the applicant's Reg. 19 response. The updated survey work has not resulted in any notable changes to the findings or conclusions reached in the original assessment subject to the implementation of appropriate mitigation works.
- 13.126 Further investigation of a series of five lagoons to the east of the access road and area of wetland further south found no evidence of Great Crested Newts.
- 13.127 An updated desk top study was conducted which revealed records of woodlark, little ringed plover and nightjar within 2km of the site. Therefore an updated breeding bird survey has been undertaken on land adjacent to the site targeting these species. This further survey work identified one nightjar on the adjoining land, eight species listed on the UKBAP and/or Red List, with seven of these species recorded as breeding (none within the site boundary), and a further ten species were listed on the Amber List, with six of these species recorded as breeding (one within the site boundary). No species listed on Schedule 1 were recorded during the breeding bird survey, but the habitats around the site boundary are assessed as being of county importance for their bird assemblage.
- 13.128 The ERF has potential to affect birds on adjoining land as a result of noise arising from the construction and operation of the facility. Particular impacts relate to the affect of the development on Nightjars and breeding birds.
- 13.129 With regard to potential impacts to Nightjars, these birds are largely nocturnal with peaks in activity during dawn and dusk when feeding. Noise from construction could result in potential harmful impacts to Nightjar populations at the times of the day when they are active. Since Nightjars are summer migrants they would only be in the Rufford area from May to August/September when there is generally fully daylight between 07:00 to 19:00. To ensure adverse impacts

resulting from construction noise do not adversely impact Nightjars it is suggested that a planning condition restricting construction activities which are audible at the site boundary be imposed limiting activities to the period 07:00 to 19:00. Since construction activities which are not audible at the site boundary would have no adverse impact on Nightjars, it is suggested that the planning condition could provide scope for inaudible construction activities to be undertaken outside the above time periods.

- 13.130 Daytime noise from construction activities could potentially have harmful impacts to breeding birds on adjoining land, particularly noise associated with sudden bangs and intermittent loud noises. To ensure that such noises are adequately controlled it is suggested that a planning condition could be imposed to require the developer to prepare a construction noise identification and mitigation scheme to ensure that such impacts are minimised.
- 13.131 Noise generated during operational activities would mainly be controlled by the design of the facility which ensures that potential noise generating activities are enclosed within the building and where necessary would be acoustically clad. Reversing alarms on vehicles servicing the site would generally be minimised by site design which ensures that vehicles would follow a circular path around the building, thus minimising reversing movements and ensuring that when they reversing manoeuvres are undertaken they are generally undertaken within the building where noise levels would be screened.
- 13.132 To minimise disturbance to ecology arising from the use of external lighting the applicant has submitted a concept lighting strategy aimed at ensuring external lighting is minimised in terms of its use and intensity. The applicant has confirmed that it is not proposed to illuminate the external walls of the building, nor to provide street lighting along the access road, and would ensure that light spillage onto adjacent land would be minimised. These measures would ensure that disturbance from external lighting to surrounding ecology should be minimised and it is recommended that the final details of the lighting scheme be required as part of a planning condition of any permission granted.
- 13.133 As part of the consultation process it came to light that the colliery access road is entered on the Department of Transport (DoT) register of amphibian migratory crossings of common toads which breed at a site east of the access road (Colliery Road) and migrate across it. Migratory patterns of toads shows that movements generally occur in spring (February and March) and at dawn and dusk.
- 13.134 To ensure impacts are appropriately minimised a planning condition is suggested as part of any planning permission to require the submission and implementation of a toad crossing mitigation plan. Such mitigation measures could include a restriction on vehicle movements to and from the ERF during toad migration periods, the

use of a warden to clear the road of toads prior to vehicles crossing, or the installation of a toad crossing tunnel.

- 13.135 The connection of the ERF to the electricity grid would require the installation of a new underground cable either along the route of the road or adjacent to road in the verge between the road and the fenced boundary of the SSSI and therefore would not encroach upon the SSSI. No impacts to the SSSI are anticipated as a result of the installation of this cable.
- 13.136 Subject to the satisfactory implementation of the mitigation measures proposed it is concluded that the development of the site would not result in any significant detrimental impacts to protected species on adjacent sites, thereby ensuring the requirements of SPR Policy 2/5, NSLP Policy NE17 & WLP Policy W3.22 are met.

Assessment of the impact of emissions on surrounding habitats

- 13.137 The environment statement submitted in support of the application provides an assessment of the predicted impact of incinerator emissions on all areas designated for national nature conservation interest within a 10km radius around the proposed ERF. This includes one European designated site, Birklands and Bilhaugh Special Area of Conservation (SAC) approximately 8km from the proposed ERF, one National Nature Reserve (NNR) and 13 SSSIs.
- 13.138 The assessment has also considered effects at locally designated sites within a 2km radius of the proposed ERF, including 12 Sites of Importance for Nature Conservation (SINC) and one Local Nature Reserve (LNR). These sites generally have a woodland/heathland character and ecosystems which are particularly sensitive to deposition of chemical emissions from air.
- 13.139 Predicted emissions originating from the ERF and their contribution to acid deposition and nitrogen deposition have been derived from dispersion modelling for comparison against critical loads for these ecosystems. Advice has been sought from Natural England regarding the methodology used and the significance of impacts identified within this assessment.
- 13.140 In response, Natural England initially raised concern about the likely impact of NO_x, SO₂ and hydrogen fluoride emissions on vegetation growth in designated sites, particularly Rainworth Heath SSSI, which lies immediately to the south of the site. Concerns were also raised that an assessment had not been undertaken of combined emissions from the ERF process and haulage traffic emissions. Natural England confirmed there would be no significant impact at the Birklands and Bilhaugh SAC.
- 13.141 The applicant has supplied additional information relating to ERF emissions as part of their Reg. 19 response. Natural England have

reviewed this information and are now satisfied that the three main air pollutants are not likely to create detectable increases in the pollution burden on the SSSI by themselves and are therefore not likely to lead to detectable changes in the state of vegetation of the SSSI. In particular impacts from elevated nitrogen deposition would be small to negligible, there would be no significant adverse impacts arising from acid deposition derived roughly equally from both sulphur and nitrogen based compounds and hydrochloric acid, and impacts from hydrogen fluoride would be so small as to be undetectable.

- 13.142 On the basis of the information provided, Natural England has withdrawn its objection, subject to the inclusion of a planning condition requiring the Rainworth Heath SSSI to be surveyed every three years for a period of 21 years to assess any changes in the vegetation and the reasons for that change.
- 13.143 However, because the Rainworth Heath SSSI is outside the planning application site and not within the applicants land ownership it is not legally possible to require this monitoring as part of a planning condition and it would therefore have to be secured as part of the Section 106 agreement. It is therefore recommended that a requirement to undertake monitoring of Rainworth Heath SSSI forms part of the Section 106 agreement.
- 13.144 Notwithstanding the fact that Natural England withdraw their planning objection, they remain concerned that potential impacts from process emissions and associated road traffic could have some affect on Rainworth Heath SSSI, although they acknowledge that monitoring and continual improvement in emissions quality required as part of any PPC permit issued by the EA should satisfactorily limit the significance of such impacts.

Assessment of potential cumulative impacts

- 13.145 Concerns have been raised regarding potential cumulative impacts to habitats and protected species arising from this development and from other industrial developments in the surrounding area. Such cumulative impacts could result from emissions and lighting proposals affecting nocturnal birds.
- 13.146 With regard to emissions, possible cumulative impacts have been raised by consulttees regarding the combined impact of the ERF and industrial development to the south of the A617 on the northern edge of Rainworth. It is assessed that the potential for such cumulative impacts would only occur if these industrial development were releasing emissions similar to those to be produced by the ERF. There is no evidence that this is the case.
- 13.147 Natural England has not raised any objection to the development on the grounds of potential cumulative impacts from such emissions. Potential cumulative impacts from floodlighting should be minimised

by the careful design of a floodlighting scheme as part of a planning condition which ensures light spillage is minimised. It is therefore concluded that no significant cumulative ecological impacts would occur.

Off-site mitigation of impacts

- 13.148 As part of the mitigation of impacts it is proposed to translocate common lizards and bee orchids from the development site to the adjoining Spring Hill SINC site which lies immediately to the south of the planning application site. This site was restored to heathland as part of the former colliery restoration, but the site is in poor condition with scrub encroachment and unauthorised motorcycle access reducing its habitat value.
- 13.149 To ensure that translocated species have an optimum chance of success a requirement to undertake habitat restoration works and thereafter manage the translocated species has been identified. Since the Spring Hill site is outside the planning application boundary planning conditions to ensure these works are undertaken could not legally be imposed as part of any planning permission issued.
- 13.150 In accordance with the approach supported by NSLP Policy NE16 and WLP Policy W3.21 the applicant proposes to enter into a Section 106 Agreement with the County Council, UK Coal (the landowner) and Nottinghamshire Wildlife Trust (who would be interested in managing the site subject to an appropriate financial provision to assist in recreating the heathland habitat its future management).
- 13.151 A draft heads of terms of the legal agreement has been submitted as part of the Reg. 19 response, the heads of terms are set out in Appendix 4 and deal with initial habit restoration works, translocation, habitat management, habitat monitoring works and reporting.
- 13.152 As well as providing a location for the translocated species, Sping Hill SINC would serve a dual purpose by providing an area that can be enhanced to heathland to compensate for the loss of potential heathland that would otherwise have been created as part of the agreed restoration plan for the colliery yard area. The habitat improvements in this area are therefore supported by NSLP Policy NE18 which encourages the creation and management of heathland habitats.
- 13.153 Further mitigation for the potential lost heathland (which would otherwise be created by the restoration of the site) could be provided through the use of appropriate planting as part of the on-site landscaping works. The applicants have confirmed that they are agreeable to undertaking such planting as part of a detailed landscaping submission under a planning condition imposed as part of any planning permission.

Hydrology and Flood Risk

- 13.154 A Flood Risk Assessment (FRA) was undertaken for the site in accordance with the guidance contained in of Planning Policy Statement 25 Development and Flood Risk (PPS25) and WLP Policy W3.5. The FRA considers the watercourses, surface water flows and flooding issues for the existing site and proposed development. In addition the water quality of the adjacent watercourses and the potential water quality impacts of the development have been considered. The assessment has been reviewed by the EA who generally accept its findings and raise no objections to the development, subject to the imposition of planning conditions.
- 13.155 Impacts of fluvial flooding from Rainworth Water have been assessed which take account of potential increased flooding resulting from climate change. The assessment demonstrates that the development is at negligible risk of flooding in such an event due to the sites relative elevation from Rainworth Water.
- 13.156 The development could increase the potential runoff to these local water features and potentially Rainworth Water. Therefore a surface water drainage strategy has been prepared for the development to mitigate this potential impact and ensure controlled discharge. This would be achieved using formal drainage (i.e. pipes), grassed intercept swales and ditches to intercept surface runoff from the development and conveying the flows to infiltration ponds sized to accommodate up to a 1000 year inflow.
- 13.157 The incorporation of the surface water drainage strategy into the development ensures that the development proposals will result in a negligible impact on surface water flooding and fluvial flooding in the adjacent watercourses and Rainworth Water. In accordance with EA advice it is suggested that planning conditions requiring the submission of a detailed surface water drainage scheme and measures to limit surface water runoff forms part of any planning permission issued.
- 13.158 The existing surface water quality within Rainworth Water is considered to be 'Fairly Good'. The proposed development would use separate land drainage systems for surface water and foul water/trade waste/process water. The surface water conveyance system would incorporate interceptors for road and yard areas while the infiltration ponds would incorporate vegetation which will aid in water quality polishing.
- 13.159 The drainage systems within the site would incorporate a mechanism (i.e. stop valve) to prevent discharge to the infiltration storage ponds in the event of an emergency spillage incident. In addition the emergency spill containment and management strategy for the development would reduce the risk to water quality in such an event.

13.160 The FRA has concluded that the water quality treatment systems, emergency shutdown provisions and use of an infiltration system for the development would result in a negligible impact to the existing water quality of the surrounding water courses including Rainworth Water. In accordance with EA advice it is suggested that a planning condition be imposed as part of any planning permission issued to ensure satisfactory control for the storage of oils, fuels and chemicals.

Hydrogeology, Ground Contamination and Ground Stability

- 13.161 The site is characterised by thin soils overlaying highly permeable sandstone, recognised regionally as an important source of drinking water. Soils at the site are classified as having a low ability to prevent pollutants from penetrating them. Accordingly, the underlying sandstone is classified as having high vulnerability to pollution, is subject to rapid infiltration by water and run-off is unlikely except where the site is covered by impermeable hard standing. The high permeability characteristics of soils and geology could create risks to groundwater and surface water quality during construction and operation of the site.
- 13.162 This risk can be appropriately controlled through the best practices outlined in the planning application during construction and operation, and through the use of impermeable surfacing and appropriately engineered drainage systems, of which the precise details could be controlled through a planning condition.
- 13.163 The application is supported by a desktop ground contamination survey which reviews current and historical uses of the site and that of adjacent areas to determine the baseline geology and hydrogeology environmental conditions and their potential for land contamination. This assessment has identified areas of pollution within the site at levels exceeding guidance levels and drinking water standards.
- 13.164 In circumstances where development is proposed to be undertaken on a site which may contain contamination, Planning Policy Statement 23 – Planning & Pollution Control (PPS23) advises that any risks arising from potential contamination are properly assessed and that the development incorporates any necessary remediation to deal with unacceptable risks. PPS23 states that such an assessment would usually involve further studies including ground sampling and thereafter undertaking appropriate remediation.
- 13.165 The EA and the EHOs have advised that this more detailed assessment could be satisfactorily controlled through a planning condition as part of any planning permission issued, and that such a condition should require the applicant to appraise the options for ground remediation and thereafter undertake these works.

- 13.166 Concerns have been raised by local residents that the history of mining activities at Rufford Colliery could potentially result in future subsidence issues that could damage bunded areas and result in contamination of groundwater. As part of the environmental assessment site investigations have been undertaken which have shown the ground to be reasonably stable and to contain no known mine shafts or adits. The underlying bedrock has been tested for competence and is considered to be suitable for the construction of the proposed structure.
- 13.167 The construction would be subject to control under the building regulations which would ensure the development is constructed to an appropriate standard. Thereafter, the operation of the site would be subject to control under the PPC Regulations enforced by the EA, so ensuring that all bunded areas remain functional during the operational life of the facility.
- 13.168 It is therefore concluded that the stability risks arising from the mining history of the adjacent land give rise to no significant issues and in the unlikely event that damage did occur, controls exercised under the PPC regulations would ensure that prompt remedial action would be undertaken to reinstate such areas and ensure groundwater pollution is minimised.

Noise & Vibration

- 13.169 WLP Policy W3.9 seeks to control noise emissions arising from waste management facilities by the appropriate siting of waste management facilities, imposing controls over operating practices and the imposition of planning conditions including the setting of maximum noise levels at sensitive locations to ensure noise emissions from operations do not become intrusive.
- 13.170 The location of the proposed Rufford ERF benefits from a relatively isolated position with few sensitive noise receptors in close proximity to the facility. The site is served by a direct road access onto the A617 which is part of the County's strategic highway network thus ensuring that potential noise nuisance from HGVs trafficking through residential areas and surrounding towns/villages is minimised.
- 13.171 In terms of the design of the plant, its operational nature means that the ERF waste processing and power generation operations are largely enclosed within the main building and thus well-attenuated. Although the waste transfer station is not fully enclosed by the building it is sited on the west side of the building remote from residential properties and screened by the main ERF building.
- 13.172 Nevertheless, the proposed ERF is a large industrial building which will generate noise and vibration emissions from both the industrial operations undertaken on the site and from HGVs servicing the ERF.

The operational nature of the plant's use would mean that 24 hour activity would occur. There is scope, however, to control the movement of vehicles servicing the site.

- 13.173 To enable an assessment of the significance of noise and vibration impacts, the planning application is supported by a series of assessments undertaken at the nearest noise sensitive properties (Sherwood House Nursing Home and pair of semi detached houses situated adjacent to the colliery access road) as well as from locations within Rainworth village to the south and Inkersall Grange Farm to the east.
- 13.174 In terms of the noise assessment for construction activities, BS 5228: Noise and Vibration Control on Construction and Open Sites (Part 1: 1997) has been used to show that impacts, when assessed as a worse case scenario, will have a neutral impact in most locations although impacts are considered to be slight-moderate at the Sherwood House nursing home and Woodland Park mobile home park, Rainworth.
- 13.175 These impacts are assessed as a worse case scenario with all plant taken to be working at closest approach and operating with a 100% on-time. Both are unlikely to occur in practice resulting in impacts that will be significantly lower than the worse case scenario predictions. It is therefore concluded that construction impacts will not significantly affect the amenity of surrounding property. To ensure noise arising from construction noise does not adversely affect residential properties it is suggested that controls limiting construction noise be imposed through planning condition.
- 13.176 In terms of the noise assessment for operational activities, BS 4142 'Method for Rating Industrial Noise affecting Mixed Residential and Industrial Areas', 1997, has been used to make an assessment of potential impacts. The noise assessment has demonstrated that during the daytime and evening periods noise arising from the operation of the ERF would be lower than the existing ambient background levels and therefore there is a positive indication that noise complaints would not occur. This conclusion applies to the night-time period (23:00-07:00) for three of the five noise sensitive locations considered.
- 13.177 However, at Woodland Park mobile home park and Helmsley Road in Rainworth, existing night-time background noise levels were found to be below the minimum 30dB(A) threshold noise level listed in BS4142. Therefore assessment of the overnight operations at these locations has been undertaken according to the guidance of BS8233 'Sound Insulation and Noise Reduction for Buildings – Code of Practice 1999' and World Health Organisation (WHO) 'Guidelines for Community Noise 2000'.

- 13.178 This concluded that the operation of the ERF would not result in noise levels within bedrooms of residential properties at these two locations which would affect sleeping patterns, even if residents slept with their windows open. Nevertheless, a planning condition is suggested requiring noise monitoring be undertaken in the event that a complaint is received with a requirement to mitigate any noise impacts in the unlikely event that operational noise proved to be a nuisance.
- 13.179 In terms of the impact of road traffic noise during construction and operation of the ERF, impacts have been assessed using methodologies contained within Calculation of Road Traffic Noise (CRTN). Due to the relatively low levels of expected vehicle movement CRTN was considered not appropriate for use and the impact was subsequently re-evaluated using BS5228:Part 1:1997 :Noise and vibration control on construction and open sites, Part 1: Code of Practice for Basic Information and Procedures for Noise and Vibration Control' using the 'haul road method'.
- 13.180 Noise monitoring has been carried out on two occasions in the vicinity of Sherwood House nursing home and the adjacent residential properties. The results of this monitoring has shown some variability resulting in predicted noise impacts at Sherwood House nursing home of between -1.3dB(A) and 4.2dB(A) and at the residential properties of between 2dB(A) and 7.6dB(A). These impacts are considered to be in the range of neutral to moderate in terms of the magnitude of change from the existing situation.
- 13.181 However, the actual level of traffic noise at these locations is predicted to be 50dB(A)Leq and 53dB(A)Leq at each respective location. These levels are below the WHO noise threshold for outdoor living areas in order to avoid serious annoyance for daytime and evening periods. It is therefore concluded that noise levels arising from both construction and operational traffic are considered not to give rise to an adverse impact. In other locations, impacts from traffic noise are considered neutral.
- 13.182 It is considered appropriate to limit the total number of vehicle movements each day to the levels proposed within the application and to control the vehicle numbers during the evening, night-time and weekend to ensure incremental increases in traffic activity associated with the operation of the ERF do not occur.
- 13.183 The applicant has provided further clarification of the anticipated pattern of HGV movements on a daily and weekly basis which show that the majority of movements occur between 0700 1900 Monday to Friday (including Bank Holidays but excluding Christmas, Boxing and New Years Day) with very limited weekday vehicle movements between 1900 to 2300 and no night-time vehicle movements. At the weekend limited vehicle movements would only occur during the daytime (0700 1900) with no movements outside this period.

- 13.184 A planning condition is suggested which has been agreed by the applicant to control evening and night-time lorry movements (and allowing for some degree of flexibility) to a maximum number of 12 HGVs (24 movements) between the hours of 19:00 to 23:00 and four HGVs (eight movements) between the hours of 23:00 to 07:00 and no movements between 19:00 07:00 at the weekend. Furthermore, a condition is suggested to ensure that noise arising from vehicle movements along the access road do not exceed 50dB(A)Leq1hour at Sherwood House nursing home and 53dB(A)Leq1hour at the adjacent residential properties.
- 13.185 In terms of vibration, no groundborne vibration impacts are predicted to occur outside of the site boundary as a result of the construction and operation of the ERF development.

<u>Odour</u>

- 13.186 Most waste management sites have the potential to cause odours, unless effectively controlled. Controls over odour emissions are considered within the PPC permit application which the developer would need to obtain prior to operating the facility. As part of obtaining a PPC permit the applicant is required to prepare an Odour Management Plan which would investigate and provide mitigation for any potential odorous activities. Odour emissions would also be monitored by the EA during the operational life of the facility.
- 13.187 Nevertheless, WLP Policy W3.7 seeks to control odour emissions arising from waste management facilities through appropriate siting of waste management facilities, controls over operating practices and the imposition of planning conditions where necessary.
- 13.188 With regard to the siting of the facility, the location of the ERF benefits from being remote from potentially sensitive odour receptors, particularly residential property, thus ensuring that the potential impact of any odour emissions would be low. With regard to site operations, the main potential source of odour emissions from the process would arise within the tipping hall where waste is unloaded from collection vehicles and stored prior to treatment within the incinerator.
- 13.189 To ensure unpleasant odour emissions from these areas are minimised the building operates under negative air pressure whereby air is drawn from the tipping hall into the boilers as part of the combustion process. This process ensures there is a general inward flow of air into the building ensuring that any unpleasant odours remain within the enclosed tipping area rather than being pushed out of the building, a technique successfully used to control odours within similar facilities elsewhere in this country.

- 13.190 The use of two boilers, with limited downtime when no boiler would be operational, would effectively prevent a situation arising when there is a loss of negative air pressure and the potential for any odours escaping into the surrounding atmosphere. A planning condition is suggested to ensuring that negative air pressure is maintained within the tipping hall thereby ensuring odour emissions from the facility are satisfactorily controlled.
- 13.191 On the basis of these controls I consider the proposals would not give rise to an odour nuisance and therefore ensure compliance with WLP Policy W3.7.

Litter and Dust

- 13.192 WLP Policies W3.8 & W3.10 seek to control litter and dust generation on waste management facilities by the imposition of planning conditions and controls over operating practices. To ensure compliance with these policies waste imported to the site would be handled within the tipping hall and transported within enclosed/sheeted vehicles and therefore the potential for litter around the site is small.
- 13.193 There is the potential for dust to arise around the site from the movement of lorries particularly during the site construction works although the significance of such impacts is considered to be low, primarily because of the remote location of the site and metalled construction of the existing haul road.
- 13.194 Nevertheless during any construction works it would be necessary to secure controls through planning conditions and these appropriately could include the provision of a site wheel wash to ensure lorries do not carry dust or mud onto the local roads and the use of water bowsers when necessary to dampen down potential sources of dust. Subject to these controls I consider the development will not give rise to significant dust or litter concerns and therefore ensure compliance with WLP Policies W3.8 & W3.10.

Incinerator Bottom Ash and Flue Gas Treatment Ash

- 13.195 As part of the consultation process concerns have been raised regarding the safety of incinerator bottom ash (IBA) and flue gas treatment ash (FGT).
- 13.196 With regard to IBA, concern has been raised regarding the potentially corrosive properties which mean that IBA is not classified as inert. Pain have submitted reports to NCC which argue that IBA has hazardous properties and therefore should be handled as a hazardous waste. These reports have been forwarded to the EA for comment. The EA advise that they have recently issued a position statement on the classification of IBA which recognises that most IBA is likely to be non-hazardous waste. If any IBA is not recycled, it

would normally be sent to a non-hazardous (rather than "inert") landfill.

- 13.197 However, the EA has identified that there could be situations where the concentration of ecotoxic components in IBA could lead to hazardous waste classification. The EA are currently reviewing their protocol to determine whether batches of IBA test as hazardous waste and, where this occurs, what effects this will have on disposal arrangements.
- 13.198 Ultimately, the waste classification of IBA is a matter for the EA which is controlled by the PPC permit. The EA advice that should a PPC permit be issued for the proposed facility it would require the operator to implement an approved ash sampling protocol to ensure that the material is sent to a suitably licensed facility.
- 13.199 IBA is suitable for recycling as a secondary aggregate for use in the construction industry. The applicant confirms it is their intention to develop a purpose built IBA processing plant to serve both the Rufford and Sheffield ERFs. This facility would reprocess the material and remove any harmful properties. Until such time as this facility is provided the applicant would use an interim facility established in the Sheffield area. It is noted that IBA originating from other Veolia ERFs is routinely reprocessed into a secondary aggregate since it makes both environmental and economic sense to do so.
- 13.200 With regard to FGT ash, this is not classed as inert, partly due to its alkaline characteristics. Concerns have been raised regarding safety issues associated with the transport of FGT ash. To ensure adequate safety the material would be stored on site within purpose built silo's and transported within sealed tanker HGVs to a facility in the West Midlands where the alkaline nature of the material can be used to neutralise acidic wastes prior to disposal. It is therefore concluded that a satisfactory safety procedure is in place for the management of FGT ash and its storage and transport present a minimal safety risk.

Waste PFI Contract

- 13.201 The Waste PFI contract is a material consideration of the current planning application as it provides a level of confidence that the proposed range of waste management facilities would in fact be provided, and thus assist (for example) in meeting Government recycling targets.
- 13.202 Further, the content of that contract is likely to be material, in as much as the planning authority needs to be aware of the range of facilities put forward through the contract and how they inter-relate, in order to assess the extent to which they will meet Government recycling

targets. Beyond this other details such as the contract price and personal data are not relevant.

- 13.203 Local residents and PAIN have raised concerns that they cannot fully participate in the planning consultation process because of the partial non-disclosure of the PFI contract which results in them not having access to all the background information.
- 13.204 In terms of consultees ability to comment on the planning issues, very substantial parts of the waste PFI contract have been made available to the public by the Council. Furthermore, the planning application contains relevant background information relating to the waste contract. Through the delivery of a wide range of waste management facilities, it also demonstrates compliance with government recycling targets. In the Council's view, this readily available information is more than sufficient to enable the public and PAIN to make meaningful representations on the extent to which Veolia's proposals comply with national, regional and development plan policies, and any other planning issues.

Archaeology and the Cultural Heritage

- 13.205 The land forming the proposed development site has a generally despoiled character and therefore a low potential for any archaeological interest. Within the relatively undisturbed areas on the eastern side of the site in the location of the infiltration pond and new access, the ES identifies some potential for archaeology to remain and within this area it is recommended that an archaeological watching brief be provided during topsoil stripping. The requirement to undertake such a watching brief could be secured through planning condition.
- 13.206 The development would have no significant impact on any historic buildings or areas identified of interest to conservation or heritage.

Other Issues

- 13.207 A wide range of general and specific design and mitigation measures would be implemented as part of the development to ensure that the impact on the amenity of local residents and tourists as users of local recreation and community facilities and open spaces would be minimised and acceptable.
- 13.208 With respect to specific concerns regarding the facility acting as a blight to further regeneration in the surrounding area, advice has been sought from the Council's regeneration team who advise that the development would offer valuable employment opportunities for local people. Furthermore the creation of the access road and other elements of the site infrastructure would begin the process of opening up the site and making it accessible to other employees should a decision be made to support the wider regeneration of the site.

- 13.209 The construction of the ERF would be undertaken over a three year period and employ up to 250 people at its peak. Employment law constraints mean that the Council can not legally require the developer to only employ members of the local community in these construction posts and it may be the case that certain parts of the development would require specialist skills which are not readily available in the local community.
- 13.210 The applicant has confirmed however that they will use reasonable endeavours to seek potential employees from within the existing communities in Nottinghamshire. It is suggested that an informative note be attached as part of any decision notice requesting the applicant to use all possible endeavours to use local employment.
- 13.211 Concerns that the facility would have a detrimental impact on surrounding property values are not considered to be material planning considerations. The distance of the ERF from areas of tourist interest within Nottinghamshire and in particular Sherwood Forest mean that impacts are likely to be minimal and therefore the development would have no significantly impact on tourist facilities.
- 13.212 The development would not directly affect any public rights of way.

14. **Other Implications**

Human Rights Act Implications

- 14.1 The Council is obliged by Section 6 of the Human Rights Act 1998 not to act in a way which is incompatible with rights and fundamental freedoms of the European Convention on Human Rights (ECHR) including Article 8 ECHR and Article 1 of the First Protocol. These particular rights relate to respect for a person's private and family life, home, and, use and enjoyment of possessions including property. Interference in such rights may be justified if lawful, necessary, appropriate and proportionate. The control of development by the town and country planning system has been generally held to be one which is compliant with ECHR rights.
- 14.2 Rights under Article 8 and Article 1 of the First Protocol may be affected. The proposals have the potential to introduce impacts on residential areas and property including visual and landscape impacts, additional traffic and noise. An assessment has been made of the likely environmental effects of the development including the issues identified above which has concluded that there will be some residual impacts even following mitigation though the imposition of planning conditions.

14.3 Members will need to consider if there is a material interference in those rights and in any event whether or not interference is proportionate.

Statutory and Policy Implications

14.4 This report has been compiled after consideration of implications in respect of finance, equal opportunities, personnel, Crime and Disorder and users. Where such implications are material, they have been brought to out in the text of the report.

Crime and Disorder Implications

14.5 The development would be located in a relatively isolated location and potentially vulnerable to criminal activity. The applicant has identified a number of security features to minimise crime risks including the erection of a continuous 2.4m high galvanised steel security fence to enclose the site, a controlled entrance system to the site and also to the buildings, 24-hour staffing of the site, use of appropriate externally lighting and the installation of a CCTV system.

15. Conclusion

- 15.1 This is a highly significant proposal which if developed would manage Nottinghamshire's municipal waste until at least 2033. The development therefore raises key issues regarding its compliance with waste management policy.
- 15.2 Significantly, the WLP is now a 'saved' document. The plan does not assess the need for facilities which are required beyond the plan period (1st January 1995 and 31st December 2004) and its detailed policies do not fully reflect more recent changes in government waste management policy. The WLP review which will eventually result in its replacement with a waste core strategy and development control policies is at a very early stage and therefore cannot be used to assess the merits of this proposal.
- 15.3 In circumstances where there is not an up to date approved waste local plan/waste development framework, PPS10 requires that decisions should be made which reflect PPS10 policy. In the context of this development, PPS10 recognises the important role that positive planning has to play in delivering sustainable waste management by providing sufficient opportunities for new waste management facilities of the right type, in the right place at the right time. PPS10 stresses that there is an urgent need for Councils to ensure that suitable waste facilities are delivered.
- 15.4 It has been demonstrated within the report that the development is in general accordance with the key planning objectives set out within PPS 10. The development would deliver waste management at a higher point in the waste hierarchy than would otherwise be achieved.

Energy from Waste is an accepted part of the National Waste Strategy which can provide an essential element in diverting waste from disposal to land in accordance with the EU Landfill Directive. The development would provide a more sustainable method of waste management thereby generally complying with policies set out within PPS10.

- 15.5 At a regional level the development is judged to be in accordance with RSS8 Policy 38 which seeks the diversion of waste from landfill by taking a flexible approach to waste recovery.
- 15.6 At a local level there is a decreasing amount of suitable available landfill void space for the disposal of residual municipal waste and therefore an urgent need to provide strategic waste management facilities which contribute to diverting waste from landfill. This facility, as part of an overall solution for the management of Nottinghamshire's municipal waste, would ensure that government targets for waste recycling, composting and recovery are achieved and therefore the amount of waste sent to landfill is minimised.
- 15.7 In coming to a decision on this application Members will need to have regard to the overall balance of benefits which would be derived from the provision of an ERF development insofar that it ensures waste is diverted from landfill and energy is recovered as part of the process.
- 15.8 The choice of the Rufford site for the development of the ERF requires a judgement to be made of competing planning policies relating to the site. The site has restoration requirements as part of its currently authorised use which require it to be restored to a green end use, and the site therefore cannot technically be considered as brownfield land. However, the history of land use at the site cannot be ignored in the context of development plan policy.
- 15.9 The site is designated as countryside on the NSLP proposals map and therefore the development of an ERF would not satisfy the requirements of NSLP Policy NE1 and SPR Policy 2/10 which seek to protect the countryside from development. However, NSLP Policy E17 allows for an exception to Policy NE1 in the case of redevelopment of the pit head area of disused collieries for employment purposes. The development would assist in meeting the objectives of NSLP Policy E17 in that it would secure the redevelopment of part of a former colliery pit head site for employment development and would generate 36 full time jobs.
- 15.10 In the wider policy context, support for the development is provided by DRP Policy 37 which identifies a specific need for the development of new larger centralised waste management facilities in the Northern Sub-Region and identifies the potential of former colliery land in providing suitable sites. RSS Policy R9 and SPR Policy 4.2 identify sites with good transport links along the MARR as being potentially suitable for employment redevelopment.

- 15.11 RSS8 Policy 9 identifies as a regional priority the economic, social and environmental regeneration of the Northern Sub-Region. To inform the future allocation of land in the sub region as part of process of reviewing development plan documents an employment land review has been carried out which identifies Rufford as a potential development site. The Rufford site is also assessed as being a suitable site for the development of an ERF under the guidance set out within paragraph 21 of PPS10 relating to the identification of sites for new or enhanced waste facilities
- 15.12 In coming to a decision on this application, Members will need to have regard to the suitably of the Rufford site for the development of an ERF in the context of the development plan policies for the site. As part of this decision Members are reminded of PPS10 advice which encourages positive planning where new facilities deliver sustainable waste management. Should members be minded to support a grant of planning permission for the development they are reminded of the need to refer the application to GOEM as a departure application due to its failure to comply with NSLP Policy NE1.
- 15.13 The most significant environmental impact arising from the development results from its visual and landscape impacts and their affect on the adjoining Rainworth Heath and Water Mature Landscape Areas, Sherwood Forest Special Landscape Area and surrounding residential properties. These impacts are assessed as being adverse/significantly adverse at some receptors and therefore the development fails to comply with a number of landscape protection policies the most relevant of which are NSLP Policies NE8 & NE9 & WLP Policy W3.3. The development is therefore assessed as being a departure to these policies on the basis of its landscape and visual impact and would also require referral to GOEM for this reason.
- 15.14 The design of the ERF has been undertaken to a high standard in accordance with PPS10 objectives and is considered to achieve a very reasonable and distinctive solution to the issue of locating a major structure in this location.
- 15.15 The potential contribution of the ERF to climate change impact has been re-assessed in light of increasingly stringent controls set out within PPS1 Supplement: Planning and Climate Change. These assessments have demonstrated that there is some variability in the performance of different residual waste treatment options and it may be possible to achieve lower net carbon emissions if other waste treatment options were pursued.
- 15.16 However the development of an ERF would provide significant savings in terms of carbon equivalent emissions over existing practice which is reliant on landfill and therefore the development is

assessed as providing positive benefits in terms of its carbon emissions.

- 15.17 The current absence of proposals for the beneficial use of hot water by CHP, which could increase the efficiency of the plant and therefore off-set the climate change impact even more is a disadvantage, although it has been shown that none of the other sites considered at the final stage of the site appraisal provide any greater potential for its development.
- 15.18 Ecological impacts arising from the development could be satisfactorily mitigated through planning conditions and by undertaking habitat improvements on the adjoining Spring Hill SINC, secured through a Section 106 Agreement. These habitat improvements would also assist in mitigating against lost potential heathland which would otherwise have been developed on the site in the event that the ERF site had been restored in accordance with the current planning permission for coal stocking. The requirements of SPR Policy 2/5, NSLP Policy NE17 & NE18 and WLP Policy W3.22 are satisfied.
- 15.19 The site impacts on the local highway network are considered to be acceptable, conforming with WLP Policies W3.11 and W3.14. Alternatives to road transport have been assessed under the requirements of WLP Policy W3.16.
- 15.20 The proposal is for a technologically advanced facility, which would operate under a PPC permit to ensure air quality is maintained and health risks are negligible. Residential and local amenity will be protected by conditions covering noise, odour, and related matters. Suggested planning conditions would ensure that the development is acceptable in terms of the decontamination, flood protection, and the protection from pollution of the watercourses and the aquifer.
- 15.21 In formulating this recommendation full account has been taken of the information contained within the planning submission and supporting environment statements submitted as part of a formal Environment Impact Assessment. Consultee responses and representations submitted by members of the public have informed the planning decision. Where appropriate specialist technical advice has been obtained to inform this assessment of issues.
- 15.22 The ES (including Reg. 19 responses) is considered to be comprehensive and adequate with no matters outstanding. Consequently it is concluded that on balance the proposal would not result in an overall significant environmental impact which could not be mitigated or compensated for by plant design, working practices and inclusion of appropriate conditions.
- 15.23 In accordance with section 38 of the Planning and Compulsory Purchase Act 2004 the decision on this application should be taken in

accordance with the Development Plan unless material considerations indicate otherwise. To enable such a decision to be made a balancing act is required to compare the recognised need for the development and the benefits it provides in terms of providing a more sustainable waste management facility through delivering waste management at a higher level within the waste hierarchy, with the impacts that arise, particularly from the scale and height of the building and its negative landscape and visual impact. Members should also take account of the land use policy issues insofar that they affect the Rufford site.

- 15.24 Overall, the balance of argument in this instance is in support of the proposal, underlined by the balance of need for this waste management facility and the governments waste planning policy.
- 15.25 It is therefore recommended that planning permission be granted subject to the Secretary of State not calling in the application for her determination and subject to the completion of a legal agreement and the imposition of controlling planning conditions as set out within appendix 5 of this report.

Statement of reasons for the decision

- 15.26 In the opinion of the County Council the development would support sustainable waste management by providing a facility which treats waste at a higher level of the waste hierarchy thus diverting waste from landfill disposal and ensuring compliance with Planning Policy Statement 10: Planning and Sustainable Waste Management (PPS 10) & Regional Spatial Strategy for the East Midlands (RSS8) Policy 38 & Draft Regional Spatial Strategy
- 15.27 The location of the proposed facility at the former Rufford Colliery is in accordance with Newark and Sherwood Local Plan Policy E17 which supports the industrial redevelopment of former colliery pit head areas. The development would also assist in complying with RSS8 Policy 8 which identifies as a regional priority the economic, social and environmental regeneration of the Northern Sub Region (which includes the application site). The development of the Rufford site would also satisfy the site selection criteria for new waste management facilities outlined within paragraph 21 of PPS10. The site is situated within land designated as countryside and therefore the development would fail to comply with policies aimed at protecting the countryside including Nottinghamshire Structure Plan Review (SPR) Policy 2/10 and NSLP Policy NE1. Overall it is assessed that policy support is provided for the development, however, the proposals have been treated as a departure for referral to the Government Office for the East Midlands due to this policy conflict.
- 15.28 The development would contribute to reducing carbon emissions generated as a result of waste disposal and therefore takes account

of sustainable development policies contained within PPS1: Sustainable Development and Climate Change and PPS1 Supplement : Planning and Climate Change. As part of a detailed assessment the applicant has demonstrated alternative sites are not available which may potentially offer greater potential for energy recovery and therefore lower impacts in respect of climate change through the development of combined heat and power.

- 15.29 In line with the approach outlined in paragraphs 30 & 31 of PPS10 it is assessed that the operation of the facility poses no significant risk to human health.
- 15.30 The design assessment demonstrates that the PPS10 guidance which encourages good design within waste infrastructure has been followed.
- 15.31 Access to the site and the capacity of surrounding highway network to absorb the additional traffic movements associated with the development are considered to be adequate in accordance with Nottinghamshire and Nottingham Waste Local Plan (WLP) Policy W3.11 & W3.14.
- 15.32 The development would result in some adverse landscape and visual impacts and therefore fails to comply with development plan policies which seek to minimise/avoid such impacts. Notable policies which the development fails to satisfy are NSLP Policy NE8 due to the impact of the development on Rainworth Heath and Water Mature Landscape Areas and NSLP Policy NE9 due to impacts on Sherwood Forest Special Landscape Area. However, on balance it is assessed the benefits of scheme in terms of delivering more sustainable waste management outweigh these landscape and visual concerns which to some extent can be mitigated.
- 15.33 Potential ecological impacts arising from the development have been mitigated to a satisfactory level through the suggested planning conditions and Section 106 legal agreement, using an approach which is in accordance with PPS9: Biodiversity and Geological Conservation, SPR policy 2/5, NSLP Policy NE17 and WLP Policy W3.22.
- 15.34 The development by reason of its design is assessed as not presenting any significant impact to hydrology and flood risk thereby ensuring compliance with Policy W3.5. Planning conditions are proposed to ensure there are no significant harmful impacts from noise and vibration thus ensuring WLP Policy W3.9 is satisfied. Satisfactory measures to control odour emissions are suggested to ensure WLP Policy W3.7 is satisfied.
- 15.35 The County Council is therefore of the opinion that the suggested planning conditions should ensure that most impacts are satisfactorily mitigated. Were impacts cannot be satisfactory mitigated it is

assessed that any potential harm is outweighed by the need for the development in terms of its contribution to sustainable waste management.

16. **RECOMMENDATION**

- 16.1 It is RECOMMENDED that no objection be raised and that the application be referred to the Government Office for the East Midlands as a departure from the Development Plan.
- 16.2 It is FURTHER RECOMMENDED that, should the Government Office not wish to intervene, the Head of Democratic and Legal Services be instructed to enter into a Section106 agreement to provide for habitat improvement and management works within Spring Hill SINC to ensure that a suitable habitat for common lizard and bee orchid translocation is provided and to secure monitoring of the Rainworth Heath SSSI for a period of 21 years.
- 16.3 It is FURTHER RECOMMENDED that, subject to the completion of the Section 106 Agreement referred to above, the Corporate Director (Communities) be authorised to grant planning permission for the above development subject to the conditions set out in Appendix 5.
- 16.4 Members need to consider the issues, including the Human Rights Act issues, set out in the report and resolve accordingly.

Steve Calvert Acting Corporate Director (Communities)

Legal Services' Comments

The decision falls within the delegation to the Planning and Licensing Committee." [NAB 22.12.08]

Financial Comments of the Strategic Director (Resources)

The contents of this report are duly noted. [DJK 23.12.08]

Background Papers Available for Inspection

The planning application file

Electoral Division(s) and Member(s) Affected

Blidworth Division

Cllr Woodhead

PSP.MH/RH/ep5155 23 December 2008

APPENDIX 1

RUFFORD ERF - KEY FACTS SHEET

APPLICANT/OPERATOR	Veolia Environmental Services Nottinghamshire Limited, Trentside Offices, Freeth Street, Nottingham NG2 3GT.
PROPOSAL	Construction and operation of an Energy Recovery Facility through the incineration of waste together with ancillary infrastructure, including a waste bulking/transfer station, administration/visitor centre, landscaping and creation of new internal haul road.
TOTAL SITE AREA	5.4 hectares
PROPOSED AMOUNT OF WASTE IMPORTATION	• 180,000 tonnes per annum of waste for incineration (assuming 15% planned and unplanned downtime).
	• 10,000 tonnes per annum of waste and recyclables for transfer/bulking.
AMOUNT OF ELECTRICITY GENERATED	15MW of which 2MW is used on site and 13MW is exported to the local electricity network.
OTHER DEVELOPMENTS ON SITE	• Administrative and education building including showers, kitchen, offices, education centre and gatehouse.
	Two weighbridges and associated infrastructure.
	 Internal road system and staff/visitor parking for 46 cars & new internal haul road.
	 Fuelling and vehicle washing facilities.
	Site landscaping.
	Site lighting.
PROPOSED HOURS OF OPERATION	24 hours a day, 7 days per week.
TRAFFIC	All access to the site would be via the 'colliery road' and the A617 Rainworth Bypass.91 (182 movements) waste vehicle HGV trips/day.
	• 36 (72 movements) staff vehicles per day.
	Vehicular access sought for 24 hour/7 day operation although most waste received 07:00-17:30 Mon-Fri & 08:00-15:00 Sat.
EMPLOYMENT	36 site operatives

Glossary of Terms & Acronyms

Anaerobic digestion: is a waste treatment process within which waste is broken down using microranisms in the absence of oxygen.

Aquifer: A water-bearing stratum situated below ground level. The water contained in an aquifer is known as groundwater.

Baseline: Existing environmental conditions.

Baseline Studies: Work done to determine and describe the environmental conditions against which any future changes can be measured or predicted and assessed.

Biodegradable Waste: Waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and paperboard.

Biodiversity: The variety of life forms, the different plants, animals and microorganisms, the genes they contain and the eco-systems they form. It is usually considered at three levels: genetic diversity, species diversity and ecosystem diversity

Bottom Ash: Also known as clinker, the principal residual material produced from an ERF plant.

Brownfield: Otherwise known as Previously developed land. Land which is or was occupied by a permanent structure, including the curtilage of the developed land and any associated fixed surface infrastructure but excluding former mineral workings which have restoration requirements upon their closure.

Bulk transfer: Refers to transfer of material via large articulated or bulk containers, which will collect temporarily stored material such as that from a Waste Transfer Station and transport it to the ERF.

Combined Heat and Power (CHP): The combined production of heat (usually in the form of steam) and power (usually in the form of electricity). In waste-fired facilities, the heat would normally be used as hot water to serve a district-heating scheme.

Combustion: Burning or rapid oxidation, accompanied by the release of energy in the form of heat and light.

Commercial Waste: Waste from premises used wholly or mainly for the purposes of a trade or business for sport, recreation or entertainment (Section 75(7) of the Environmental Protection Act 1990).

Composting: The degradation of organic wastes in the presence of oxygen to produce fertiliser or soil conditioner. This can either be an enclosed process (in vessel) or operated as an open windrow process.

Condensers: A vessel or apparatus for converting steam to water.

Construction and Demolition Waste: Waste arising from actual construction, demolition and maintenance or buildings and roads, typically consisting of soil and other inert material.

Construction phase: Period of construction work / activity taking place on site up until commissioning.

Contaminated land: any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that: a. significant harm is being caused or there is significant possibility of such harm being caused; or b. pollution of controlled waters is being, or is likely to be, caused", from Section 78 A(2) of the Environmental Protection Act 1990.

Dioxins: A family of chlorinated organic compounds.

Disposal The final stage of managing waste, preferably in a controlled and sustainable manner, the most common technique being landfill.

District Heating The use of hot water produced from energy production facilities to heat or cool adjacent properties by pumping through a local pipe network.

EA: Environment Agency.

EfW: Energy from Waste.

EIA: Environmental Impact Assessment - a process by which information about the likely environmental effects of certain projects is collected, assessed and taken into account both by the applicant, as part of the project design, and by the decision making body in deciding whether permission should be granted.

EIA Regulations: Collective name for the various statutory instruments through which the EC Council Directive on Environmental Assessment (Directive 85/337/EEC) as amended by Directive 97/11/EC) was implemented.

Energy Recovery: A waste treatment process involving the combustion of waste, also termed Energy from Waste. The resulting heat is used to make steam from which electricity is generated and fed into the National Grid. It is also possible to provide District Heating. Significant emission control equipment is provided at such facilities to control pollution.

Environmental Statement (ES): Document in which the results of an EIA are presented to decision-makers and the public.

ERF: Energy Recovery Facility.

FGT: Flue Gas Treatment.

Flue Gas: Gas by-products of the combustion process whose constituents may be polluting.

Furan: One of a range of polychlorinated dibenzofurans that are produced as contaminants from the incomplete incineration of chlorinated hydrocarbons.

Furnace: Apparatus with combustion chamber for subjecting waste materials to intense heat.

Green waste: Vegetation and plant waste from household gardens and public parks and gardens.

Groundwater: Water flowing through, or contained beneath, the ground surface.

Habitat: The natural environment of animals or plants.

Habitat Survey: A walk-over survey designed to map and assess habitats and their importance.

Hazardous Material: A material or combination of materials, which because of its quality, concentration, or physical, chemical, or infectious character may:

- Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
- Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed.

Heavy Goods Vehicle (HGV): Includes all rigid and articulated vehicles over 5 tonnes gross vehicle weight, with two or more axles. Includes tractors (without trailers), road rollers, box vans, and similar large vans. DTLR: 'Transport Statistics'. GB, 2001.

Household Waste: Waste from domestic premises, caravans, residential homes, educational establishments or premises forming a part of a hospital or nursing homes (Section 75 (5) of the Environmental Protection Act 1990). This includes all waste arising within a Waste Collection Authority, collected waste, waste delivered to Civic Amenity Sites, and waste brought to recycling centres.

HWRC: Household Waste Recycling Centre. Site utilised for the disposal of recyclable material and household bulk items requiring disposal.

Hydrocarbons: Organic chemicals (normally petrol distillates).

Hydrogeology: The study of fluid dynamics within groundwater in the earth's surface.

Hydrology The study of the distribution and conservation of water.

Impermeable: The property of a material or soil that does not allow, or that allows only with great difficulty, the movement or passage of water.

Incineration: Chemical oxidation at high temperatures where organic material is converted into heat energy, flue gas or ash.

Industrial Waste: Waste from any factory, or premises used for the provision of public transport, public utility or postal services (Section 75(6) of the Environmental Protection Act 1990).

Inert Material: Material having limited ability to react chemically; unreactive.

LA90: This is the noise level that is exceeded for 90% of the measurement period and gives an indication of the noise level during quieter periods. It is often referred to as the background noise level and is used in the assessment of disturbance from industrial noise.

LAeq: The 'equivalent A-weighted sound pressure level, In decibels'. Defined as the value of the A- weighted sound pressure level of a continuous, steady sound which, within a specified time interval T, has the same mean square sound pressure as a sound under consideration whose level varies over the same time interval. This is a unit commonly used to describe construction and industrial noise, and is generally referred to as the ambient noise level.

Landfill Allowance Trading Scheme (LATS): In order to ensure that the UK meets its obligations under the Landfill Directive, the Waste and Emissions Trading Act (WET Act) requires an allowance to be set for the tonnage of biodegradable municipal waste that can be land filled in the UK. This allowance scheme is called the Landfill Allowance Trading Scheme. Landfill allowances are allocated to each authority to enable England to meet its targets. These allowances set out limits on the tonnage of biodegradable municipal waste that local authorities can send to landfill and the allowances can be banked, borrowed or traded.

Landfill Directive: More formally European Directive 1999/31/EC. The Directive's overall aim is "to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole life-cycle of the landfill.

Life Cycle Analysis: The evaluation of aspects (often environmental) of a product through all stages of its life cycle.

LNR: Local Nature Reserve

MARR: Mansfield Ashfield Relief Road

Materials Recycling Facility (MRF): A transfer station for the storage and segregation of recyclable materials.

MDC: Mansfield District Council

Megawatt (Mw): a unit of electric power that equals 1,000,000 watts.

Mitigation: Any process, activity or entity designed to avoid, reduce or remedy adverse environmental effects likely to be caused by a development project.

Mitigation Measures: Methods employed to avoid, reduce, remedy or compensate for significant adverse impacts of development.

MLA: Mature Landscape Area

MRF: Materials Recovery Facility - facility for the separation and segregation of recoverable materials from materials already segregated from MSW.

MSW: Municipal Solid Waste - solid waste that originates from residential sources.

Municipal waste: Waste, including household, commercial, clinical, hazardous, fly-tipping, street sweeping and any other that is controlled by the local authority.

Nitrogen dioxide (NO2): Reddish brown gas (in high concentrations), respiratory irritant and precursor to photochemical processes which produce other pollutants and photochemical smog and contribute to global warming.

NCC Nottinghamshire County Council

Non Technical Summary (NTS): Information for the non-specialist reader to enable them to understand the main environmental impacts of the proposal without reference to the main environmental statement

Normal Operation: Operation within specified operating conditions and limits.

NOx: Collective expression to describe oxides of nitrogen (Nitrogen dioxide (NO2), nitrogen oxide (NO), nitrous oxides (N2O)).

NSDC: Newark and Sherwood District Council

OPUN: Part of Regeneration East Midlands, a Government body who undertake a design review process aimed at delivering sustainable, high quality and well-planned developments

Particulates: Fine, solid particles that remain individually dispersed in gases and stack emissions.

PM10: Particulate matter with a diameter of 10 microns or less (microns are also referred to as micrometers or 10-6 of a metre): unit is '∞m'.

PPG: Planning Policy Guidance Note.

PPS: Planning Policy Statement. PPSs are the Government's policy guidance on a range of topics. Thes e are gradually replacing PPGs. Key documents include PPS1 – Delivering Sustainable Development and its Supplement – Planning & Climate Change, and PPS10 – Planning for Sustainable Waste Management.

Recovery: In waste management this may include the recovery of materials from a waste stream or energy (heat or electricity) that is derived from combusted waste material.

Red list species: Species that are globally threatened according to the International Union for the Conservation of Nature and Natural Resources criteria.

Reduction: Reduction or minimisation can be accomplished through reviewing the production processes as to optimise utilisation of raw (and secondary) materials and re-circulation processes. This may lower disposal costs and the usage for raw materials and energy. Also householders can reduce waste by reusing products and buying goods with reduced packaging

Remediation: Measures to reclaim contaminated land and to make it suitable for use.

Residual effects: Effects remaining after mitigation measures have been implemented.

Residual Waste: Residual wastes are those remaining following extraction of materials for reuse or recycling either at source by householders (as part of separate kerbside collections organised by the Waste Collection Authorities), or following segregation or treatment at other facilities.

SAC: Special Area of Conservation – a European designation for particularly important nature conservation sites.

SINC: Site of Importance for Nature Conservation

SO2: Sulphur dioxide – formed principally through the combustion of sulphur bearing fossil fuels.

SSSI: Site of Special Scientific Interest - a nature conservation notification for sites of importance at the national, and sometimes international, level.

Statutory Consultees: Organisations that the relevant determining authority is required to consult by virtue of the EIA Regulations. These can include LPAs, Environment Agency, English Nature etc.

Supporting Statement: A planning document that accompanies the planning application submission.

TA: Transport Assessment.

Tpa: Tones per annum.

Waste: Any substance or object the producer or person in possession of it discards, or intends, or is required to discard.

Waste Arisings: The quantity of waste generated over a specified period of time, usually yearly.

Waste hierarchy: Principle that waste is handled through a series of sequential proposals starting with avoidance, through minimisation, recovery and reuse, recycling, pre-treatment with energy recovery, pre-treatment without energy recovery and ending with final disposal.

WDA: Waste Disposal Authority

WHO: World Health Organisation.

WID: Waste Incineration Directive. EC Directive 2000/76/EC of 4 December 2000.

Heads of Terms of Section 106 Agreement

Habitat Improvement and management works within Spring Hill SINC

PART I INITIAL HABITAT RESTORATION WORKS: Early habitat restoration works will involve the following;

- removal of gorse and broom scrub cover from large areas of the site and disposal of arisings.
- erection of post and wire stock fencing to enclose the site. Access gate to be erected along boundary with SSSI.
- creation of ditch and mound along northern and eastern boundaries of the site.
- boundary strengthened by digging large rocks into locations most used by motorcyclists to access the site.
- creation of hibernacula for common lizard constructed of piles of wood and stone and located around habitat edges.
- Early grazing of land.

PART II TRANSLOCATION WORKS

- translocation of bee orchids from ERF site.
- translocation of common lizards from ERF site.

PART III HABITAT MANAGEMENT WORKS: The restored areas of heathland will be important for species such as nightjar, woodlark, bee orchid and common lizard. Habitat management works additional to those mentioned above will be carried out to enhance the site for these species. This will involve the following:

- animal grazing at certain times of the year to control re-growth of scrub species and remove nutrient from the site to encourage the growth of heather,
- bracken control through frond cutting in the summer when fronds are at maximum growth.

PART VI HABITAT MONITORING WORKS

• monitoring of grassland and heathland species by a suitably qualified ecologist on an annual basis (for a period of five years) and adjusting management as required.

PART V COMMON LIZARD MONITORING WORKS

• monitoring of common lizards on an annual basis (for a period of five years) and adjusting management as required.

PART VI REPORTING

• Annual reporting of works and monitoring undertaken and submission to Nottinghamshire County Council (for a period of five years)

Monitoring of Vegetation within Rainworth Heath SSSI.

- A vegetation survey within Rainworth Heath SSSI shall be undertaken within 12 months of the commencement of ERF construction operations
- Thereafter a survey shall be undertaken of the vegetation of Rainworth Heath SSSI every three years following the commissioning of the ERF Facility for a period of 21 years after the commissioning of the facility.
- The survey shall be carried out in such a way as to allow close comparison with data gathered in previous surveys and as part of the original application.
- The survey shall include an assessment of any changes in the vegetation of the SSSI and the reasons for that change.
- The results of the survey shall be submitted to the WPA within 4 weeks of the survey being undertaken as part of a report.

RECOMMENDED PLANNING CONDITIONS

Commencement

- 1. The development hereby permitted shall be begun before the expiration of three years from the date of this permission.
 - Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended by Section 51 of the Planning and Compulsory Purchase Act 2004).
- 2. The Waste Planning Authority (WPA) shall be notified in writing of the date of commencement at least 7 days, but not more than 14 days, prior to the commencement of the development.

Reason: To enable the WPA to monitor compliance with the conditions of the planning permission.

Approved Plans

- 3. The development hereby permitted shall only be carried out in accordance with the details contained within the Environment Statement and in particular the plans identified below, unless otherwise agreed in writing by the WPA, or where amendments are made pursuant to the other conditions below:
 - a. Drawing No. 2GB.9B 001 Revision 0: Site Plan & Layout for Rufford ERF received by the WPA on 30th November 2007.
 - b. Drawing 2GB.9B 010 Revision 0: Horizontal Section 1-1, Levels +88.00 to +100.00 for Rufford ERF received by the WPA on 30th November 2007.
 - Drawing 2GB.9B 011 Revision 0: Horizontal Section 2-2, Levels +105.50 & +106.00 for Rufford ERF received by the WPA on 30th November 2007.
 - Drawing 2GB.9B 012 Revision 0: Horizontal Section 3-3, Level +108.50 for Rufford ERF received by the WPA on 30th November 2007.
 - e. Drawing 2GB.9B 013 Revision 0: Horizontal Section 4-4, Levels +108.50 & +117.00 for Rufford ERF received by the WPA on 30th November 2007.
- f. Drawing 2GB.9B 020 Revision 0: General view on Facades for Rufford ERF received by the WPA on 30th November 2007.
- g. Drawing 2GB.9B 021 Revision 0: General West & East Facades for Rufford ERF received by the WPA on 30th November 2007.
- h. Drawing 2GB.9B 022 Revision 0: General North & South Facades for Rufford ERF received by the WPA on 30th November 2007.
- i. Drawing 2GB.9B 023 Revision 0: Internal East Elevation B and Internal East Elevation C for Rufford ERF received by the WPA on 30th November 2007.
- j. Drawing 2GB.9B 024 Revision 0: Internal West Elevation D and Internal West Elevation E for Rufford ERF received by the WPA on 30th November 2007.
- k. Drawing 2GB.9B 025 Revision 0: Internal North Elevation and Internal South Elevation for Rufford ERF received by the WPA on 30th November 2007.
- I. Drawing 2GB.9B 030 Revision 0: Long Section A-A for Rufford ERF received by the WPA on 30th November 2007.
- m. Drawing 2GB.9B 031 Revision 0: Cross Section 1-1 and Cross Section 2-2 for Rufford ERF received by the WPA on 30th November 2007.
- n. Drawing 2GB.9B 032 Revision 0: Cross Sections 3-3 and Cross Section 5-5 for Rufford ERF received by the WPA on 30th November 2007.
- Drawing 2GB.9B 040 Revision 0: Administration Building Plans for Rufford ERF received by the WPA on 30th November 2007.
- p. Drawing 2GB.9B 041 Revision 0: Administration Building Elevations for Rufford ERF received by the WPA on 30th November 2007.
- q. Drawing 2GB.9B 042 Revision 0: Administration Building Sections for Rufford ERF received by the WPA on 30th November 2007.
- r. Drawing 2GB.9B 050 Revision 0: Transformer Building for Rufford ERF received by the WPA on 30th November 2007.
- s. Drawing 2GB.9B 060 Revision 0: Circulation Plan & Visitors Route for Rufford ERF received by the WPA on 30th November 2007.
- t. Drawing WCL 0002 Revision A02: General Arrangement (Rufford Access Works) for Rufford ERF received by the WPA on 30th November 2007.

u. Drawing WCL 0006 Revision A01: Typical Cross Sections (Rufford Access Works) for Rufford ERF received by the WPA on 30th November 2007.

Reason: For the avoidance of doubt and to define the documents that are approved as part of this planning permission.

4. From the commencement of the development to its completion a copy of this permission including all plans and documents hereby approved, and any other plans and documents subsequently approved in accordance with this permission, shall be retained at the site offices for inspection by the WPA at all times.

Reason: To enable the MPA to monitor compliance with the conditions of the planning permission.

Removal of Permitted Development Rights

- 5. Notwithstanding the provisions of Parts 4, 8 and 25 of Schedule 2 of the Town and Country Planning (General Permitted Development) Order 1995 (or any order revoking and re-enacting that order):
 - a. Additional external fixed plant or machinery, buildings, structures and erections shall not be erected, extended, installed or replaced at the site without the prior written agreement of the WPA.
 - b. No Telecommunications antenna shall be installed or erected without the prior written consent of the WPA.

Reason: In the interests of the amenity of the area and to ensure that the design/external appearance of the ERF development is not inappropriately altered.

Construction Materials

- 6. Notwithstanding the details shown on the approved plans, the implementation of the finishes shall not commence until details and samples of the materials to be used in the construction of the external surfaces of the buildings hereby permitted have been submitted to and approved in writing by the WPA. Development shall be carried out in accordance with the approved details.
 - Reason: In the interest of visual amenity and to minimise impact to the surrounding landscape in accordance with NE8 & NE9 of the Newark and Sherwood Local Plan.

Ground Contamination

- 7. The desktop study and site investigation undertaken within the technical appendices accompanying the Environmental Statement to the planning application shall form the conceptual model upon which a method statement detailing remediation requirements to minimise the impact on ground and surface waters shall be prepared and submitted for the written approval of the WPA. Site remediation works shall thereafter be undertaken in accordance with this approved scheme. If any unexpected, visibly contaminated, or odorous material is encountered during redevelopment, remediation proposals for the material shall be submitted to the WPA for its approval in writing. The development shall thereafter be carried out in accordance with the approved details. Unless otherwise agreed in writing, soakaways shall only be used in areas where contamination is not present.
 - Reason. To protect the environment and ensure that the redeveloped site is reclaimed to an appropriate standard in accordance with Planning Policy Statement 23: Planning and Pollution Control.
- 8. Upon completion of the remediation detailed in the Method Statement, a report shall be submitted to the WPA that provides verification that the required works regarding contamination have been carried out in accordance with the approved Method Statement(s). Post remediation sampling and monitoring results shall be included in the report to demonstrate that the required remediation has been fully met. Future monitoring proposals and reporting (if necessary) shall also be detailed in the report.
 - Reason. To protect the environment and ensure that the redeveloped site is reclaimed to an appropriate standard in accordance with Planning Policy Statement 23: Planning and Pollution Control.

Archaeology

- 9. No intrusive development shall take place within the area hatched pink on Figure 15.1 of the Environment Statement until details of a scheme for an archaeological watching brief for these areas has been submitted to and approved in writing by the WPA. Thereafter the scheme shall be implemented in full accordance with the approved details, unless agreed otherwise in writing by the WPA.
 - Reason: To ensure that adequate archaeological investigation and recording is undertaken and to accord with PolicyC24 of the Newark and Sherwood Local Plan.

Controls relating to Construction

- 10. Prior to the commencement of the development hereby permitted, details of the following matters shall have been submitted to and approved in writing by the WPA:
 - a. contractor's access arrangements for vehicles, plant and personnel;
 - b. contractor's site storage area/compound;
 - c. The number, size (including height) and location of all contractors' temporary buildings;
 - d. Temporary means of enclosure and demarcation of the site operational boundaries, to be erected prior to the commencement of construction operations in any part of the site and maintained for the duration of construction operations;
 - e. the means of moving, storing and stacking all building materials, plant and equipment around the site;
 - f. the arrangements for parking of contractors' vehicles and contractors' personal vehicles;
 - g. Measures to ensure that dust emissions are minimised;
 - h. details of external floodlighting installed during the construction period including hours of operation;
 - i. A construction noise mitigation scheme to ensure that noise emissions at adjoining sites is minimised. Particularly reference shall be provided to the potential noise impact to protected species, breeding birds and their habitats. The scheme should identify those activities that can be considered noisiest, where and when these activities are likely to occur, a threshold level that would trigger a response and what such a response will be in terms of reducing noise for each noise generating activity;
 - j. The method of controlling and discharging groundwater during construction to avoid pollution of surface water and the underlying groundwater.
 - Details of any wheel wash facility, use of water bowsers and any other measures necessary to ensure that vehicles do not leave the site in a condition whereby mud, clay or other deleterious materials are carried onto the public highway;

The details shall be implemented as approved during the construction and commissioning of the development. Reason: In the interests of amenity and to minimise impacts to surrounding land users.

11. Prior to the commencement of the development hereby permitted a walkover survey of the site shall be carried out by a qualified ecologist to check for the presence of protected species. Should any protected species be identified a scheme including methods and timings to mitigate any undue adverse effects on such species shall be submitted to the WPA for its approval in writing. The mitigation measures shall be implemented in accordance with the approved scheme.

Reason: In the interests of safeguarding species protected by law in accordance with Newark and Sherwood Local Plan Policy NE17.

12. Prior to the commencement of the development hereby permitted the translocation of Common Lizards and Bee Orchids present on the site shall be undertaken in accordance with the method statements dated August 2008 submitted as Appendix 9 to the additional information supplied under Regulation 19 on 22nd September 2008.

Reason: In the interests of nature conservation in accordance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.22.

13. With the exception of survey works no excavations shall commence on site until a detailed strategy and method statement for minimising the amount of construction waste resulting from the development has been submitted to and approved in writing by the WPA. The statement shall include details of the extent to which waste materials arising from the demolition and construction activities will be reused on site and demonstrating that as far as reasonably practicable, maximum use is being made of these materials. If such reuse on site is not practicable, then details shall be given of the extent to which the waste material will be removed from the site for reuse, recycling, composting or disposal. All waste materials shall thereafter be reused, recycled or dealt with in accordance with the approved strategy and method statement.

Reason: To minimise the amount of construction waste to be removed from site for final disposal in accordance with East Midlands Regional Waste Strategy Policy 1.1.

14. Site clearance/preparation operations that involve the felling, clearing or removal of vegetation or disturbance of bare ground shall not be undertaken during the months of March to August inclusive unless otherwise agreed in writing by the WPA following the submission of a report detailing survey work for nesting birds carried out by a suitably qualified ecologist.

Reason: In the interests of safeguarding nesting birds in accordance with Newark and Sherwood Local Plan Policy NE17.

- 15. Unless otherwise agreed in writing by the WPA, construction works which are audible at the site boundary shall only take place between 07.00 19.00 Monday to Friday, and 07.00 13.00 on Saturdays, and not at any time on Sundays, Public or Bank Holidays, except in cases when life, limb or property are in danger, and in such instances these shall be notified in writing to the WPA within 48 hours of their occurrence. Construction activities which are assessed as being inaudible at the site boundary (such as internal electrical work and other quiet internal fitment work) may be undertaken outside of these times.
 - Reason: To protect the amenity of the area and ensure adverse impacts to Nightjar populations are minimised in accordance with Nottinghamshire Structure Plan Review Policy 2/5, Newark and Sherwood Local Plan Policy NE17 & Nottinghamshire and Nottingham Waste Local Plan Policy W3.22.
- 16. Unless otherwise agreed in writing by the WPA, the construction activities associated with the development of the ERF hereby permitted shall not give rise to noise levels in excess of L90 +10dB at any The developers shall allow access to residential property. Nottinghamshire County Council staff, or representatives working on their behalf to the application site at any time, and upon their verbal request, cease all construction operations and switch off any machinery for a period up to 15 minutes to enable measurements of ambient backgound noise to be taken. In the event that noise levels are measured which exceed L90 +10dB at any residential property then upon the written request of the CPA the applicant shall submit a scheme to mitigate the noise impact of the construction operations to ensure that noise does not exceed L90 +10dB at any residential property. The noise mitigation scheme shall thereafter be implemented in full within 7 days of the written approval of the WPA.
 - Reason: To protect the amenity of the area and ensure adverse impacts to Nightjar populations are minimised in accordance with Nottinghamshire Structure Plan Review Policy 2/5,Newark and Sherwood Local Plan Policy NE17 & Nottinghamshire and Nottingham Waste Local Plan Policy W3.22.

Protection of Toads

- 17. Prior to the commencement of the development hereby permitted a scheme to ensure the protection of migrating toads crossing the Rufford Colliery Access Road shall be submitted to the WPA for its approval in writing. The scheme shall provide appropriate mitigation measures for both the construction and operation of the ERF. The toad mitigation scheme shall thereafter be carried out in accordance with the approved details.
 - Reason In the interests of nature conservation in accordance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.22.

Provision of Electricity/Water/Sewage Connection

- 18. The connection from the plant to the local electricity transmission system, mains water system and sewage system shall be by underground connection only. Prior to its installation the route and methodology for excavation for the connection shall be agreed in writing with the WPA. The connection shall thereafter be installed in accordance with the approved details.
 - Reason: In the interests of amenity and nature conservation in accordance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.22.

Operational Controls

- 19. The ERF shall have a nominal capacity of 180,000 tonnes per annum (based on 85% availability) with up to a maximum of 194,823.5 tonnes per annum delivered for combustion in any one year. (For the avoidance of doubt, nominal capacity is the processing capacity of the plant under normal operating conditions taking account of its annual average availability due to planned maintenance events and other plant shutdowns.
 - Reason: To ensure environmental impacts are no greater than identified within the Environmental Statement submitted in support of the application and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.1.
- 20. All reasonably practicable measures shall be used to ensure that operational noise generated within the site is kept to a minimum. These shall include ensuring that where necessary all plant and machinery is fitted with silencers maintained in accordance with the manufacturers' recommendations and specifications and ensuring that the fast acting screen shutters of the ERF are maintained in good operational order

and kept shut at all times other than to allow passage of incoming/outgoing waste vehicles into/out of the building.

Reason: To minimise potential noise disturbance at the site in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

21. All plant, machinery and vehicles (excluding delivery vehicles which are not owned or under the direct control of the operator) used on the site shall incorporate white noise reversing or similar specification warning devices and be fitted with silencers maintained in accordance with the manufacturers recommendations and specifications to minimise noise disturbance to the satisfaction of the WPA.

Reason: To minimise potential noise disturbance at the site in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

22. In the event of a complaint being received by the WPA regarding operational noise emissions from the ERF the operator shall undertake a noise survey within 2 weeks of a written request of the WPA for such a survey to be undertaken, The noise survey shall be undertaken in accordance with BS 4142 (1997) and shall be carried out under the supervision of the WPA. The results of the noise survey shall be provided to the WPA for its written approval within 1 month of the survey being undertaken. Should the results of the noise survey suggest that further mitigation measures are necessary these shall be identified within the report and implemented within 1 month following their approval by the WPA, unless otherwise agreed in writing.

Reason: To minimise potential noise disturbance at the site in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

23. Measures shall be employed to ensure that any litter arising from the operations does not leave the site. Such measures shall include ensuring that the fast acting screen shutters of the ERF tipping bay are maintained in good operational order at all times and through regular inspections/litter picks outside the ERF building and within the site.

Reason: To minimise nuisance caused from windblown litter in accordance with Policy W3.8 of the Nottinghamshire and Nottingham Waste Local Plan.

- 24. Measures shall be employed to ensure that dust emissions from the site are controlled and fugitive dust prevented from leaving the site. These measures shall include but not necessarily be limited to the following:
 - a. The use (as appropriate) of a dust suppression system within areas likely to give rise to fugitive dust emissions;

- b. The use as appropriate of water bowsers and/or spray systems to dampen the road sweepings bay, vehicle circulation and manoeuvring areas;
- c. Ensuring that the fast acting screen shutters installed in the ERF are maintained in good operational order at all times;
- d. All vehicles transporting waste materials either to or from the site shall be fully enclosed or sheeted.

Reason: To minimise potential dust disturbance at the site and to accord with Policy W3.10 of the Nottinghamshire and Nottingham Waste Local Plan.

- 25. Measures shall be employed to ensure that operations associated with the development hereby permitted do not give rise to any malodours. Such measures may include but not necessarily be limited to the following:
 - a. Regular movement of waste within the refuse bunker to ensure that material is circulated on a regular basis thus ensuring that waste is not allowed to decompose.
 - b. The operation of negative air pressure within the tipping hall area thus ensuring that air is drawn from the tipping area into the boilers as part of the combustion process.
 - c. The application of masking agents where necessary to neutralise any malodours.

Reason: In the interests of amenity and to accord with Policy W3.7 of the Nottinghamshire and Nottingham Waste Local Plan.

- 26. Measures shall be employed to ensure that mud, clay or other deleterious material from the ERF is not deposited on the public highway. Such measures shall include but not necessarily be limited to the following:
 - a. The regular sweeping and cleaning of on site vehicle circulation and manoeuvring areas during the operational phase.

In the event that these measures prove inadequate, then within one month of a written request from the WPA additional steps or measures shall be taken in order to prevent the deposit of materials upon the public highway the details of which shall have previously been submitted to, and if applicable, agreed in writing by the WPA. Reason: To prevent mud and other deleterious material contaminating the public highway and to accord with Policy W3.11 of the Nottinghamshire and Nottingham Waste Local Plan.

- 27. Following the initial receipt of municipal or household waste, no storage container, skip, sorted or unsorted waste material or residue of recycled materials or any other items shall be stored outside the building, other than within the designated bays or on operational vehicles.
 - Reason: In the interests of visual amenity and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.3.

Site Access and Traffic

28. Prior to the commencement of the development hereby approved a structural/condition survey of the Rufford Colliery Access Road between the A617 and the Rufford ERF access point shall be undertaken. The results of this survey shall be provided within a report which shall identify any areas of carriageway deterioration and incorporate schedule of recommended а maintenance/replacement/resurfacing deemed necessary to re-instate the carriageway. The report shall be submitted to the WPA within one month of the survey being undertaken for its written approval. Access road maintenance/replacement/ resurfacing works shall thereafter by undertaken in accordance with the timetable agreed in writing by the WPA.

Reason: To ensure that satisfactory access is provided between the site and the public highway in accordance with Policy W3.15 of the Nottinghamshire and Nottingham Waste Local Plan.

- 29. Except where otherwise agreed in writing by the WPA there shall be a maximum of 1090 two way HGV movements each week (545 HGV's into the site and 545 HGV's out of the site). In any one week (Monday to Friday) including Bank Holidays with the exception of Christmas Day, Boxing Day and New Years Day there shall be no more than:
 - 12 HGV's (24 movements) between the hours of 19:00 to 23:00.
 - 4 HGV's (8 movements) between the hours of 23:00 to 07:00.
 - No movements between 19:00 to 07:00 Saturdays and Sundays.

Written records shall be maintained of all HGV movements including the time of day such movements take place. Copies of the HGV vehicle movement records shall be made available to the WPA within 7 days of a written request being made by the WPA.

- Reason: To limit vehicle movements in accordance with Policy W3.14of the Nottinghamshire and Nottingham Waste Local Plan
- 30. The level of noise generated from traffic movements along the Colliery access road associated with the construction and operation of the Energy Recovery Facility shall not exceed 50dB(A)Leq1hour freefield at Sherwood House nursing home and 53dB(A)Leq1hour freefield at the adjacent residential property (measured within the garden area of the residential properties and the grounds of the Sherwood House nursing home measured at a height between 1.2-1.5m and at least 3.5m away from any reflective surface) in a location agreed in writing by the WPA. In the event of a complaint regarding traffic noise along the colliery access road being received, only noise from traffic movements in connection with the Energy Recovery Facility shall be assessed.

Reason: To ensure that noise from vehicles using the Rufford Colliery Access Road is satisfactory controlled in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

31. The ERF shall not be brought into operational use until the vehicular access, circulation, car/motorbike parking and servicing provision have been made available /marked out in accordance with the approved plans and details. These facilities shall thereafter be retained and made available for their designated purposes at all times unless any variation is subsequently agreed in writing by the WPA.

Reason: In the interests of highway safety and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.14.

32. Prior to the ERF first being brought into operational use eight covered bicycle stands shall be erected and made available for use at all times in accordance with details that shall have been agreed previously in writing by the WPA.

Reason: To promote more sustainable means of travel in accordance with guidance contained within Planning Policy Guidance Note 13: Transport.

33. Within one year of the date of commencement of the development as notified under Condition 2 above, a Travel Plan aimed at reducing reliance on the use of private cars as a principal means of staff and visitors transport to and from the ERF shall be prepared and submitted to the WPA for its written approval. The measures identified shall be

implemented in accordance with the approved plan and be subject to review every five years.

Reason: To promote more sustainable means of travel in accordance with guidance contained within Planning Policy Guidance Note 13: Transport.

External Lighting

- 34. All floodlighting and other external lighting units proposed including cowling enclosures shall be developed and operated in accordance with a detailed scheme approved by the WPA. The scheme shall also include a lighting contour map to identify levels of lighting within the application site and any light spillage onto adjacent land and shall ensure that the external faces of the completed ERF buildings and chimneys are not illuminated.
 - Reason: To ensure landscape, visual and ecological impacts are minimised in accordance with Nottinghamshire and Nottingham Waste Local Plan Policies W3.3, W3.4 & W3.22.

Site Drainage and protection of groundwater

- 35. Within 12 months from the commencement of worksas notified through condition 2 a scheme for the provision of surface water and foul sewage drainage works shall be submitted to and approved in writing by the WPA. The drainage works shall be completed in accordance with the details and timetable agreed.
 - Reason: To prevent the increased risk of flooding by ensuring the provision of a satisfactory means of surface water disposal and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5..
- 36. Prior to being discharged into any watercourse, surface water sewer or soakaway system, all surface water drainage from parking areas and hardstandings shall be passed through an oil interceptor designed and constructed to have a capacity and details compatible with the site being drained. Roof water shall not pass through the interceptor.
 - Reason: To prevent pollution to the water environment and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5..
- 37. Within 12 months from the commencement of works as notified through condition 2 a scheme for the provision and implementation of a surface water run-off limitation shall be submitted to and approved in writing by the WPA. The scheme shall be implemented in accordance within the approved programme and details.

Reason: To prevent the increased risk of flooding and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5.

38. The use of piled foundations shall only take place in accordance with a detailed scheme approved in writing by the WPA.

Reason: To protect groundwater quality in the area and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5.

- 39. Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The size of the bunded compound shall be at least equivalent to the capacity of the tank plus 10% or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater. All filling points, vents, and sight glasses must be located within the bund. There must be no drain through the bund floor or walls.
 - Reason: To prevent pollution of the water environment and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5.

Landscaping

- 40. Within one year of the date of commencement, as notified under Condition 2 above a landscape scheme for the site shall be submitted to and approved in writing by the WPA. The landscaping scheme shall include:
 - a. Hard Landscaping
 - Proposed finished levels or contours;
 - Means of enclosure;
 - Car parking surfacing;
 - Other vehicle and pedestrian access and circulation areas surfacing;
 - b. Soft Landscaping
 - Planting proposals which are sensitive to the heathland habitat of adjoining sites.
 - Written specifications (including cultivation and other operations associated with plant and grass establishment);
 - Schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate;

- c. Implementation programme
 - To include timetable of landscaping/planting and arrangements for a minimum of 5 years aftercare/post planting management.

The landscaped areas shall be maintained thereafter in accordance with the approved management plan. Any trees or shrubs that, within a period of five years after planting, die, are removed or, in the opinion of the WPA, become seriously damaged or diseased, shall be replaced in the following planting season with similar specimens to those originally approved, unless the WPA gives written consent to any variation.

Reason: In the interests of visual amenity and to ensure compliance with Policy W3.4 of the Nottinghamshire and Nottingham Waste Local Plan.

Protection of the Railway Line

41. Cranes and jibbed machines used in connection with the works must be so positioned that the jib or any suspended load does not swing over railway infrastructure or within 3 metres of the nearest rail if the boundary is closer than 3 metres.

Reason: To maintain the safety of railway operations.

42. All cranes, machinery and constructional plant must be so positioned and used to prevent the accidental entry onto railway property of such plant, or loads attached thereto, in the event of failure.

Reason: To maintain the safety of railway operations.

Closure of Site

- 43. In the event that the use of the site for the importation of waste should cease for a period in excess of one month then, within one month of a written request from the WPA, the site shall be cleared of all stored waste and processed materials.
 - Reason: In the interest of amenity and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W4.1.

Notes/Informatives

- 1. Your attention is drawn to the attached letter from Network Rail dated 4th January 2008.
- 2. The applicant is requested to keep under review the use of hot water from the plant to maximise the recovery of energy in the local area.
- 3. The applicant is requested to establish a Local Liaison Group prior to the commencement of the work, which should include local community representatives and the applicant/ERF operator, Waste Planning Authority, Environment Agency and District Environmental Health Department, to meet at regular intervals throughout the construction and commissioning periods and at least the first 12 months of the plants operational life, to monitor the development and the plant's operation.
- 4. The applicant is requested to use all reasonable endeavours to seek new recruits within the construction and operation of the ERF from within the existing communities in Nottinghamshire and is therefore encouraged to advertise any new vacancies within the local media.

PSP.MH/RH/ep5155 23 December 2008