

**DEVELOPMENT CONTROL AND REGULATORY BOARD**

**15<sup>TH</sup> OCTOBER 2010**

**REPORT OF THE CHIEF EXECUTIVE**

**COUNTY MATTER**

**PART A – SUMMARY REPORT**

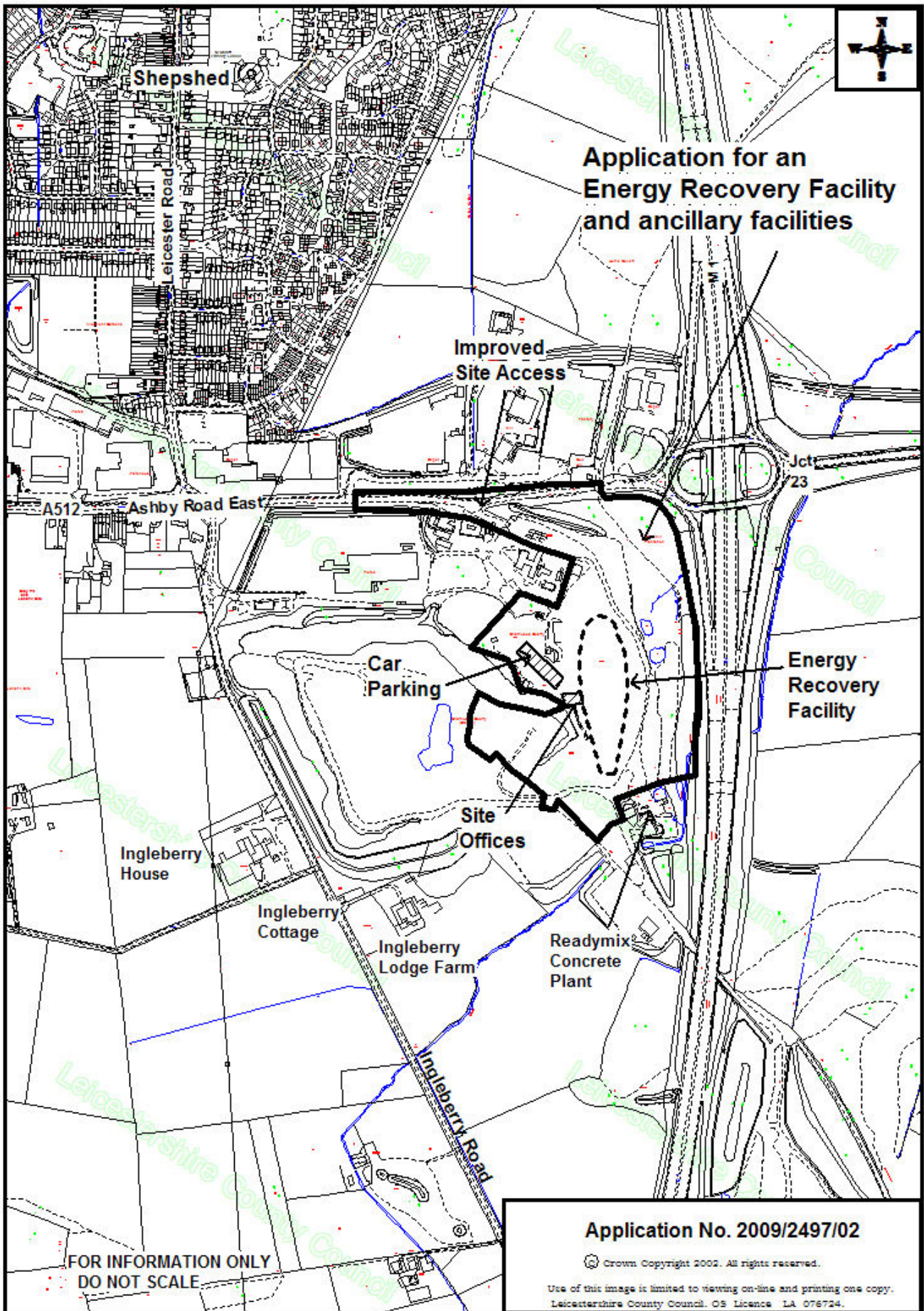
- APP. NO. & DATE:** 2009/2497/02 (LCC ref no. 2009/C166/02) – 14<sup>th</sup> December 2009
- PROPOSAL:** Construction and operation of an Energy Recovery Facility (ERF) and ancillary facilities, comprising offices and welfare facilities, visitor centre, bottom ash recycling and maturation, access roads, weighbridge facilities, crew drop-off shelter, electrical compound, together with peripheral landscaping and security fencing.
- LOCATION:** Land at Newhurst Quarry, south of the A512 close to Junction 23 of the M1.
- APPLICANT:** Biffa Waste Services Ltd.
- MAIN ISSUES:** Development Plan, need, traffic and access, geological interest, protected species, emissions, air quality, health impacts, landscape and visual impact, cultural heritage and the 'fallback' situation.
- RECOMMENDATION:** Refuse the application on the grounds that:
- The benefits that the proposal would have on meeting the waste management needs of the development plan area are not outweighed by the unacceptable impact that the proposal would have on the countryside, the designated Area of Particularly Attractive Countryside, the character of the Charnwood Forest, the character and setting of the listed Garendon Park and the setting of the listed structures within the Garendon Park.

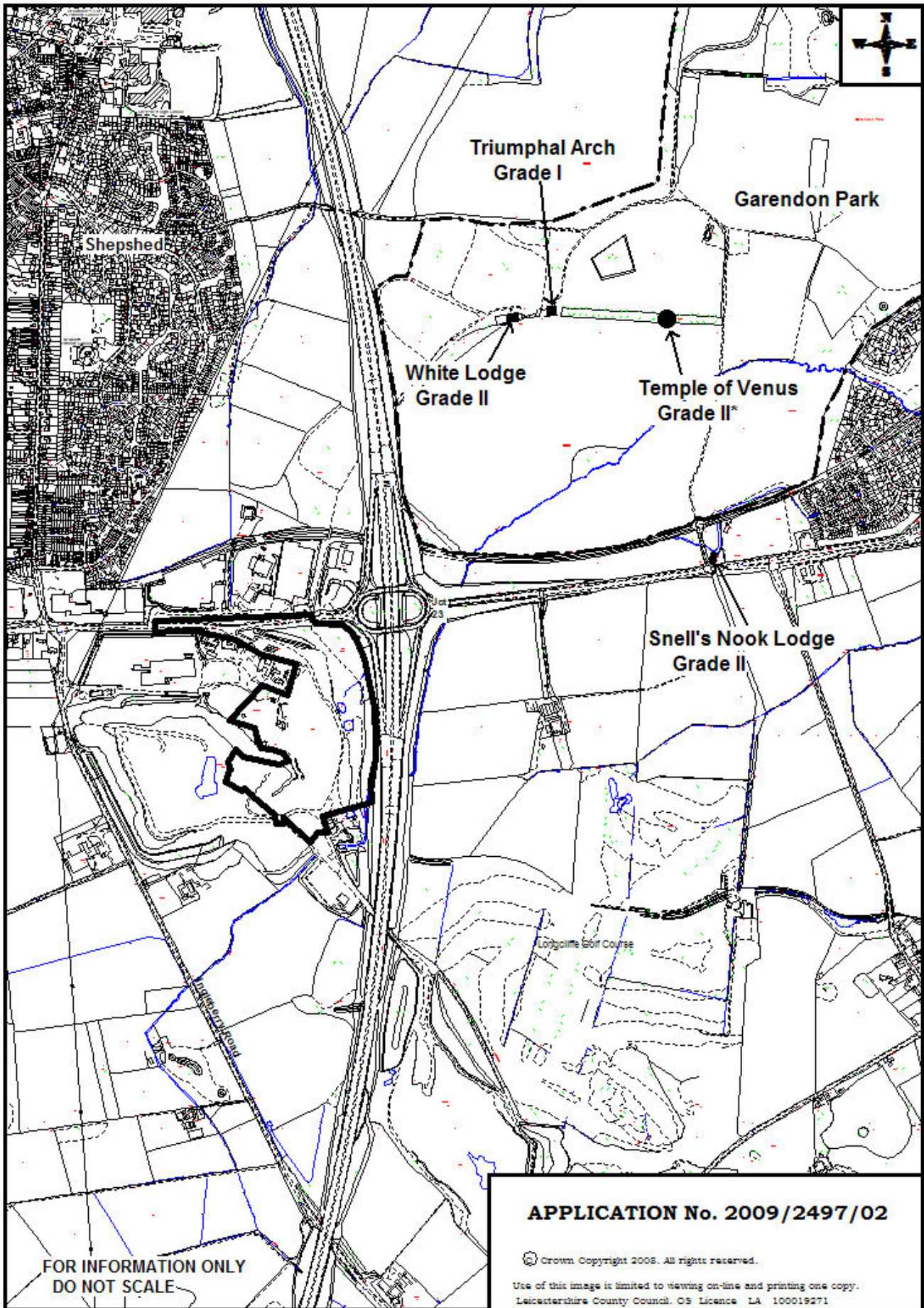
**Circulation Under Local Issues Alert Procedure**

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## **PART B – MAIN REPORT**

### **Background**

#### **Planning History**

1. Quarrying operations have been undertaken at Newhurst Quarry since the 19<sup>th</sup> Century, although no extraction operations have taken place since around 2000, with all processing equipment having been removed from the site. A stand-alone concrete batching plant remains on the site immediately to the south east of the current planning application boundary.
2. A planning application for the landfilling of the Newhurst Quarry void was submitted by Hanson Waste Management in January 1999 (prior to Waste Recycling Group Ltd. (WRG) acquiring their waste management interests in February 2001). The planning application was considered by the Development Control and Regulatory Board on 18th April 2002 when it was resolved to grant planning permission subject to the completion of a legal agreement and the imposition of planning conditions. However, no decision notice was issued (although a legal agreement was signed in November 2002) as it became evident that the method of landfill containment proposed would not meet the requirements of the new Landfill Regulations introduced in June 2002.
3. WRG was therefore requested to provide revised information on how the landfill void would be engineered to meet the Landfill Regulations (and the Groundwater Regulations), and how such revisions would affect the Environmental Statement (ES) and the planning application. A Review Document was provided on 11th June 2003, and the County Council subsequently obtained legal advice on the adequacy of this and the original ES. The legal advice concluded that the original ES and the Review Document could not be found to satisfy the 1999 Town and Country (Assessment of Environmental Effects) Regulations (EIA Regulations).
4. Consequently, the County Council wrote to WRG on 9th January 2004 explaining that, in order to progress the planning application to determination, and avoid a foreseeable risk of challenge, it would be necessary to submit an amendment to the planning application. It was also explained that the amended application would need to be supported by an appropriate ES. No revised application or ES was submitted and WRG formally withdrew the planning application on 7th November 2005.
5. Biffa Waste Services Ltd (Biffa) subsequently secured an interest in the site and proceeded to take forward proposals for a new landfill with front-end waste management facilities. A formal scoping request under the EIA Regulations was made in March 2006, to confirm the nature of the development and the range of key issues to be investigated. In addition to planning permission, the development would require a Pollution Prevention and Control (PPC) licence (landfill) and a waste management licence (front end facilities) from the Environment Agency.

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6. A planning application to landfill Newhurst Quarry with ancillary front-end recycling facilities on adjacent land was submitted by Biffa in June 2007 (ref. 2007/1987/02) and the Development Control and Regulatory Board at its March 2008 meeting resolved to grant planning permission subject to the signing of a Section 106 (S106) agreement. The S106 was signed in February 2009 and planning permission was issued subsequently. Biffa has recently stated that, as a company it is moving away from landfill operations and it now has no intention of implementing the 2009 permission. Notwithstanding this statement, the extant waste planning permission is a material planning consideration for all applications on the site, particularly because Biffa could sell their interests in the site to another waste operator who may wish to implement the extant permission.
7. The County Council adopted the Waste Local Plan (WLP) on 2nd September 2002 and this includes the allocation of Newhurst Quarry void as a new site for the disposal of household/civic amenity/industrial/commercial wastes. The WLP policy allocating Newhurst Quarry has been 'saved' and will remain extant until it is superseded by the Leicestershire and Leicester Waste Development Framework Site Allocations document and therefore a waste operation is allocated at the Newhurst site.

#### Private Finance Initiative (PFI)

8. The applicant was one of three companies vying for the County Council's long term waste management contract which is to be signed through a Private Finance Initiative (PFI). In June 2010 the County Council short-listed two of the three companies to go through to the last stage of bidding and Biffa's PFI bid was not taken forward. It is likely that a final decision on the preferred long term waste management company will be made early in 2011. The successful contractor would be responsible for (amongst other roles) collecting and disposing of the residual municipal solid waste (MSW) from within the County boundary.

#### Location of Proposed Development

9. The application site covers an area of 15.5ha and incorporates land to the east and north east of the Newhurst Quarry void up to the M1 motorway and a section of the A512, on which the applicant proposes some highway improvements. The land under the control of the applicant includes the Newhurst Quarry void and land immediately to the east but does not extend to the east of the M1 and therefore does not include Longcliffe Quarry.
10. The application site lies to the south east of Shepshed, adjacent to the M1 and the A512, which provides access to junction 23 of the Motorway. Ingleberry Road (B591) runs to the west, along which several farms and outlying properties are located, these being the nearest residential properties to the site. Other nearby residential properties include those located along the A512. Beyond the A512 to the north are various industrial and commercial uses and the southern edge of the built-up area of Shepshed. An industrial unit and the offices of Hanson Aggregates/Midland Quarry Products lie along the northern site boundary, adjacent to the site entrance.

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11. The Newhurst Quarry floor presently extends to a depth of over 80m below surrounding ground levels in the form of a series of steep, terraced rock faces. The Longcliffe Quarry void is similarly configured. Part of the northern quarry face of Newhurst Quarry is designated as a geological Site of Special Scientific Interest (SSSI), and the Quarry is also designated as a Regionally Important Geological Site.
12. The boundary of the site is almost entirely surrounded by mixed (mainly) deciduous woodland, which in places is still maturing and varies from about 8m to 20m in height. These plantations were established as part of the quarry screening works, and on the northern, western and southern boundaries of the quarry void they are combined with soil bunds. The northern and eastern-most site boundary woodland is known as Brickhill Plantation and is covered by a Tree Preservation Order. Within this plantation there are the partial remains of the Charnwood Forest Line canal.

### **Description of Proposal**

13. The applicant is seeking planning permission for the erection of an energy recovery facility (ERF) on land adjacent to Newhurst Quarry, Shepshed. The primary purpose of the ERF is for the disposal of up to 300,000 tonnes of residual commercial and industrial (C&I) non-hazardous waste per annum through thermal treatment by combustion. This process would create enough heat to generate approximately 25MW of electricity (enough to power approximately 42,000 homes) and heat that could be exported off site (subject to suitable end users being identified).
14. The application was originally put forward as part of Biffa's PFI bid, with the intention that the site would treat up to 180,000 tonnes per annum of MSW with the remaining capacity being made up from C&I waste. Biffa was unsuccessful in progressing to the next stage of the PFI procurement process but has stated that it wishes to go ahead with the proposed development by combusting 300,000 tonnes per annum of purely non-hazardous C&I waste.

### **The ERF Building**

15. The whole of the energy recovery process would be housed within a single architecturally designed building. The building would be around 330m long and up to 115m wide (including the area designated for maturation of incinerator bottom ash [IBA]), being approximately ovoid in shape, and occupying a footprint of around 21,700 square metres. The curving roofline would result in the height of the building varying from around 14.5m to a maximum height of 47m. The facility would have two flue stacks 96.5m high, to be located adjacent to each other on the western side of the building and to be coloured matt light grey.
16. The ERF building would contain the following waste treatment facilities:
  - a waste reception hall and storage bunker, shredder and waste feed system;
  - boiler hall with grate, combustion chamber and a heat recovery boiler;
  - turbine hall with steam turbine for generating electricity;
  - flue gas treatment hall with equipment to clean combustion gases;

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- facility for discharging and loading air pollution control (APC) residues, silos and other ancillary equipment;
  - two flue stacks to discharge the treated flue gases into the atmosphere;
  - air cooled condensers (ACC) for cooling the recycling steam from the generating process; and
  - ancillary areas, control room, central processing unit (CPU) room, storage areas, electrical room, workshops etc.
17. In addition to the above the applicant is proposing the following features:
- visitor centre;
  - office and ancillary staff accommodation;
  - staff and visitor parking area;
  - electricity sub station;
  - weighbridges and gatehouse;
  - crew drop-off shelter;
  - rainwater attenuation measures;
  - landscaping and security fencing around the site; and
  - provision of additional ecological habitats.
18. The northern section of the building would be used solely for the maturation of IBA. This area would be positively drained using concrete hard standing bounded by reinforced concrete push walls and contain an IBA lagoon to be used to store and treat run-off tainted with IBA. The IBA maturation area would be covered with a metal sheet 'gull wing' roof, but the walls would be partially open to allow natural ventilation and light in to this part of the building to assist with the maturation process, whilst preventing excessive rain water from entering the IBA lagoon.
19. The applicant states that the building materials have been chosen to ensure that practicality in terms of the operations is complemented by a sustainable approach to their selection and use. An Aluplus Patina finished aluminium material is proposed for the roof. This material is similar to a "mill finish" aluminium, but is 'pre-weathered' in the factory to achieve a consistent matt grey finish from the start, with no shine or possibility of causing glare. This product combines the durability of aluminium roof sheet, with a glare free, light grey finish.
20. A key design principle is the provision of natural lighting for the operation of the plant and for the benefit of the workforce. Translucent cladding to the perimeter walls and high level front cladding provide daylight to locations where vehicle movements are taking place within the building envelope. The translucent areas of the façade are designed to give an attractive finely graded appearance. The material, whilst translucent, limits the direct type of light spillage that is always associated with glass curtain walling.
21. The base or 'plinth' of the facility would be clad in Europanel metal composite flat cladding panels or similar. This base provides a "language" for the introduction of horizontal bands of ventilation louvres and openings at points where they would be required for admission of fresh air. The metal cladding panels would be aligned horizontally, emphasizing the length rather than height of the building. It is proposed to use long panels (up to 12m in length) except at

the IBA pre-treatment area, where the curvature of the façade is tightest. The panels are able to flex to a natural curvature.

22. A 'top hat' section would be used at the continuous vertical joints between the cladding panels to accommodate a fractional change in angle between adjacent panels. Through this means, the envelope of the ERF would keep a curved, rather than a faceted appearance, which is important for the mass to integrate with the undulating land form. Where the curvature is tight within the IBA facility, the envelope would be constructed from tinted concrete, which would provide a suitably robust finish in this high-traffic area. Openings in the cladding at ground level for articulated vehicles would be framed in tinted concrete, to provide robust edge protection and prevent impact damage to the cladding.
23. The opaque walls above the base or plinth of the facility would be Euroclad Elite horizontal walling system or similar approved. A half round profile is being considered. This is an adaptable, sustainable and economic solution to horizontal cladding. The perimeter enclosures on the east and west sides would be curved to a gentle radius. The proposed cladding materials can flex naturally to accommodate this curve, meaning that this cladding would give a gently curving enclosure, not a faceted appearance. The enclosing perimeter walls of the IBA facility would be constructed from in-situ concrete.
24. This material would be exposed on the inside, where it would act as a push wall for loading of bottom ash. It is proposed that gabion baskets are used to clad the outside face of the IBA facility. The aggregate stock piles on the site would be assessed to establish whether there is suitably sized aggregate on the site (+/- 200mm) for filling the gabion baskets. Planting is proposed around the enclosing wall to the IBA facility to integrate the wall further with the landform and site.
25. Foreground planting is proposed for the enclosing walls to the west side of the IBA facility approach, close to the access road to the offices and visitor centre. This planting would screen the wall to the IBA facility, afford a well vegetated approach for visitors and screen potential views down into the IBA area.
26. Metallic finishes are proposed for the opaque façade cladding materials. Metallic finishes behave in a semi reflective way, so that they begin to suggest the tones of their surroundings within their base hue. This property will help the building integrate with its context through the changing seasons. The base of the building would generally be viewed against a land form of vegetation, and therefore a mid tone would help the building blend with the background. It is proposed that the base of the building is clad in an earthy russet hue that refers to the deep rich colour ranges found in the quarry stone on the site. The proposed colour is Corus Colourcoat Prisma Aurora.
27. The horizontal cladding and louvres occur in two zones, namely below the lower roof and on the sides of the lantern roof. Due to its height, the upper cladding zone is likely to be viewed against the backdrop of the sky rather than landform or vegetation. A light metallic silver colour (Corus Colourcoat Prisma Mercury) is proposed for this zone such that the top of the building is lightest in colour, de-emphasising its profile against the sky which is usually light. Due to its height, the lower cladding zone is likely to be viewed against the backdrop of the

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landform and vegetation. A mid-metallic silver (Corus Colourcoat Prisma Ariadne) is proposed for this zone as it will be seen against a darker background than the sky.

### Landscaping Matters

28. It is proposed that the margins of the proposed ERF site (within the application site) would be landscaped to “*Charnwood Forest heath*”, a combination of rocky heathland/acid grassland and woodland/scrub edge. The applicant states that the internal vehicle access routes would cut through the vegetation mosaic with the main aim of the landscape treatments being to complement and extend the adjoining existing habitats of the local area and follow the principles of the permitted landfill restoration scheme. Loose rock ‘exposures’ would be added to the heathland areas as a natural feature and a habitat for lichens and mosses. The existing tree belts to the north and east, coupled with the important exposures of the geological SSSI within the quarry void, would also be retained. In relation to the restoration of the quarry, it is considered premature to consider its long term use. The eastern shoreline would be modified to accommodate volumes of surplus cut material and to create a new access track from the car park to the lake.
29. Due to the previous quarrying activities on the site there are very little (if any) top or sub soils available for landscaping purposes and the applicant intends to import topsoil to aid the landscaping of the site.
30. Over the majority of the landscape areas, the existing surfaces and materials would be disturbed to create formation levels along the eastern edge of the quarry edges to form a new 5 metre wide access track and lake margin, with gradients of 1:2.5 to 1:3 sloping into the void. Any additional surplus material would be placed on a bench on the eastern side of the quarry to form a gentle slope, and allow an access track from the car park to the water body to be created. The re-graded edges of the site would marry in with adjacent *in-situ* levels. It would not be necessary to remove any existing vegetation, such as the tree belt to the north and east and it is proposed that these areas would be protected throughout the restoration earthworks by installing temporary demarcation pegs at 5m intervals at a minimum 5m standoff to the boundary, which would then be removed at the end of works.
31. Overall the ERF site would slope from 93m AOD (Above Ordnance Datum) in the north to 98m AOD in the south and 112m AOD in the west to 88m AOD in the east, with slopes ranging from 1:50 associated with the car parking areas, up to 1:20 for the roadways and up to 1:2 for embankments and slopes.
32. In addition to the establishment of heathland areas, the objective would also be to undertake appropriate management to develop the areas towards a mosaic with semi-natural grassland. Green hay may therefore be utilised from suitable local donor sites. The green hay would be strewn, on an annual basis throughout the aftercare period, over selected areas of the site and left for a number of weeks to allow seeds to drop onto the substrate, prior to its removal. The seeded surface would then be rolled to ensure good contact between seed and substrate.

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33. There are also proposals for woodland/scrub edge regeneration and planting and these areas would be closely monitored to include the selection and protection of target tree and shrub species, such as rowan *Sorbus aucuparia* and oak, *Quercus robur*. For example, any identified individual seedlings may be protected for a five year period by adding a guard and support. A detailed scheme for supplementary planting of birch, *Betula pendula*, rowan *Sorbus aucuparia* and oak, *Quercus robur* could be the subject of a planning condition.
34. The applicant proposes that a landscape management scheme would be agreed with the Local Planning Authority (LPA) to provide for an annual programme of works to be undertaken throughout the life of the development according to the age, condition and requirements of each habitat.
35. Surface water run-off would be managed in accordance with the principles of SUDS (Sustainable Drainage Systems) so that the rate of run-off would be no greater than the existing (pre-development) situation. Clean surface water (rainwater) from roofs would be captured and stored in tanks within the building for use in the process. Water from roadways would be passed via silt and oil interceptors to a surface water attenuation pond, prior to discharge from the application site (with consent from the Environment Agency). A peripheral drain system in combination with a catchment drain would provide drainage of surface water from the site. An open water-balancing pond would also be constructed to the south-eastern part of the site, at the lowest point of the site, before feeding into the existing pond in the woodland to the east. This would be capable of holding 2,500m<sup>3</sup> of excess surface water from the site.
36. The applicant has stated that, following comments made at their pre-application public exhibitions, consideration will be given to allow public access to the restored quarry at some point in the future (once the applicant, in consultation with the County Council and landowner, is satisfied that the restored landform of the quarry is safe). Prior to such public access taking place, health and safety implications would have to be considered and it is not possible at present to state definitively that future public access would be available to the restored quarry area.
37. Visitor access and parking spaces (cars and bicycles) would be provided close to the ERF building, using concrete block paving and brindle pigmented tarmac. In addition, 0.5km of multi-user track, using loose bound stone and suitable for disabled access, cycles, and pushchairs would lead from the car park to the lake shoreline.

Fencing

38. The operational area of the site would be provided with a secure boundary treatment comprising of a 2.4m high non-climb plastic coated weld mesh fence.

External Lighting

39. External lighting would be required for health and safety purposes, with the main lighting being located adjacent to roadways, footpaths and vehicle manoeuvring areas, above doorways and on the building facades. There are no plans for any floodlights or high level lighting within the site. All lighting would

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be designed to minimise glare and light trespass from the site with lights being fitted with appropriate cowls and fitted with timers or photo cells.

#### Highway Improvements and Access

40. As part of the development proposals the application site would be accessed via an upgraded junction on to the A512 Ashby Road East. The junction improvements replicate those approved under the previous landfill permission and involve minor re-alignment works, new left hand turning lanes and a new set of traffic lights.
41. From the site entrance, an internal roadway would provide access to the site; this would operate on a one way system with traffic circulating in a clockwise fashion around the site. The roadways would run around the periphery of the building. Approximately 165m from the site entrance would be a roundabout, with a separate 'by-pass' lane for HGVs visiting the concrete batching plant. To the south east of the roundabout would be the gatehouse and associated weighbridges. Entrances to the building would be located within the western façade, whilst egress would be from the eastern façade.
42. A separate roadway would lead from the roundabout to provide access to the staff/visitor car park and office accommodation. With the exception of the road leading to the car park, all roads within the site would be surfaced with bituminous bound material ("*tarmac*"). The surface of the road leading to the car park would be formed from brindle pigmented tarmacadam, whilst the car park would be surfaced with interlocking block paving. All roads would be appropriately drained via silt and oil interceptors, with surface water being directed towards the attenuation lagoon.

#### Electricity Link to National Grid

43. To provide electricity from the facility to the National Grid a new electricity substation would be required. The ES states that this would be situated to the south west of the main ERF building. Underground cables would run across the site and under the A512, where they would be connected to the main National Grid system. There would be no requirement for pylons as a result of this development.

#### Process

44. The operation of the ERF plant consists of five key stages:
  - Waste reception;
  - combustion;
  - energy recovery;
  - flue gas treatment; and
  - residues handling

#### *Waste Reception*

45. HGVs importing waste would be weighed when entering the site and directed to the tipping hall, with all HGVs being covered during transit to prevent waste and odour releases to the environment during the journey. Incoming waste vehicles

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would enter the tipping hall in a forwards direction and reverse up to the waste storage bunker once inside the hall. HGVs would then leave the tipping hall on the opposite side of the building to ensure a one-way system, thus minimising conflict with other vehicles.

46. A shredder would be provided to process bulky wastes and to reduce the material to an appropriate size to prevent blockages in the feed chute and/or damage to the furnace and grates.
47. Air for the combustion process would be positively drawn from the tipping hall to reduce the escape of dust and odours. Rapid action access doors would also be erected which would also aid in the minimisation of dust, odour and noise from the tipping hall.
48. The waste storage bunker would have the capacity to store up to five days of waste at the normal throughput rate, with the tipping bay allowing two vehicles to tip simultaneously. Overhead grab cranes would then mix and break up the waste to ensure homogeneity of feed for the combustion chambers. A designated storage area for non-permitted wastes would be created in the tipping hall pending removal off-site to a suitably licensed site.
49. Waste would then be loaded from the storage bunker into each combustion chamber via dedicated feed chutes and air locks, using the grab cranes. Each feed chute would channel the waste onto a grate bed and also limit the ingress of air into the furnace. There would be two feed lines fuelling two furnaces.

### *Combustion*

50. Each of the two furnaces would be fitted with a reciprocating moving grate that transports, mixes and turns the waste as it passes through the furnace. During its passage through the furnace the waste would undergo drying, ignition, combustion and burnout. The rate at which the grates pass the waste through the furnace would be controlled to ensure complete combustion.
51. The ES states that combustion would take place in two stages. Primary combustion is undertaken on the mechanical grate to promote the mixing of burning and unburnt waste. The combustion gases from the primary stage are then heated further in the upper sections of the furnace to reach and maintain the specified minimum temperature of 850°C for a minimum of two seconds. The burnt waste from primary combustion on the moving grate would be removed as incinerator bottom ash (IBA).
52. The grates are divided into a series of zones along their length and combustion air would be supplied independently to each of the zones. This enables close control of the combustion process by adjusting the air flow to each zone as necessary. Primary combustion air, taken from the tipping hall and waste bunker, would be delivered to the under-side of the grates and would pass through the grates to combust the waste mass.
53. Once primary combustion has taken place and the volatile gases generated, complete combustion of these gases would take place in the upper sections of the furnace, the secondary combustion chamber. The flue gases can flow

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upwards into the secondary combustion chamber without having to be diverted, thus encouraging optimal flow conditions. Complete combustion of the volatile gases takes place at 850-1000 °C. The furnace is designed to optimise combustion conditions through the injection and recirculation of secondary air within the chamber, which reduces carbon monoxide concentrations and improves the burn-out of both flue gas and fly ash. The residual carbon in the waste on the grate continues to burn to achieve the degree of burn-out required by the Waste Incineration Directive (less than 3% carbon in the ash).

54. Combustion control is fully automatic; the operator only selects the desired steam output. Large variations of the calorific value (CV) of feedstock may require manual adjustment, although “CV-correction” is a feature that is fully integrated in the control system, giving an automatic adjustment of up to ten parameters of the combustion control system. Manual adjustments of the control system are not normally required, but the automatic system can be overridden if necessary under unusual circumstances.
55. Under normal circumstances combustion is self-sustaining without external fuel sources. In the event that the temperature falls close to or below the legally permitted limit of 850°C, the ES states that oil-fired auxiliary burners automatically start operation. The applicant states that experience shows that use of the burners to support secondary combustion occurs rarely. Predominantly, the burners remain in a stand-by position and are cooled by the cooling fans provided. The burners are routinely used for start-up and shut-down of the plant.

#### *Energy Recovery*

56. Heat from combustion of the waste is recovered using a heat recovery boiler to form steam. The boiler type is of proven design, which optimises thermal efficiency, minimises fly ash deposits and reduces the formation of dioxins. The design also incorporates effective on-line cleaning devices and minimises corrosion risks. The boiler is designed to produce 62 bar (a) / 420°C live steam. The conservative design with large heat exchange surfaces allows for a long-lasting service. The boiler would use de-mineralised water, prepared by treatment in ion-exchange columns. All water treatment chemicals would be stored in a secure area within the building.
57. The high pressure steam produced drives a steam turbo generator to provide electricity. The ERF is anticipated to generate approximately 25MW electrical power for export to the National Grid. Approximately 12% of the total generated electricity would be used within the facility itself (“*parasitic load*”).
58. The power generation and auxiliary equipment provided include a turbine/generator set, air cooled condensers and a heat recovery unit able to extract further energy from the partially cooled steam or hot water after it has been through the turbines. The waste heat would be recovered as either hot water or low or high pressure steam, depending on the end-use requirements.

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The applicant states that the turbine has been specifically designed to optimise the combined heat and power (CHP) potential of the facility, which would be wholly dependent on local heat energy demands identified from the detailed heat plan for Newhurst.

### *Flue Gas Treatment*

59. The air pollution control (APC) system would form an integral part of the plant to treat all flue gas prior to release to the atmosphere to ensure that emissions will meet the stringent EU Waste Incineration Directive (WID) (2000/76/EC) standards. The WID places limits on the following substances:
  - total particulates (dust);
  - acid and corrosive gases – e.g. hydrogen chloride, hydrogen fluoride, sulphur dioxide and nitrogen oxides;
  - heavy metals – e.g. cadmium, mercury, lead and other heavy metals; and
  - organic compounds – e.g. dioxins, furans, and volatile organic compounds (VOC).
60. The treatment would involve a process called “*Selective Non-Catalytic Reduction*” (SNCR) to control the release of nitrogen oxides (NOx) gases. The applicant states that this process is a proven and widely used system of pollution abatement and would reduce emissions from the facility to well within the stringent WID emission limits. The process involves the injection of a diluted ammonia solution into the high temperature gases at the top of the first pass of the boiler.
61. The flue gas treatment in the proposed facility would be a “dry” system, to clean the cooled exhaust gases after they have left the boiler. The gases would be passed through sodium bicarbonate to neutralise acid gases such as hydrogen chloride, hydrogen fluoride and sulphur dioxide, and activated carbon which adsorbs dioxins, furans and gaseous mercury.
62. Following the injection of the neutralising agents, the exhaust gases would then be filtered through a bag type filter, which traps fine particulate matter (dust) including the boiler ash (fly ash), reaction products and excess reagents. The bag filters also thereby remove heavy metals that are absorbed onto particulate matter. These residues are known collectively as air pollution control (APC) residues.
63. The reagents (sodium bicarbonate and activated carbon) remain on the surface of the filters allowing further flue gas treatment. Periodically the filters are cleaned by a reverse pulse of air. Residues from the final bag house filter process are collected in enclosed silos.
64. The cleaned gases would pass to the atmosphere via the twin flue stacks, one to serve each process line. The height of the stacks has been determined following a modelling process which considers (*inter alia*) legislative requirements for air quality, the local topography and the types of waste to be combusted. There would be an induced draught (ID) fan at the base of each flue to maintain the air flow through the process and overcome any pressure losses through the system. The cleaned gases would be subject to extractive continuous sampling and monitoring, using certified Continuous Monitoring

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Equipment (CEM). CEM monitoring data for oxides of nitrogen, sulphur dioxide, hydrogen chloride, particulates and VOC would be automatically fed to the Control Room. In addition, ammonia and nitrous oxide emissions from the SNCR would also be continuously monitored. Feedback of monitoring data would allow action to be taken to adjust the process if necessary before emission limits are exceeded. In addition, periodic sampling of the full range of WID limited pollutants would take place. Operational experience indicates that the process emissions would comply with the WID limits.

65. The process would be computer-controlled from the Control Room, with continuous process and emissions monitoring to ensure satisfactory operation and performance. Site staff would be fully trained in the use of the selected technology. The process would operate and be monitored in accordance with an Environmental Permit, which would be issued and regulated by the Environment Agency.
66. The applicant states that a plume of steam would be visible from the stacks during certain weather conditions. The Landscape and Visual Assessment estimates that this will be visible 10-15% of the time, with a height of 20-500m, manifesting as a free-standing cloud.

#### *Residues Handling*

67. The whole process generates three main solid waste residues, namely incinerator bottom ash (IBA), APC residues (including boiler ash or fly ash) and metals.
68. IBA is generated from the grate combustion unit, and amounts to approximately 25% of the waste imported to the ERF. IBA from the furnace would be cooled by passing through a water quench before passing by conveyor to the ash pre-treatment area, at (and within) the northern end of the building. Process water would be re-circulated for use in the ash quench.
69. The matured IBA can be used in concrete and concrete block construction, replacing up to 50% of the aggregate traditionally used. IBA has also been used successfully in sub-base and road base layers in road construction, after a process of hot asphalt stabilisation and mixing with cement or bitumen. The sub-base and road base layers refer to the intermediate layers of the road, below the final surface wearing course and above the lowest sub-grade layer.
70. The APC residues include boiler ash ("fly ash") from combustion that is removed from the flue gases, together with the other contaminants, prior to release into the atmosphere. Boiler ash consists mostly of carbon dust, along with some pollutants, organic compounds and heavy metals. The bulk of the APC residues comprise the spent reagents. APC residues are removed from the flue gases so that the emissions from the facility meet the WID standards, preventing unacceptable pollution of the environment. APC residues have a high pH due to un-reacted neutralising reagents and this causes them to be classified as a hazardous waste. They would be stored in fully enclosed silos or bags pending removal off-site in enclosed tankers at a designated hazardous waste landfill, unless a market can be found for their use in treating acid wastes. Boiler ash ("fly ash") combined with spent reagents represents only about 3% by mass of the waste feedstock.

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71. Following combustion of the wastes, metals are separated from the IBA by electromagnetic separators for ferrous metals. This process improves both the composition of the IBA for after-use and recovers valuable metals for recycling. The quantity of metal that can be recovered from the IBA is typically around 2 to 5% depending on the waste feedstock and thus represents a useful opportunity for significant amounts of metals recovery.
72. The applicant intends that the facility would operate on a continuous basis, 24 hours a day, 7 days a week throughout the year, operating for a total of 365 days per year with the exception of routine maintenance and annual shutdowns for insurance inspections. It is intended that the plant would be available for a minimum 90% of this time. The delivery of waste to the facility would occur during the period 0600 hours to 2200 hours during the week (Monday to Friday) and 0730 hours to 1600 hours on Saturdays. There would be no deliveries on Sundays or Public/Bank Holidays.

#### Environmental Statement

73. An Environmental Statement (ES) has been submitted in support of the planning application as required by the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. The Environmental statement includes sections on the following matters: alternatives; air quality; landscape and visual impact; highways and transportation; noise; geology, hydrology and hydrogeology; ecology; cultural heritage; socio-economic impacts, and climate change.
74. **Alternatives** – the ES examines alternative sites to Newhurst Quarry, alternative ways of developing the Newhurst site and alternative technologies for treating residual waste streams. The ES notes that the adopted Leicestershire and Leicester Waste Core Strategy (WCS) identifies that strategic waste management sites should be located within an area that encompasses the Newhurst site, that priority should be given to sites with existing waste management use and that the Newhurst Quarry void is specifically allocated in the Waste Local Plan for waste disposal.
75. The proposed ERF has been assessed against other technologies including Mechanical Biological Treatment (MBT), Mechanical Heat Treatment (MHT), Anaerobic Digestion (AD) and Advanced Thermal Treatment (ATT). The applicant has also considered alternatives as to how the building would be orientated within the site, colour schemes, flue stack design, covering the IBA area and the 'do nothing' scenario. In respect of global warming potential, the ES concludes that the ERF outperforms the alternative waste management processes with a net avoided carbon dioxide burden saving of approximately 25,000 tonnes based solely on electricity production. This net saving would be increased further should heat be exported from the site.
76. **Air Quality** – the ES focuses on the principal emissions to air including Air Quality Strategy Pollutants from vehicles, Air Quality Strategy and Waste Incineration Directive Pollutants, dust and litter emissions during the construction and operational phases, and odours and bio aerosols arising from the operational phase.

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77. The ES concludes that the impacts from dust, litter, odour and bio aerosols would be insignificant and that the impact on air quality arising from development traffic would be neutral when considered against the extant landfill permission. The ES also states that there would no significant impact on sensitive ecosystems. However, the ES does state that nitrogen dioxide impacts (both short and long term) arising from the combustion process and an increase in HGVs in the locality would be classed as 'minor adverse' close to the site, although these impacts would not be focused at a sensitive receptor location and any exposure to such impacts would be short term.
78. **Landscape and Visual Impact** – a landscape and visual impact assessment of the proposed development has been completed and states that the development would not alter the "*industrial*" local landscape character of the site as the proposed building would be similar to those that would otherwise occur.
79. The ES concludes that there would be a 'slight' and 'adverse' landscape impact with the site being partially screened by local topography and existing mature vegetation and any impacts would be limited to relatively close proximity to the site of approximately 1-2km, with no significant visual impact for the majority of viewpoints within the study area, except for views from J23 of the M1.
80. **Highways and Transportation** – the ES assesses the highway impacts against recognised standards and guidelines issued by the Department for Transport and against the fallback situation which is the extant landfill permission. It concludes that the development proposals would not discernibly or materially worsen the existing operation of the highway network and therefore that the proposal is acceptable in highway terms.
81. **Noise** – the ES considered the potential noise impacts from both construction and operational phases. The noise assessment involved measurements of background noise levels at four locations and making a series of noise level predictions based in accordance with British Standards (BS5228:2009 and BS4142: 1997) and Government guidelines. The ES concludes that predicted noise levels during the construction phase would at worst have a minor, barely perceptible impact on the existing ambient noise climate at the nearest noise sensitive receptors.
82. For the operational phase of development, the ES concludes that the predicted noise levels give a positive indication that complaints are unlikely from all noise sensitive receptors. The ES goes on to state that HGV traffic within the site and the cumulative impact of all operations would have no impact on the existing ambient noise levels at any of the noise sensitive receptors.
83. **Geology, Hydrology and Hydrogeology** – the ES has considered the local geology, hydrology and hydrogeology and notes that the existing geological interest in the quarry void would be unaffected by the development proposed. The ES notes that the underlying rocks are classified as a major aquifer. However, the aquifer's extent is limited because of its isolation from other aquifers due to local areas of rock with limited permeability. The site is not within a flood zone, and a flood risk assessment demonstrates that the proposed development would not lead to any flood related impacts off site. The ES concludes that, where appropriate, mitigation measures such as traffic

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management, containment and sustainable drainage schemes have been incorporated into the design of the building to ameliorate identified impacts and the proposal would not have any significant adverse impacts upon the geological or water environments, including the major aquifer.

84. **Ecology** – the ES contains an Ecological Impact Assessment based on published guidelines which addresses the likely effects upon flora and fauna. The ecological evaluation identified the following receptors within the site as being of ecological importance: mature woodland and plantation; great crested newts (within the quarry void); foraging badgers; commuting bats and nesting birds.
85. The ecological assessment identified a range of potential impacts on the ecological features within the site, such as habitat loss, fragmentation, dust and noise impacts etc., and sets out mitigation and avoidance measures. This section concludes that restoration and habitat enhancements would compensate in the long term for the loss of habitat resulting from the proposed development.
86. **Cultural Heritage** – the ES includes an assessment of the potential impact upon cultural heritage features in and around the site. Whilst there are no ‘heritage assets’ within the application site, the ES states that there are eight conservation areas, 104 listed buildings, six scheduled monuments and one registered park within five kilometres.
87. The ES lists three groups of features identified for detailed impact assessment:
- Garendon Park, comprising the remains of a medieval abbey and post medieval 18<sup>th</sup> and 19<sup>th</sup> century parkland, buildings and structures;
  - Holywell medieval farmhouse and outbuildings; and
  - Hill-forts near Belton and at Beacon Hill
88. Due to the previous quarrying activities on the site the ES states that there is little potential for archaeological remains within the application site. The applicant proposes high quality building design and landscaping to mitigate the visual impact of the development upon sites of cultural heritage importance. The cultural heritage assessment concludes that there would be a negligible to moderate adverse impact upon the registered park and the listed buildings and structures and scheduled monument within Garendon Park; negligible adverse impact for Holywell Farmhouse and minor adverse impact for the hill-forts at Belton and at Beacon Hill.
89. **Socio Economic** – the ES considered potential socio economic impacts using a study area with a radius of five kilometres from the application site. The ES states that up to 200 construction workers would be employed at the site during a number of phases. It acknowledges that whilst some local suppliers and workers would be employed, the majority of construction workers would require specialist skills and so may only reside in the area for a short period, thus leading to a small temporary increase in the local population in the worst case scenario.

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90. The operation of the ERF would require approximately 40 permanent staff and the ES states that a mixture of employment opportunities would be available, with the applicant anticipating that the majority of new staff would be recruited locally. The applicant would encourage workers to car share, use public transport or walk/cycle to work.
91. The ES states that there are no significant visitor attractions in the area, and whilst a number of smaller attractions are present, it is not envisaged that the proposed development would deter visitors from the area.
92. The applicant states that security measures, including CCTV and security staff, would be in place to ensure that the site would not attract crime during the construction phase. Also, the ES concludes that there is no evidence to suggest that the proposed development would result in an increase in ill health in the surrounding area and that the ERF would have only a negligible impact on local air quality.
93. **Cumulative Impacts** – the ES examines the cumulative impacts of this proposal with other historic, present, and planned developments in the locality and also any inter-relationships between impacts. The ES concludes that there would be no significant impacts arising from cumulative impacts related to the application site.

**Planning Policy****Introduction**

94. The planning system plays an important role in delivering sustainable waste management, by protecting human health and the environment, encouraging reductions in the production of waste, and increasingly promoting waste as a resource. Waste policy in the UK sits within a wider policy and legislative framework agreed with the European Union (EU). This policy framework is overarched by EU Directives implemented through National Regulations, and also includes The Waste Strategy 2007 (WS 2007) and Planning Policy Statements at the national level.

**European Policy**

95. The principal directive controlling waste management throughout the European Union is the Framework Directive on Waste. A revised Waste Framework Directive (Directive 2008/98/EC) was passed on 12<sup>th</sup> December 2008 and member states are required to bring into force its provisions by 12<sup>th</sup> December 2010. The Directive provides the basic framework for waste management in member states. It encourages them to take appropriate measures to reduce waste production, recover the useful components of waste and draw up national waste management plans.
96. A key component of the waste framework is the Landfill Directive (99/31/EC) adopted in 1999. The principal objective of this Directive is to prevent, or reduce as far as possible, the negative effects of landfilling waste on the environment and health. It introduces a number of restrictions on the type and

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quantities of waste that may be landfilled in the future. As a result, alternative management routes will need to be found for waste that can no longer be landfilled. Article 5 progressively limits the quantity of biodegradable municipal waste (BMW) that can be landfilled, in order to avoid environmental damage.

97. The target dates set by the Directive are summarised below and allow for a four-year delay for those member states, such as the UK, which at the time landfilled more than 80% of their household and municipal waste:
- By 2010 to reduce the BMW landfilled to 75% of that produced in 1995;
  - By 2013 to reduce the BMW landfilled to 50% of that produced in 1995; and
  - By 2020 to reduce the BMW landfilled to 35% of that produced in 1995.
98. The Waste Incineration Directive (WID) (2000/76/EC) sets standards and methodologies required by operators who wish to incinerate waste within the European Union. The primary aim of this Directive is to minimise the impact of negative environmental effects on the environment and human health resulting from emissions to air, soil, surface and ground water from the incineration of waste. The WID seeks to achieve this high level of environmental and human health protection by requiring the setting and maintaining of stringent operational conditions, technical requirements and emission limit values for plants incinerating and co-incinerating waste throughout the European Community. This Directive has been implemented in England and Wales by the Environmental Permitting (EP) (England and Wales) Regulations 2007 (*note: from April 2008 these replaced the Pollution Prevention and Control (PPC) (England and Wales) Regulations 2000*).
99. Under the EP regulations, a company wishing to erect and operate an incinerator must have a valid planning permission and an Environmental Permit issued by the Environment Agency (EA). Biffa has submitted an application for an Environmental Permit and the EA is currently consulting on this document (the County Council is not a statutory consultee for such permits). Should the EA issue a permit, then this would set out the operational and monitoring standards for the incineration process. The EA would act as an independent monitor of the facility's outputs and, if limits were breached, it would have powers to shut down the facility and impose fines accordingly.

### **National Policy**

100. The Government's vision for sustainable waste management is set out in the Waste Strategy for England 2007. The new strategy builds on Waste Strategy 2000, and addresses the key challenges for the future management of waste. Its main purpose is to set out, over the medium and longer term, the direction for the management of all waste (not just municipal waste).
101. The Strategy puts greater emphasis on waste prevention and sets a new target to reduce the amount of household waste not re-used, recycled or composted. This means reducing it from the 22.3 million tonnes in 2000 to 12.2 million tonnes in 2020 (with a target of 15.9 million tonnes by 2010). This is a reduction of 45%.

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102. Higher national targets than in 2000 have also been set for:

- recycling and composting of household waste – now at least 40% by 2010, 45% by 2015 and 50% by 2020; and,
- recovery of municipal waste – 53% by 2010, 67% by 2015 and 75% by 2020.

These are significantly higher than the old targets (set in Waste Strategy 2000) of 30% by 2010 and 33% by 2015.

103. Targets for commercial and industrial waste are also proposed to be introduced for reducing the amount of this waste stream that is landfilled. It is expected that a 20% drop between 2004 and 2010 would result (due to landfill tax increases, and the restrictions on landfilling introduced by the Landfill Directive).

104. The 2008 Waste Framework Directive states that the preparing for re-use, recycling and other material recovery of non-hazardous construction and demolition waste shall be increased to a minimum of 70% by 2020.

105. The current energy policy of the United Kingdom is set out in the Energy White Paper of May 2007 entitled 'Meeting the energy challenge', which builds on previous work including the 2003 Energy White Paper and the Energy Review Report in 2006.

106. It sets out the Government's desire to ensure the security of the supply of energy through a broader mix of electricity generation including an increase in renewable energy supply and nuclear energy.

107. The White Paper states that the Government is committed to the important role renewables have to play in helping the UK meet its energy policy goals. As highlighted in the July 2006 Energy Review Report, the UK faces difficult challenges in meeting its energy policy goals. Renewable energy, as a source of low carbon, indigenous electricity generation is central to reducing emissions and maintaining the reliability of our energy supplies at a time when our indigenous reserves of fossil fuels are declining more rapidly than expected. A regulatory environment that enables the development of appropriately sited renewable projects, and allows the UK to realise its extensive renewable resources, is vital if we are to make real progress towards our challenging goals.

108. New renewable projects may not always appear to convey any particular local benefit, but they provide crucial national benefits. Individual renewable projects are part of a growing proportion of low carbon generation that provides benefits shared by all communities both through reduced emissions and more diverse supplies of energy, which helps the reliability of our supplies. This factor is a material consideration to which all participants in the planning system should give significant weight when considering renewable proposals. These wider benefits are not always immediately visible to the specific locality in which the project is sited. However, the benefits to society and the wider economy as a whole are significant and this must be reflected in the weight given to these considerations by decision makers in reaching their decisions.

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109. Subsequent to the passing of the Climate Change Act 2008, the Government issued a white paper entitled 'UK Low Carbon Transition Plan - National strategy for climate and energy' (Transition Plan), which sets out the UK's first ever comprehensive low carbon transition plan to 2020. This plan seeks to deliver emission cuts of 18% on 2008 levels by 2020 (and over a one third reduction on 1990 levels).
110. This Transition Plan sets out policies to decarbonise the electricity system by reducing carbon emissions from electricity and heavy industry by 22% on 2008 levels by 2020 through a variety of measures. These include diversifying the electricity generation sector to supply more renewable energy in to the national grid. The Government acknowledges that certain technologies are more commercially viable than others, and so technologies that need more support for effective market deployment will receive it. Energy from Waste facilities that can demonstrate Combined Heat and Power capacity are very expensive to develop and generally require long term contracts to succeed. Therefore, the Government has decided that suppliers of electricity from such facilities are entitled to claim full Renewable Obligation Certificates (ROCs) for each megawatt of energy supplied to the grid.
111. The UK Renewable Energy Strategy 2009 (RES) sets out how the UK will deliver 15% renewable energy overall by 2020, across electricity, heat and transport. It states that waste-biomass is an under-used resource which could provide a significant contribution to our renewable energy targets and reduce the overall amount of waste that is landfilled.
112. The RES goes on to state that currently 6 TWh (terawatt hours) of heat and power is generated from biomass municipal solid waste collected by Local Authorities, and about 18 TWh from landfill gas. If all the food and wood waste sent to landfill were used for energy it would generate 42 TWh, or approximately 18% of our renewable energy target.
113. Planning Policy Statement 1: Delivering Sustainable Development (PPS1) sets out the overarching planning policies on the delivery of sustainable development through the planning system. PPS1 relates to both the preparation of spatial plans, which underpin the decision-making process, and to individual planning applications.
114. The December 2007 Supplement to PPS 1 sets out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. In relation to planning applications, the Supplement states (page 5) that "*applicants for planning permission should consider how well their proposals for development contribute to the Government's ambition of a low-carbon economy and how well adapted they are for the expected effects of climate change.*" The Glossary to the 2007 Supplement defines "*Renewable and Low Carbon Energy*" as including energy from waste. This has recently been acknowledged in the inspector's report following a public inquiry regarding an application for a 650,000 tonnes per annum incinerator at the "*Ince Marshes*" site, Cheshire.
115. Planning Policy Statement 5: Planning for the Historic Environment (PPS 5) states that planning has a central role to play in conserving our heritage assets

and utilising the historic environment in creating sustainable places. The Government's overarching aim is that the historic environment and its heritage assets should be conserved and enjoyed for the quality of life they bring to this and future generations. To achieve this, the Government's objectives for planning for the historic environment are:

- to deliver sustainable development by ensuring that policies and decisions concerning the historic environment:
  - recognise that heritage assets are a non-renewable resource;
  - take account of the wider social, cultural, economic and environmental benefits of heritage conservation; and
  - recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term.
- to conserve England's heritage assets in a manner appropriate to their significance by ensuring that:
  - decisions are based on the nature, extent and level of that significance, investigated to a degree proportionate to the importance of the heritage asset;
  - wherever possible, heritage assets are put to an appropriate and viable use that is consistent with their conservation;
  - the positive contribution of such heritage assets to local character and sense of place is recognised and valued; and
  - consideration of the historic environment is integrated into planning policies, promoting place-shaping.
- to contribute to our knowledge and understanding of our past by ensuring that opportunities are taken to capture evidence from the historic environment and to make this publicly available, particularly where a heritage asset is to be lost

116. Planning Policy Statement 7: Sustainable Development in Rural Areas (PPS7) states in paragraph 1 that decisions on development proposals should be based on sustainable development principles and that "*good quality, carefully-sited accessible development within existing towns and villages should be allowed where it benefits the local economy and/or community*". It goes on to state that "*accessibility should be a key consideration in all development decisions*" and that "*priority should be given to the re-use of previously-developed ('brownfield') sites*".

117. Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9), includes the broad aim that planning projects should have minimal impacts on biodiversity and enhance it wherever possible. Opportunities for the incorporation of beneficial biodiversity and geological features within the design of development should be promoted. Where a development proposal is likely to have an adverse effect on a Site of Special Scientific Interest (SSSI) it advises that planning permission should not normally be granted. PPS9 also covers conservation of species protected by law and provides that planning authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. Planning authorities should refuse permission where harm to the species or their habitats would result unless the need for, and benefits of, the development clearly outweigh that harm.

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118. National Planning Policy relating to waste management is contained within Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS 10). It advocates protection of the environment and human health through sustainable waste management objectives, which seek to reduce the amount of waste produced, and the amount disposed of, by driving waste management up the waste hierarchy. It also promotes the ‘proximity’ principle to ensure that waste is managed as near to source as possible. The guidance sets out advice on the material planning considerations and planning conditions for waste management facilities. Planning conditions should be used to control matters such as vehicle movements, hours of operation, impact on neighbouring land uses, timescale and landscaping.
119. Paragraph 22 states that when proposals are consistent with an up-to-date development plan, waste planning authorities should not require applicants for new or enhanced waste management facilities to demonstrate a quantitative or market need for their proposal.
120. Planning Policy Guidance Note 13: Transport (PPG13), includes objectives to integrate planning and transport at the national, regional, strategic and local level and to promote more sustainable transport choices both for carrying people and for moving freight.
121. Planning Policy Statement 22: Renewable Energy (PPS 22) states that the increased development of renewable energy resources is vital to facilitating the delivery of the Government’s commitments on both climate change and renewable energy. It goes on to define renewable energy as energy flows that occur naturally and repeatedly in the environment – including (*inter alia*) from biomass. Biomass is the biodegradable fraction of products, waste and residues from agriculture (including plant and animal substances), forestry and related industries, as well as the biodegradable fraction of industrial and municipal waste.
122. Planning Policy Statement 23: Planning and Pollution Control (PPS 23) deals with the relationship between the planning and pollution control regimes. It advises that any consideration of the quality of land, air, or water, and potential impacts arising from development possibly leading to impacts on health are capable of being material planning considerations in so far as they arise, or may arise from, or may affect any land use. It also states that the planning and pollution control regimes should complement rather than duplicate each other.

### **Development Plan Policies**

123. The development plan in this instance consists of the Leicestershire, Leicester and Rutland Waste Local Plan (saved policies) (September 2002), the adopted Waste Development Framework Core Strategy and Development Control Policies Document (October 2009) and the Charnwood Borough Local Plan (January 2004). The relevant policies and proposals are set out below.

#### Leicestershire, Leicester and Rutland Waste Local Plan

124. Saved *Policy WLP 7* of the Leicestershire, Leicester and Rutland Waste Local Plan states that the assessment of all proposals for waste management

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development will take account (*inter alia*) of the following factors where appropriate:

- (i) the nature of the material to be managed;
- (ii) the effect on, and relationship to, sensitive nearby land uses by reason of noise, dust, odour, litter, fumes, or any other potential nuisance, including reference to national and local air quality standards;
- (iii) the visual impact on the landscape and the surrounding area;
- (v) the effect on woodlands and on topographical features;
- (vi) transportation implications including the nature and volume of traffic likely to be generated by the proposed operation;
- (vii) the effect on statutory nature conservation sites and other sites of more local scientific interest;
- (viii) the effect on known archaeological features, ancient monuments or other sites and buildings of archaeological, historical or architectural interest and their setting;
- (xiv) the contribution that the proposed development makes to the implementation of the waste hierarchy; and
- (xv) the land use planning implications of monitoring and managing any leachate generated;
- (xviii) the provisions of the development plan and other guidance, being policies and proposals of local planning authorities and any relevant strategies.
- (xix) The benefits of the proposal in terms of employment generation, economic benefit and regeneration of disturbed land;
- (xxiii) implications for any proven mineral reserves adversely affected by the proposal;
- (xxiv) the siting and visual appearance of the buildings, plant, machinery or operations;
- (xxvi) the potential energy recovery to which the development will contribute.

125. *Saved Policy WLP 15 – Waste Disposal Sites for Household, Civic Amenity, Industrial and Commercial wastes*, allocates one new site at Newhurst Quarry. The release of this site is subject to there being a full supporting statement made at submission, and no harm being caused to the interests identified in Policy WLP 8. Whilst the specific site allocation identifies only the quarry void, the preamble to the policy states that ‘it is considered that the adjoining quarry processing area could beneficially accommodate various waste treatment and energy recovery options...’.

Leicestershire and Leicester Waste Development Framework Core Strategy and Development Control Policies Document

126. *Policy WCS2* states that the strategy for **strategic waste sites** is to locate them within the Broad Locations indicated in the Key Diagram, in or around the urban areas of Leicester, Coalville, Shepshed and Loughborough, taking into account the principles set out in Policy WCS4: Waste Location Principles.

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127. *Policy WCS4* sets out the site-specific strategy for locating waste sites, which should be to locate sites in accordance with the objectives of Policies WCS2 and the following sequential approach:-

- (i) priority one will be given to land with an existing waste management use, where transport, operational and environmental benefits can be demonstrated as a consequence of the co-location of waste management facilities;
- (ii) thereafter, priority, in no order of preference, will be given to:
  - a) land forming part of new major development proposals;
  - b) existing industrial/employment land;
  - c) other previously-developed land;
  - d) contaminated or derelict land;
  - e) existing mineral workings;
  - f) unused and under-used agricultural and forestry buildings and their curtilages;
- (iii) finally, consideration will be given to greenfield sites,

providing that there is no unacceptable harm to the environment or communities.

128. *Policy WCS6* states that the strategy is to allow **anaerobic digestion (AD), incineration, mechanical-biological treatment (MBT) and other energy/value recovery technologies** that would provide for the recovery of energy from waste, provided that:

- (i) pre-sorting is carried out;
- (ii) value recovery from by-products of the process is maximised;
- (iii) energy recovery is maximised;
- (iv) any residue of the process can be satisfactorily managed and disposed; and
- (v) the proposal does not cause unacceptable harm to the environment or communities.

129. *Policy WCS10* states that the strategy for environmental protection is to protect and enhance the natural and built environment of the framework area by ensuring that: (*inter alia*)

- (i) there are no unacceptable adverse impacts from waste developments on:
  - a) natural resources including water, air and soil;
  - b) the character and quality of the landscape;
  - c) biodiversity, including nationally and internationally important sites and the key habitats and species identified in relevant Biodiversity Action Plans;
  - d) historic and cultural features of acknowledged importance;
  - e) sites of geological interest;
  - f) the distinctive character and setting of settlements within the framework area; and
  - g) residential amenity;
- (ii) the highest standards of operational practice for the management, working, and where appropriate restoration and aftercare of sites are adopted; and
- (iii) development is designed to a high standard, incorporates sustainable construction principles and includes appropriate landscaping.

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130. *Policy WCS12* states that the strategy for waste development within or adjacent to the **Charnwood Forest** is to ensure that:
- (i) proposals include measures to protect and enhance the character of the area, including its landscape, ecology, cultural heritage, built heritage and recreational value; and
  - (ii) the siting, scale, design and materials of the development reflect and complement the character of the surrounding landscape and minimise any harm.
131. *Policy WCS14* states that the strategy for the transportation of waste is to locate new waste management developments (*inter alia*):
- (i) in close proximity to arisings in order to minimise the need to transport waste; or
  - (ii) in close proximity to the County's lorry route network and where road traffic generated by the development can avoid residential areas and minor roads in order to minimise the impact of transporting waste by road.
132. *Policy WDC1*: states that proposals for waste management development will be required to demonstrate that they have been designed to ensure impact on the environment is minimised by appropriate measures to:
- (i) reduce greenhouse gas emissions and other forms of pollution;
  - (ii) minimise levels of energy and water consumption;
  - (iv) minimise production of waste during construction and operation;
  - (v) maximise the re-use or recycling of materials; and
  - (vi) protect and contribute positively to the character and quality of an area.
133. *Policy WDC2* states that planning permission will not be granted for waste management development that would have significant adverse effects on sites of national historic importance or on their character, appearance and/or setting of sites of national importance, including:
- (i) Scheduled Ancient Monuments and other nationally importance archaeological sites;
  - (ii) Historic parks and gardens, battlefields and historic landscapes; and
  - (iii) Listed buildings,
- unless there are overriding reasons of national importance for development in that location that clearly outweigh the impacts that it is likely to have on the features of interest.
134. *Policy WDC3* states that planning permission will not be granted for waste management development which would have a significant adverse effect on the character, appearance, ecological, geological or amenity value of Sites of Regional and Local Importance, including:
- (i) Local Wildlife Sites (LWS);
  - (ii) Local Nature Reserves;
  - (iii) priority habitats or species identified in relevant Biodiversity Action Plans;
  - (iv) special landscape areas and landscape features of importance;
  - (v) Regionally Important Geological Sites (RIGS);
  - (vi) protected woodland areas;
  - (vii) country parks, common land, village greens and other important areas of open space or green areas within built-up areas;

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- (viii) conservation areas and locally listed buildings (including their setting);
- (ix) land or buildings in sport, recreational or tourism use; and
- (x) land that is of regional or local importance for wildlife corridors or for the conservation of biodiversity,

unless it can be demonstrated that there is an overriding need for the development and any impacts can be mitigated or compensated for, such that there is a net gain or improvement to their condition.

135. *Policy WDC5* states that planning permission will not be granted for waste management development within the countryside, unless it can be demonstrated that:
- (i) the development is such that it cannot be accommodated within the urban areas;
  - (ii) there is an overriding need for the development; and
  - (iii) the landscape character of the area will not be harmed.
136. *Policy WDC8* states that planning permission will not be granted for waste management development which is likely to generate unacceptable adverse effects from noise, dust, vibration, odour, emissions, illumination, visual intrusion or traffic to adjoining land uses and users and those in close proximity to the waste management development.
137. *Policy WDC10* states that planning permission will not be granted for waste management facilities involving the transport of waste by road where:
- (i) there is a practicable alternative to road transport which would be environmentally preferable;
  - (ii) the proposed access arrangements would be unsafe and inappropriate to the proposed development and the impact of the traffic generated would be detrimental to road safety to an unacceptable degree; and
  - (iii) the highway network is unable to accommodate the traffic that would be generated and have an unacceptable impact on the environment of local residents.
138. *Policy WDC13* states that planning permission will not be granted for waste management development which would give rise to new or increased hazards to aviation.

Borough of Charnwood Local Plan (2004)

139. Saved *Policy EV/1* states that the Borough Council will seek to ensure a high standard of design in all new developments. Planning permission will be granted for new development which:
- (i) respects and enhances the local environment including the scale, location, character, form and function of existing settlements and the open and undeveloped nature of the countryside;
  - (ii) is of a design, layout, scale and mass compatible with the locality and any neighbouring buildings and spaces;
  - (iii) utilises materials appropriate to the locality;
  - (iv) provides positive and attractive built frontages to existing or proposed public spaces including roads, footpaths, waterways and areas of public open space;

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- (v) safeguards important viewpoints, landmarks and skylines;
  - (vi) uses the landform and existing features in and around the site, such as woodlands, trees, hedges, ponds, important buildings and structures imaginatively as the focus around which the new development is designed;
  - (vii) safeguards the amenities of adjoining properties, particularly the privacy and light enjoyed by adjoining residential areas;
  - (viii) meets the needs of all groups, including the disabled; and
  - (ix) minimises the opportunity for crime to create a safe and secure environment.
140. Saved *Policy EV/2* states that planning permission will not be granted for development which would adversely affect a scheduled ancient monument or other nationally important archaeological site, or its setting.
141. Saved *Policy EV/8* states that planning permission for development which would affect a building of local historic or architectural interest or its setting will be granted provided:
- (i) the appearance or character of the building and its setting are safeguarded; or
  - (ii) the development would result in significant local community or environmental benefits.
142. Saved *Policy EV/9* states that planning permission will not be granted for development which would have an adverse effect on the character or setting of the parks and gardens of historic or landscape significance as shown on the Proposals Map.
143. Saved *Policy EV/40* states that planning permission for lighting installations, or for development requiring or likely to require external lighting, will only be granted where it can be demonstrated to the satisfaction of the local planning authority that:
- (i) the lighting scheme proposed is the minimum needed for security or working purposes;
  - (ii) potential pollution from glare and spillage is minimised, particularly to residential areas, areas of nature conservation and locations in the open countryside or on the edge of existing settlements;
  - (iii) the lighting proposed would not cause a distraction to drivers using nearby highways;
  - (iv) the visual impact of proposed lighting installations and structures on the character of the surroundings is minimised.
144. Saved *Policy CT/1* states that land lying outside the defined Limits to Development is variously identified on the Proposals Map as Countryside, Green Wedge and Areas of Local Separation. Development within these areas of generally open land will be strictly controlled. Planning permission will be granted for the re-use and adaptation of rural buildings for uses suitable in scale and nature, and small-scale new built development, where there would not be a significant adverse environmental impact and the proposal would:
- i) be essential for the efficient long-term operation of agriculture, horticulture or forestry; or
  - ii) facilitate the diversification of the rural economy; or

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- iii) improve facilities for recreation, or leisure uses; or
- iv) implement strategically important schemes for mineral related uses, transport infrastructure, and for public services or utilities.

In all cases it should be demonstrated that the proposed development could not reasonably be located within or adjacent to an existing settlement.

145. Saved *Policy CT/2* states that in areas defined as Countryside, development(s) acceptable in principle will be permitted where it would not harm the character and appearance of the countryside and provided it could safeguard its historic, nature conservation, amenity, and other local interest.

146. Saved *Policy CT/7* states that within the designated Areas of Particularly Attractive Countryside planning permission will be granted for uses where the proposal would not detract from the essentially undeveloped rural character of the landscape, damage natural features and landform or diminish the visual amenities afforded by important viewpoints by reason of:

- (i) the introduction of prominent, visually obtrusive or incongruous elements by reason of poor siting, design construction and landscaping; or
- (ii) the use of materials or designs incompatible with the traditional vernacular or otherwise unsuitable due to their colour or reflective qualities;
- (iii) the removal of traditional buildings and structures, or particular elements of them, or other landscape features which contribute to the special character and appearance of the locality.

Where development is acceptable in principle it will be expected to maintain or enhance the character and appearance of the landscape.

Proposals by statutory agencies involving the construction of large buildings or structures, including overhead power lines, will be acceptable where they are shown to be essential to operational requirements, and are located to minimise the visual impact on the landscape.

### **Initial Consultations on Original Application - January 2010**

#### **Charnwood Borough Council - Planning**

147. "Notwithstanding the thought given to their design, the Borough Council objects to the height, size, colour and visual impact of the building and the flue stacks, and the effect these would have on the appearance of the landscape, which is protected by saved policies CT/1, CT/2 and CT/7 of the Borough of Charnwood Local Plan as being within a designated Area of Particularly Attractive Countryside.

The Council considers that full regard should be had to the many responses from the local community and as expressed at the public meetings held in Shepshed.

The Committee resolved that, in the event that the County Council grants planning permission, it would wish to see the following issues taken into account:

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- (a) The developer should enter into a legal agreement regarding the routing of vehicles transporting waste to and from the site via the M1 and the section of the A512 between the motorway and the site entrance and not through the remaining roads in Shepshed, with exceptions for local waste deliveries only.
- (b) The operation of the facility, as described in the application, conditioned to adhere to agreed assessment levels in respect of noise, air quality, odours, traffic generation, hours of use, hydrology etc. to ensure the impact on the environment is maintained at acceptable levels.
- (c) That restoration measures be programmed and secured to ensure the satisfactory long term provision of landscape restoration and enhancement, using native species only, and with appropriate levels of public access.
- (d) That conditions be imposed that ensure the development makes as little impact on the environment as possible.
- (e) That steps be taken to ensure that no part of the extant planning permission could be implemented once this development was initiated, to avoid additional traffic and to protect the wildlife interest of the area.

### **Charnwood Borough Council – Environmental Health**

#### First Response to initial consultation

148. The site will be required to apply for a permit to operate under “The Environmental Permitting Regulations”. This permit will be administered and regulated by the Environment Agency. Many of the environmental and human health concerns will therefore be controlled as part of the permit conditions. The remit of the permit will be to ensure that the activities at the installation are carried out in such a way as to ensure that the “best available techniques” are used to mitigate the environmental impact. Given that the site will be subject to a robust regulatory input I have limited my comments to general observations about the potential environmental impacts of the proposal and to those issues which the permit may not have the remit to control.
149. It is recognised that as part of the consultation exercise for any EPR permit application the Health Protection Agency would be contacted. I would however recommend that advice be sought from them at this stage of the planning application to ascertain whether a health impact assessment should be undertaken to evaluate the risk to human health from the proposed facility.
150. As regards general observations regarding the air quality and noise reports I would specifically make the following comments:
- Air Quality
- Chapter 6 of the Environmental Statement concludes that ‘in summary the proposed ERF is not predicted to give rise to significant adverse air quality effects for either human or ecological receptors’. The conclusions are based on air quality modelling of projected emissions from the additional traffic burden that the facility would generate, AERMOD dispersion modelling for emissions from the stacks, together with qualitative assessments of dust, odours and bio aerosols arising from plant operations. I do not have air quality modelling software capable of replicating that used to produce the statement. However,

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the assessment methodology is generally sound and the conclusions are reasonable based on the results obtained.

151. The air quality assessment supporting the planning application indicates that the significance of any impacts from the EFW Process Stack are negligible, with the exception of nitrogen dioxide (short and long term) impacts which are classified as minor adverse. I am concerned that properties on the A512, and in particular Cow Hill Lodge on Ashby Road East, are currently marginally compliant with the national air quality objectives for NO<sub>2</sub>. The additional contribution of nitrogen dioxide from the proposed waste facility is likely to be small as a percentage of existing levels, but could squeeze the margins of compliance with the air quality objectives and possibly cause an exceedence. I would therefore recommend that if permission be granted, an air quality monitoring regime be agreed with the local authority to track any changes in local nitrogen dioxide levels from the construction phase through to 6 month full operational status of the facility. The EHO also concurs with the mitigation measures for the construction phase as detailed in section 6.111 of the report, which should be implemented in full to reduce the potential impact on local receptors.

152. Noise

Chapter 9 of the Environmental Statement concludes that “predicted daytime and night time noise rating levels produced by fixed plant at the proposed development are unlikely to give rise to complaints at any of the nearest noise sensitive receptors. On-site vehicles movement would have no impact on ambient noise levels and the cumulative impact of all operations would have no effect on the existing ambient noise levels at of the nearest noise sensitive receptors. Whilst I do not have the noise modelling software capable of replicating that used to produce the above statement, the assessment methodology is generally sound and the conclusions are reasonable based on the results submitted.

153. I would therefore concur with the mitigation measures for the construction phase as detailed in sections 9.79 to 9.81 of the report, which should be implemented in full to reduce the potential impact on local receptors. The conclusions relating to noise from the operational phase are based on the fact that the main processes will take place within the building envelope which will be designed to provide a sound reduction index of 20dB. All external activities will be screened from nearby noise sensitive receptors and all goods vehicle movements will take place during the daytime only. A further noise impact assessment will be necessary if any of the operations are at variance from the assumptions/conditions detailed above. I would therefore concur with the mitigation measures as detailed in section 9.88 of the report, which should be implemented in full to reduce the potential impact on local receptors.

Second response to initial consultation

154. Charnwood Borough Council has raised concerns regarding the potential adverse air quality impact of the proposed development on Cow Hill Lodge (the nearest residential property to this development) as measurements of nitrogen dioxide concentrations elsewhere on Ashby Road suggest that levels at Cow Hill Lodge might breach the air quality objective standards.

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Table 1 - National Air Quality Objectives for Nitrogen dioxide

Pollutant	Time Period	Objectives
Nitrogen dioxide	1- Hour mean	200ug/m <sup>3</sup> not to be exceeded more than 18 times a year
	Annual mean	40 ug/m <sup>3</sup>

**Non-Automatic Monitoring**

Since the completion of the CBC's first review and assessment of air quality it have sought to continuously update and improve its monitoring network throughout the Borough. During 2008 Nitrogen dioxide diffusion tubes were deployed at 35 sites (tubes in triplicate being used at 3 automatic monitoring sites) with additional site including Cow Hill Lodge. Tubes were located as close as practicable to receptor locations – usually on the façades of residential properties. There are two sets of tubes in the Shepshed area as detailed below.

Table 2 - Location of tubes in Shepshed

Site Name	Site Type	OS Grid Ref	Pollutants Monitored	In AQMA (Y/N)	Relevant Exposure ? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case location?
Cow Hill Lodge (Shepshed)	Road side	X 448876 Y 318307	NO <sub>2</sub>	N	Y (façade)	~10m	Y
Ashby Rd Central (Shepshed)	Road side	X 448121 Y 318257	NO <sub>2</sub>	N	Y (~12m)	2m	Y

155. A review of Monitoring data throughout the borough for 2008 shows that the **40µgm<sup>-3</sup>** annual mean objective for NO<sub>2</sub> was exceeded at the following monitored locations:

1. Ratcliffe Rd (Loughborough)
2. Leicester Rd (Loughborough)
3. Alan Moss Rd/A6 Derby Rd (Loughborough)
4. High St (Loughborough)
5. Ashby Rd (Loughborough)
6. **Ashby Rd Central (Shepshed)**
7. Baxter Gate (Loughborough)

With the exception of the Shepshed site; all the above locations fall within the existing Loughborough Air Quality Management Area. It is widely accepted that

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the annual mean concentration of nitrogen dioxide reduces rapidly with increasing distance from the kerbside (Laxen and Marner, 2008). DEFRA have recently issued their latest Technical Guidance for Local Air Quality Management (LAQM.TG08) in which they have included a calculator which allows measurements made at the kerbside to be used to predict concentrations further from the road ie. at receptor locations. Once this correction is applied the result for the roadside tube at Shepshed falls within the objective level.

There have been no other exceedences recorded for 2008.

156. **Comparison of Monitoring Results with AQ Objectives**

Table 3 - Nitrogen Dioxide Results for 2008

Site ID	Location	Within AQMA?	Data Capture 2008 %	Annual mean concentrations ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias		
				2006	2007	2008
16	Cow Hill Lodge (Shepshed)	N	42	-	-	36.1
26	Ashby Rd Central (Shepshed)	N	100	40.2	50.7	<b>47.6</b>

There are no sites recording more than 18 1-hour means above  $200\mu\text{g}/\text{m}^3$ , however as stated above there are a number of exceedences of the  $40\mu\text{g}/\text{m}^3$  annual mean. All of these sites, with the exception of one, occurred in areas already declared as part of an AQMA.

The one outstanding site (Ashby Rd Central, Shepshed) is a roadside location where the tube is positioned approximately 12m away from the façade of the nearest receptor.

Using the “NO<sub>2</sub> with Distance from Roads Calculator” (Issue 2) available from the UK Air Quality Archive, it is possible to calculate the distance NO<sub>2</sub> falloff between the kerbside tube and local receptors. Using this calculator the concentration at the receptor is shown to be  **$32.7\mu\text{g}/\text{m}^3$** .

Now that new correction figures have been applied to the kerbside levels for nitrogen dioxide, CBC’s initial concerns may have been unnecessary as the levels at Cow Hill Lodge ( the nearest residential property) is predicted to be within the Air Quality standards.

**North West Leicestershire District Council - Planning**

157. Response not received at the time this report was published.

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### **Shepshed Town Council**

158. Objects to the proposal. A copy of its full response is appended to this report as Appendix A.

### **Environment Agency**

159. Subject to the imposition of conditions relating to contaminated land risk assessments, piling, surface water drainage, flood risk from Shortcliff Brook the Environment Agency (EA) raises no objection. The EA also makes the following comments:

- The developers should adopt all appropriate pollution control measures, such as oil interceptors, drainage schemes etc., both underground and on the surface, to ensure that the integrity of the aquatic environment, both groundwater and surface water, is assured.
- As great crested newts are near to the site and ponds are present then even though none are present on the site it will still be necessary for the presence of the species to be monitored during site work. Should newts be found work must cease and a competent ecologist asked to produce an amelioration proposal.
- If a new abstraction licence is needed for the water supply for the boiler feed, this should be discussed with the Environment Agency at the earliest opportunity.
- We believe that we need to create less waste, recycle more and maximise the use of residual waste in a safe and environmentally friendly way.
- We believe that recovering energy from residual waste can contribute to a balanced energy policy.
- We also consider that energy generated by incineration should be recovered as far as practicable, for example using Combined Heat and Power (CHP) schemes, consistent with the requirements of Best Available Techniques (BAT).

### **English Heritage**

160. Considers that there is insufficient information to provide a full response and requests that further work is carried out in relation to the potential impacts upon Garendon Park (which is included on English Heritage's *Heritage at Risk* register). It also states that it is not convinced by the assessment presently put forward in regard to the Temple of Venus, the Triumphal Arch and the White House within the southern area of the Park and that further photo montages are required to ascertain fully the actual degree of visual impact upon each of these features.

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### **Highway Agency**

161. Raises no objection, subject to conditions relating to external lighting and no external advertisements on the building and the placement of 'queue detector loops' on the A512 Ashby Road East between the site access and the M1 motorway junction 23 to allow traffic to be 'flushed' through should there be an exceptionally large build up of traffic in the vicinity of the site access.

### **Natural England**

162. No objection, subject to the imposition of conditions relating to the long term landscape management of the site to protect the great crested newt population.

### **Health and Safety Executive**

163. No objection.

### **Central Networks**

164. No objection.

**Arqiva** (responsible for providing the BBC and ITV's transmission network)

165. No objection.

### **Severn Trent Water**

166. No objection, subject to the imposition of conditions relating to the disposal of surface water and foul sewage.

### **Commission for Architecture and the Built Environment (CABE)**

167. Whilst applauding the applicant's commitment to commissioning a well designed building, it is considered that, given the prominent location adjacent to the M1 motorway, the scale and building type demands a particularly accomplished and ambitious design. It is considered that the curved envelope has the potential to be successful but the overall design has not achieved the high design standard required for the location with further work required in particular in regard to materials and detailing.
168. CABE considers that the curved form of the building creates a pleasing object but the applicant needs to do more to develop a convincing relationship to its particular location. CABE believe that these buildings, which in addition to processing waste produce renewable energy and generate economic value, should inspire a more ambitious and bold design.
169. CABE states that it would welcome facilities which exhibit some of the internal processes and suggest exploring a design which, for example, includes transparent or translucent elements in the form of display windows. The long term success of the scheme also depends on robust detailing and high quality materials which require little maintenance and the design team is urged to revisit their proposal and simplify and refine the choice of material and detailing

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which at present appears over-complicated and potentially vulnerable in terms of weathering and ageing. The proposed building envelope is wrapped competently around the complex plant equipment underneath, but it does not think that the proposal has yet achieved the high design standard required for this location; the proposal requires refinement and needs further work, particularly regarding materials and detailing.

170. CABE considers that the design of the landscape responds well to the building and shows a commendable grade of care and detailing. For example, the car park is successfully integrated into the overall site layout.

#### **Civil Aviation Authority**

171. No objection, but advises that East Midlands Airport and the Ministry of Defence are consulted directly regarding the proposal.

#### **Ministry of Defence – Defence Estates Safeguarding**

172. No objection.

#### **East Midlands Airport**

173. No objection subject to conditions relating to details of cranes to be forwarded to the airport in advance of their erection, aviation warning lights for the flue stacks, and that there be no feeding of wildfowl on the site. It also requests that the floating reedbeds proposed to mitigate the impacts on the great crested newts be deleted from the scheme to reduce potential bird strike hazard.

#### **Leicestershire and Rutland Wildlife Trust**

174. No response received at the date this report was published.

#### **The National Forest Company (NFC)**

175. The NFC is disappointed that the proposal only promotes restoration initiatives for the Newhurst site with no proposals for Longcliffe Quarry, unlike the previous landfill permission. It also considers that the proposed built development will have significant visual impact from local viewpoints to the detriment of the character and appearance of the landscape.
176. The NFC considers that there are several potential habitats within 500 metres of the site which have not been surveyed and there is the potential for more protected species to be using the site than that suggested in the ES. The specialist views of Natural England and the County Council's ecologist should be sought.
177. The NFC objects to the proposed restoration proposals on the basis that the application puts in jeopardy the complete restoration of the two quarries and that the County Council should pursue the comprehensive restoration of the wider site area.

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178. If permission is granted, the NFC wish to see increased public access to the wider quarry site, long term woodland and heathland management and the potential for recreational rock climbing to be investigated.

### **Campaign to Protect Rural England (CPRE)**

179. The CPRE objects to the proposal and claims that incineration presents an unacceptable risk to health and states that the no decision should be made until the other [PFI] schemes come forward. It also considers that the application possibly represents a case of planning prematurity. CPRE considers that there is insufficient waste in the County to maintain such a proposal and that, as the figures used to calculate the needs assessment are from 2003, they are well out of date.
180. The CPRE is concerned that incineration would impact upon the current upward trend for recycling and that waste could be imported long distances to fuel the plant, which would be unsustainable in terms of miles travelled. It is also worried that as the WDF states that incineration is the ‘best economic solution’ [in dealing with the County’s waste], planning decisions may be made on economic grounds rather than sustainability grounds. *Note: the WDF states that ‘In terms of procurement, it has been identified at this stage that the best economic solution for the county is to develop an Energy from Waste facility with Combined Heat and Power’ and ‘the [PFI] tender process will not specify Energy from waste but will seek proposals from companies for dealing with the county’s municipal waste’.*
181. The CPRE states that the proposal would have unacceptable impacts on local air quality and would have serious impacts on the health of those living in the locality. It is particularly concerned about the impacts of PM10 and PM2.5 particulates emitted from the stacks and HGVs associated with the site. The CPRE also claims that the dioxins and furans pollution from incinerators is linked to several major health issues and that the Health Protection Agency’s stand on the subject of incineration is wholly inadequate and incorrect.
182. The CPRE concludes that the County Council should seek alternative waste management processes such as anaerobic digestion, that waste recovery from waste is one of the least preferred environmental options, and that exposing the public to fallout from the flues very likely presents an infringement on Article 2 of the 1998 Human Rights Act and the European Convention.

### **Leicestershire Leicester and Rutland Primary Care Trust (PCT)**

183. States that the application is for planning permission for which it is not a statutory consultee. The Health Protection Agency is looking at the application and will comment in due course. It is understood that an environmental permit will be required for this scheme and the PCT will comment at that stage as a consultee.

### **Leicestershire Fire and Rescue Service**

184. Response not received at the time this report was published.

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### **Health Protection Agency**

185. Raises no objection and makes the following statement on the process of incineration:

"The HPA has, following a comprehensive review of the latest evidence, issued an updated position statement on Municipal Solid Waste Incineration that states:

The Health Protection Agency has reviewed research undertaken to examine the suggested links between emissions from municipal waste incinerators and effects on health. While it is not possible to rule out adverse health effects from modern, well regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health and on the fact that modern and well managed municipal waste incinerators make only a very small contribution to local concentrations of air pollutants.

The Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment has reviewed recent data and has concluded that there is no need to change its previous advice, namely that any potential risk of cancer due to residency near to municipal waste incinerators is exceedingly low and probably not measurable by the most modern techniques. Since any possible health effects are likely to be very small, if detectable, studies of public health around modern, well managed municipal waste incinerators are not recommended.

The Agency's role is to provide expert advice on public health matters to Government, stakeholders and the public. The regulation of municipal waste incinerators is the responsibility of the Environment Agency."

The full text is available from:

[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1251473372218](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1251473372218)

### **Leicestershire Local Access Forum**

186. The Forum is concerned that there are no firm restoration proposals for the Newhurst and Longcliffe quarry voids. It wishes to see increased public access through the wider site utilising the underpass under the M1 motorway with a new car park in the bottom of Longcliffe quarry.

### **Garden History Society**

187. Response not received at the time this report was published.

### **National Farmers Union**

188. Raises concerns relating to the potential for dioxins to be emitted from the facility which would be detrimental to local farmers' crops and produce.

**Leicestershire County Council – Landscape Advice**

189. The building and surrounds are of high quality design, and there are no major concerns in this respect, although the scale of the proposal is of concern. The proposals for external surfacing and fencing are broadly acceptable; details of these elements could be approved by condition.
190. There are concerns regarding the proposals for the protection of existing trees by means of demarcation pegs at 5m intervals and areas of scrub regeneration, although these issues could be covered by condition.
191. The landscape masterplan proposals are broadly acceptable subject to ground amelioration, planting and aftercare details being covered by condition.
192. The 2007 landfill permission provided a mechanism for the restoration of the whole of the former quarry site. Paras. 3.42 and 3.81 (Vol 3) of the current application assume that the quarry workings would be restored in accordance with the extant mineral planning permission, as shown on Midland Quarry Products' drawing no. C120/4 (October 1997). However, this is only an outline proposal and no detailed submission has been made or approved. The current application line is drawn more tightly, leaving a question mark over what happens to the remainder of the quarry site. This issue needs to be resolved to ensure appropriate long-term land management for this area.
193. The photographs provided for each of the viewpoints appear to be accurate and it is good to see both summer and winter images included. However, it is very difficult to tie up the text at paras 7.165-7.240 with the viewpoint photographs. I would like to see the viewpoint photographs annotated to indicate the main landscape features being referred to and the position of the proposed development within the view.
194. The viewpoint descriptions are often rather vague in their description of the visual impacts, which is disappointing given the scale of the development. For example, where the flue stack is described as breaking the skyline it would be helpful to have some indication of the magnitude of this. (Paras 7.232 and 7.233 are more helpful in that they describe the height of the building in relation to the height of the existing GLW Feeds' Mill and the height of the flue stacks in relation to the existing pylon.) I would particularly like to be able to identify clearly the impacts on the distinctive Charnwood Forest skyline, viewed from the north and the east.
195. The two photomontages are very helpful. The one for Viewpoint 6 in particular demonstrates the massive scale of the building. The visual impacts of the mass and height of the building and the height of the flue stack, combined with the plume/cloud, concern me and I think that more visual representations are needed in order to fully understand these. The fly-through provided on disk is helpful to some extent, but does not cover all the viewpoints. I am mindful here of Local Plan policy CT/7 regarding the introduction of visually intrusive elements within APACs and Waste Core Strategy policy WSC10 regarding the need for the scale of development to reflect and complement the character of the surrounding landscape.

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196. It is considered that VR stills from within Garendon Park would be helpful, as I feel that the visual impact on the Historic Park and Garden may have been underestimated, and also a VR from the northbound M1, where the fly-through suggests that the building has a considerable presence in the views experienced in a short section approaching J23.
197. At para 7.155 and Table 7-6 I would question the sensitivity allocated to some of the viewpoints, although I recognise that there is a degree of professional judgement involved here. Public rights of way would generally be regarded as being high sensitivity viewpoints; vehicular routes would generally be regarded as being medium sensitivity.
198. Concerns were also raised regarding the degree of overlap allowed between the individual frames of the panoramic images. Whilst it is considered that the assessment covering lighting impacts is adequate, there are also concerns regarding the translucent facades at night time and during the winter months when internal lighting would be required.

**Leicestershire County Council – Public Rights of Way**

199. Wishes to see a usable public right of way between Shepshed and Nanpantan utilising the site and the underpass under the M1 motorway in order to provide a genuine green infrastructure gain from the proposal.

**Leicestershire County Council – Archaeology Advice**

200. No objection on archaeological grounds. With the exception of the line of the Charnwood Forest Canal, the site possesses only a limited potential for preserved buried archaeological remains.
201. Notwithstanding the above, the County Archaeologist raises concerns regarding the impacts from the development on the character and setting of Garendon Park and advises that English Heritage must be consulted on this matter.

**Leicestershire County Council – Highway Authority**

202. No objection subject to the imposition of conditions relating to improvements to the site access, HGV routeing, and green travel plans.

**Leicestershire County Council – Ecological Advice**

203. Wish to see clarification relating to the Ecological Target Notes contained within the ES. Raises concerns relating to public access to the quarry void area due to potential impacts on protected species including the great crested newt population and sensitive nesting birds including peregrine falcons.

**Second Consultation - May 2010**

204. The applicant submitted additional information on 29<sup>th</sup> April 2010, focusing mainly on landscape and visual impacts and impacts upon archaeology and cultural heritage assets, and which sought to address various concerns raised by the consultees. This information was subject to another round of formal

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consultation as required by Regulation 19 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

205. Biffa would accept the proposed conditions suggested by the Highways Authority but questions the need for wheel cleansing, as given the design of the site, road-borne traffic will be kept separate from site vehicles and would only run on hard surfaced roads. Biffa would also accept conditions relating to the appearance of buildings, a review of restoration proposals, management of existing woodland and provision of a habitat management plan.

### **Highways Agency**

206. Considers that the applicant has addressed their concerns and raise no objection subject to a condition relating to the road improvements being completed prior to the development coming into use.

### **English Heritage (EH)**

207. Considers that the fundamental issue remains. The Impact Assessment is clear that the scale of the proposed ERF “is greater than any existing feature visible from the park ... and contrasts with the overall impression of a rural setting, though with encroachments”. The impact of the proposal is illustrated in the accompanying drawings, in particular NH 7/35, which record a view from the Temple of Venus to the west with the Triumphal Arch and the ERF both in view and the impact undeniable, even though the accompanying assessment seems prepared to play down this ‘the proposed building is off-set from this feature and thus does not wholly detract from the designed view’.
208. Viewpoint NH 7/34 records the proposal against the skyline to the south as introducing a ‘noticeable industrial addition’ to the skyline and that the development ‘would cause a noticeable difference to the landscape’.
209. EH remain unconvinced that the character and setting of the historic park, and the setting of the listed buildings within it, would not be further eroded by this development, irrespective of the present condition of the park. EH consider that the applicant’s view that the overall assessment of significance of impact as *moderate adverse*, despite the new data, underplays the actual impact.
210. PPS 5, *Planning for the Historic Environment* is clear in HE9.1 that “there should be a presumption in favour of the conservation of designated heritage assets...significance can be harmed or lost through alteration or destruction of the heritage asset of development within its setting”. In addition, substantial harm to a grade II park and garden should be *exceptional* and to a grade I or grade II\* heritage asset *wholly exceptional*. EH consider that a reliance on high quality design as mitigation in a development of this scale could satisfy the requirements of HE7.7, which relates to securing planning conditions and obligations to balance loss of significance against the merits of a development. Nor could the application be seen to meet the test of HE10.1 which encourages planning authorities to better consider applications which “make a positive contribution to or better reveal the significance of the asset”. HE5.1 encourages local planning authorities to pay particular attention to such heritage assets which are recognised to be at risk of loss or decay.

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211. Accordingly, EH objects to the proposal and recommend that planning permission be refused for the aforementioned reasons.

### **Leicestershire County Council – Built Heritage Advice**

212. I am pleased that additional information has been submitted which helps in the understanding of the impact of the proposed development on Garendon Park, a grade II Registered Park and Garden, and some of the important historic buildings and structures set within it; notably the grade I Triumphal Arch, the grade II\* Temple of Venus and the Lodge and White Lodge, both listed grade II. I have been able to visit part of the park and make a visual assessment of my own as well.
213. It is the statutory duty, under the Planning (Listed Buildings and Conservation Areas) Act 1990, to have regard to preserving the setting of listed buildings. Government policy in respect of listed buildings and registered parks and gardens has recently been revised following the publication of PPS 5. English Heritage in their letter of 10<sup>th</sup> May appears to have done a thorough job of identifying the most relevant policies and their bearing on the current application. The policy relating to the protection of setting (HE10.1) is of particular relevance - especially given the statutory duty noted above. The policies which require you to have regard to the status of the heritage assets affected by the proposal (HE9.1), must also be taken into account given the high grade of two of the listed buildings affected by the proposal.
214. There would be no direct physical impacts from the proposed energy recovery facility on the built heritage of the area, but it is considered that, from knowledge of the locality and examining the submitted information, the development will affect significantly the setting of several historic assets of national interest. The proposed facility by virtue of its location, scale and massing will be visible for a considerable distance, including from parts of the park and also the listed structures referred to above. Views in and out of the area contribute to the immediate and wider setting of these heritage assets and the new facility will clearly compete with their dominance in the broader landscape. Escaping steam will inevitably add to the prominence of the tall chimney and from certain vantage points the facility, because of its size and location, will be the most dominant landmark, competing with established features such as the Temple of Venus and White Lodge, whose listing description notes that it was 'remodelled as an eye catcher'.
215. The new facility, which is essentially a large industrial building, will contrast unfavourably with its rural location; other nearby modern industrial and office development on the A512 and its junction with the M1 and illustrates the damage which can be caused by such incongruous development. It is a matter of opinion as to how significant the additional intrusion will be but the assessments submitted with the application appear to underestimate the harm caused by the development.

**Leicestershire County Council – Landscape Advice**

216. The landscape officer remains concerned that the long term land management of the area outside the current application boundary, but within the applicant's control, is an issue that needs to be addressed, even if it is not appropriate to do this within the current application process.
217. The additional information is helpful, particularly the additional viewpoint assessments. However, the landscape officer does not agree with all of the assessments made at Appendix 1. For example, from a number of viewpoints it is stated that the building would appear as part of nearby built up areas, which is disputed. It should be noted that the inevitable limitations of photography tend to reduce the visual impression that is obtained in the field, where the landscape generally appears closer with features discernible in more detail.
218. The landscape officer notes that not one of the photomontages and visual representations include the plume. The Landscape and Visual Assessment estimates that this will be visible 10-15% of the time, with a height of 20-500m, manifesting as a free-standing cloud. As such it will tend to draw the eye and contribute to a perception of industrial character, even from locations where the main building may not be visually intrusive.
219. With regard to Garendon Park, in all three of the additional viewpoints the massive scale of the proposed ERF and its stark appearance in contrast with the surrounding landscape is apparent, especially bearing in mind that photographs tend to 'flatten' what is actually seen with the naked eye. The claim that the curved roof profile reflects the rolling Charnwood Forest skyline and thus reduces the overall contrast of the character and scale of the new building is unconvincing and the assessment itself acknowledges that the building would provide '*a noticeable industrial addition to the generally wooded skyline*'.
220. The limitations of the VR model in producing images of potential views from the M1 are noted. However, they do bear out previous concerns about the considerable presence and visual impact of the building in both northbound and southbound views. This is of particular importance in southbound views as the site is located at what is effectively the 'entrance' to Charnwood Forest.
221. Both SLR (SLR Consulting, agents for the applicant) and the landscape officer agree that *sensitivity gradings* are ultimately a matter of professional judgement on the part of the individual landscape architect carrying out the assessment, and it is therefore always likely that there will be some divergence of that judgement. (It is the landscape officer's judgement that VP7 on the Lubcloud Farm bridleway and within the APAC designation and the National Forest should have been allocated a High sensitivity.)
222. It is noted that the individual photographic frames have a 20-40% overlap. SLR will be aware that the Guidelines for Landscape and Visual Impact Assessment recommend a 50% overlap between adjacent photographs. This minimises image distortion.

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223. With regard to the Additional Supporting Information for the Archaeology and Cultural Heritage Assessment, the additional information acknowledges the scale of the proposed ERF and its contrast with the existing overall impression of a rural setting. As commented above, the landscape officer does not agree with the assessment that this visual impact is mitigated by the reflection of the undulating skyline in the proposed building's roofline.
224. In the light of the additional information provided to assist in the landscape and visual impacts of the proposal, the landscape officer objects to the proposal on grounds of its scale and intrusive appearance on the edge of the Charnwood Forest.

### **Highways Authority**

225. No objection, subject to a condition.

### **CPRE**

226. Objects on grounds of health impacts and that better alternative waste treatment methods exist.

### **CABE**

227. Considers that its earlier views still stand.

### **Third Consultation - September 2010**

228. The applicant submitted further additional information relating to a potential restoration scheme for Garendon Park on 26<sup>th</sup> August 2010 in response to the objections raised by English Heritage and the County Council's Landscape Architect. Again this information was sent out to the relevant consultees for their comments.

### **English Heritage**

229. We have now reviewed the most recent information and although the report undoubtedly demonstrates a far greater understanding of the historic assets concerned, but without the benefit of any structural or condition survey of the listed buildings, we find the mitigation proposals disappointing.
230. This application presented a rare opportunity to enhance and safeguard the historic character of Garendon, to reveal and reinforce the role of the listed buildings within the landscape. Instead, despite previous agreement that it was reasonable to concentrate activity on the southern area of the park where the main assets are located, the mitigation proposals are constrained only to marginal replanting along the ridgeline in close proximity to the listed buildings within that area. The planting, which is based on a 1777 survey of the park, would see the form of radial avenues around the temple of Venus and the 'wine glass' to the fore of another listed building, White Lodge, only partially reinstated, with woodland blocks in between. This would, in effect, block views out from these buildings towards the application site but fail to consider, or reflect, the wider design intent of the landscape, or of views of it.

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231. There would be no continuum of the avenues across the south park, as these would interfere with the existing farming operations. Interestingly, this present reinstatement proposal is a far reduced scheme than that previously put forward as part of the western expansion of Loughborough in 2007 (which remains subject to the conclusion of the Charnwood Core Strategy) that would have seen the conversion of Garendon into a Country Park. We do note in Biffa's covering letter that the De Lises and their partner developers for that scheme, Persimmon Homes and William Davis Homes, are broadly supportive of these subsequent proposals.
232. The current proposals make no reference to the listed buildings. English Heritage specifically encouraged a holistic view of the environment at a previous meeting with the applicant and officers of the County Council, in the knowledge of the condition of the buildings. Biffa also volunteered an annual financial contribution to the maintenance of the listed structures within the park at that meeting.
233. Regrettably the mitigation measures now proposed cannot be said to satisfy our requirements and would fail if tested against PPS5, specifically HE7.7, which concerns securing planning conditions and/or obligations to balance loss of significance against the merits of a development. The guidance is clear that substantial harm to a grade II park and garden should be *exceptional* and to a grade I or grade II\* heritage asset *wholly exceptional*. We hope that there still may be opportunity to revise these mitigation proposals in order to obtain the most beneficial outcome for the historic environment at risk at Garendon.
234. English Heritage is aware that there is a possibility of this application proceeding to Public Inquiry. There are a wide range of concerns related to this application, outside its detrimental impact on Garendon Park, which may lead to a refusal of planning permission. However, should the application be dismissed on heritage grounds, we would be willing to consider how English Heritage could provide evidence in some form in support of Leicestershire County Council's decision.

### **Leicestershire County Council – Further Archaeology Advice**

235. Given that the proposals are designed to address the implications of the development upon the setting of the Registered Park and the Listed structures therein, the objections raised by English Heritage should be referred to.
236. In the event of a solution that involves reinstatement of the historic landscape, it is first recommended that the applicant undertake further targeted fieldwork to justify and refine their proposals, for example geophysical survey and trial trenching. This should aim to establish the actual character of the landscaping scheme, confirming and/or clarifying the layout depicted in the historic plan. It is notable in that context, that the current aerial photographic evidence (revealed as cropmarks) doesn't clearly correlate with the documented layout. The suggested fieldwork should be designed to confirm the width of avenues, separation of trees, density and character of tree planting, treatment of surfacing, etc. This information may be used to ensure the accuracy of the proposed planting scheme and minimise impact upon underlying archaeological remains.

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237. In addition to the designated assets, the submitted proposal identifies the presence of otherwise undesignated heritage assets (PPS5 HE7.1) within the proposed landscaping area, notably the postulated extent of the former deserted medieval village of Garendon (HER ref.: MLE580) and an associated cropmark enclosure (MLE576); the latter is of uncertain character and might prove to be either later prehistoric or Roman in date. Other archaeological remains have been noted in the vicinity include a further cropmark enclosure c. 300m to the south of the Triumphal Arch (MLE575) and medieval pottery found 90m south of the Temple of Venus, possibly reflecting a southerly extension of a medieval village.
238. As yet the extent, character and crucially significance of these archaeological remains is unclear, as such it is recommended that the applicant is requested to undertake a further stage of archaeological investigation comprising both non-intrusive (fieldwalking and/or geophysical survey) and targeted intrusive (trial trenching) archaeological techniques. This work should be undertaken and the results submitted to the planning authority in advance of the finalisation of any landscaping proposals, to inform the design of the scheme, the need for and character of any appropriate mitigation and to assist with the determination of the current application.
239. The preservation of archaeological remains is, of course, a “material consideration” in the determination of planning applications. The proposals include operations that may significantly truncate or destroy any buried archaeological remains present, but the archaeological implications cannot be adequately assessed on the basis of the currently available information. Since it is possible that archaeological remains may be adversely affected by this proposal, we recommend that the planning authority defer determination of the application and request that the applicant complete an Archaeological Impact Assessment of the proposals.
240. Normally it would be appropriate for this information to be submitted to the planning authority before any decision on the planning application is taken, so that an informed decision can be made, and the application refused or modified in the light of the results as appropriate. Without the information that such an evaluation would provide, it would be difficult in our view for the planning authority to assess the archaeological impact of the proposals.

### **Leicestershire County Council – Landscape Advice**

#### Biffa letter - 26 August 2010

241. The section of this letter covering Design and Size seeks to dismiss objections relating to visual impact by claiming that objectors find the proposal unacceptable simply because it is big and therefore visible. The visual impact of the proposed development is linked not just to its size but to its scale relative to its surroundings.
242. CABE’s comments dated 5 February 2010 are quoted selectively. CABE commented that, *‘we do not think that the proposal has yet achieved the high design standard required for this location’* and *‘the proposal needs to do more to develop a convincing relationship to its particular location’*. Although no one

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from CABE visited the site and its surroundings, the CABE response acknowledges the prominence and highly visible nature of the site.

Additional supporting information for the Landscape and Visual Impact Assessment

243. As I have commented previously, the inevitable limitations of photography tend to reduce the visual impression that is obtained in the field, where the landscape generally appears closer with features discernible in greater detail. I strongly agree with Paragraph 3.2 which suggests that ideally all visualisations should be taken into the field to provide the best practical comparison with what can be seen by the naked eye.
244. Paragraphs 3.3 and 3.4 relate to my comments on additional information submitted in April 2010 as Appendix 1, Table 1: Additional Visual Analysis for Individual Viewpoints. In particular I questioned the claim in this document that from VP3, VP7, VP10 and VP11 the proposed development would be seen as part of the built up area of Shepshed and/or Loughborough. The additional supporting information now refers to the proposals being seen 'as part of the nearby built up areas and lower lying areas' and seeks to identify the proposed development as being part of a low-lying settled area which is seen within the landscape as being a distinctly separate area from the more elevated Charnwood Forest landscape. This does not really answer my original query but attempts to open up a different area of debate.
245. The Landscape Offer re-visited VP10 and considers that the visualisation on NH7/29 considerably exaggerates the visible extent of Shepshed. The text of the additional supporting information further exaggerates this by claiming that from this viewpoint 'the visualisation shows Shepshed immediately located to the left, right and in front of the ERF building'. Examination of the visualisation shows that this is incorrect.
246. I remain of the opinion that the location and nature of the building mean that from a number of viewpoints it would be seen as a separate structure distinct from the existing built up areas of Shepshed or Loughborough.
247. I note that additional photomontages have not been prepared as part of this report. My notes of the meeting with SLR on 18 May 2010 show that we were expecting additional photomontages to be produced for VP7 and VP11, and that these were to include an indication of the plume.
248. Paragraphs 3.5 and 3.6 discuss the issue of photomontages of the plume. Whilst I appreciate that there are some difficulties associated with this, I had expected to see something that would give an appreciation of the potential scale of the plume. I note that paragraph 3.6 acknowledges the possibility that under certain conditions the plume may draw the eye and contribute to a perception of industrial character, including from locations where the building itself may not be visually intrusive. I am not seeking to give excessive emphasis to the potential impacts of the plume, merely to properly acknowledge that those impacts exist and to gain some understanding of their visual scale. The existence of other plumes in the area does not constitute a justification for introducing a further similar impact.

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249. Paragraph 4.2 regarding impacts on Garendon Park raises similar issues to those already mentioned regarding building design. It is acknowledged that the curved roofline is preferable to a rectilinear design, but it is the bulk and scale of the building that is the real issue. A building of 'exemplary architectural design' may nevertheless have an unacceptable landscape and visual impact. The quote at paragraph 4.2 from Box 5.1 of the Guidelines for Landscape and Visual Impact Assessment begs the question of whether this building in this location does fit comfortably with its surroundings. In my view it does not.
250. Paragraph 5.2 discusses at length the question of the appropriate sensitivity grading for VP7 which is located on a public right of way within both an APAC and the National Forest. The Guidelines for Landscape and Visual Impact Assessment in discussing the sensitivity of visual receptors suggest that the most sensitive receptors may include, 'users of all outdoor recreational facilities including public rights of way, whose attention or interest may be focused on the landscape' and it is usual within individual landscape and visual impact assessments to give all public rights of way the same sensitivity grading.
251. The discussion at paragraph 6.2 of this location being a 'gateway' to Charnwood Forest is correct in that this is not a formally recognised designation. However, topographically, visually, and in terms of its relationship to the Charnwood Forest landscape character area boundary, J23 is very close to the boundary of Charnwood Forest (and also the National Forest) and may thus be regarded as an entry point in a way that does not apply to either J22 or J21a.
252. Paragraph 6.2 also discusses the developed nature of the areas surrounding Charnwood Forest. This reflects the historic settlement pattern. The existing industrial buildings to the west of J23 are of a lesser scale than the present proposal. The proposed Science Park will not be an industrial development but a 'high quality, low density development within a parkland setting'. It is purely speculative to suggest that the Science Park 'could' 'possibly' include high-rise buildings.
253. Drawing NH7/40 shows the Zone of Theoretical Visibility (ZTV) for the building mass and drawing NH7/41 shows the ZTV for the stack. As would be expected the stack is theoretically visible over a wider area than the lower level building mass. The exception to this appears to be to the north, east and south-east of Loughborough, where the building mass is shown as theoretically visible from an area extending from Normanton on Soar round to Prestwold, Barrow upon Soar, Buddon Wood and areas north of Woodhouse, whilst the stack is not theoretically visible from these areas. I would have to question if this is correct.
254. It remains the view of the Landscape Officer that this proposal would have unacceptable adverse landscape and visual impacts, and does not complement the character of the Charnwood Forest landscape in its siting, scale and design.

Garendon Park Partial Restoration

249. The proposals are lacking in some important details in respect of the planting. I note that the avenue trees are proposed to be planted as 2.50-3.00m specimens. No spacings for these trees are given, but the Tree Advice Trust's

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Arboricultural Practice Note 'Management of Avenue Trees' (APN9, May 2004) suggests a minimum final distance of 7-10m for *Tilia europaea*. A stand-off would be required between the avenues and the woodland blocks to allow the avenue trees to develop properly. This is not considered in the report or apparent from the plan at Figure 8. It is also unclear what is proposed to happen in respect of existing tree lines on the Temple of Venus/Triumphal Arch axis.

250. Whilst this proposal would in time partially mitigate the visual impacts upon the White Lodge, Triumphal Arch, Temple of Venus and parts of the wider registered park, the timescale needed to achieve this remains a matter of concern.

### **Applicant's Response to the Consultees' Comments**

251. The applicant responded to English Heritage's comments by stating that they refute that there are any justifiable planning grounds to refuse consent, either on the issue of the impacts upon the Garendon Park or when the full planning balance of all the issues is undertaken. They state that they are encouraged by English Heritage's desire to explore opportunities "*to revise the mitigation proposals in order to obtain the most beneficial outcome for the historic environment at Garendon*".
252. The applicant understands that the planning authority is not prepared to allow further time for discussion and intends to determine the application on 15<sup>th</sup> October. The applicant states that such mitigation measures could be controlled by a planning condition, or it could leave the matter to be resolved in the context of an appeal (if refused on these grounds).
253. On the issue of a financial contribution to the maintenance and improvement works to the listed buildings within the park, the applicant is offering to provide a sum of £60,000 per annum for each year the facility is operational. The applicant considers that this sum could be secured through a S106 legal agreement.

### **Publicity**

254. The proposal was initially advertised in the Loughborough Echo on 1<sup>st</sup> January 2010 and the submission of additional information was advertised again in the Loughborough Echo on 6<sup>th</sup> May 2010. The application was also advertised by a site notice and 1766 neighbour letters posted to properties within Shepshed and the western part of Loughborough.
255. A public meeting was held on 8<sup>th</sup> March 2010 at Shepshed High School, attended by approximately 320 members of the public together with representatives of the Environment Agency, local County Councillors and members of the Development Control and Regulatory Board. At the meeting questions were raised and statements made on the following matters:
- Excessive vehicle numbers on a stretch of road which is already at or over capacity with long tailbacks at peak times;

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- Additional set of traffic lights would further exacerbate the current problems along Ashby Road East;
- HGV routing and prevention of waste traffic using roads through Shepshed;
- The potential for the emissions from the facility to impact detrimentally upon local air quality which would seriously harm the health of those living downwind of the site;
- The range of wastes proposed to be imported to the site;
- Lack of community benefits arising from the development including limited access when compared to the landfill permission;
- Whether the process would be exothermic (the response from the EA officer was that it would be);
- Other waste management processes exist that are more environmentally friendly and less expensive to operate than incineration;
- An incinerator near Pontypool caused pollution issues to nearby residents to the extent that they were advised not to eat their home produced eggs (further investigations show that this issue arose in the early 1990s from a hazardous chemical waste incinerator with residents' poultry within 200 metres of the stacks being affected. The current application is for a non-hazardous facility and there are no residents in such close proximity to the stacks);
- No carbon capture and storage (CCS) proposed for the facility (due to the relatively small-scale energy generation capacity of the proposed facility there are no legislative requirement for CCS);
- The chimney stacks and building would have a detrimental impact on local visual amenity and on Garendon Park;
- Negative impacts on local house prices;
- Potential impacts from the collection, transport and disposal of toxic fly ash;
- Concerns regarding heavy metals and dioxins being emitted from the stack;
- Concerns about noise, vermin and odour from the facility were raised;
- Mr. Hunt CC raised concerns about the competency of Leicestershire County Council's planning officers to deal with this particular application.

It was apparent that a majority of those residents attending the public meeting were against the proposal and it was asked that this be noted by the Development Control and Regulatory Board.

256. Following the public meeting the County Council held a public exhibition on the evenings of 14<sup>th</sup> and 15<sup>th</sup> April at Shepshed Town Council offices. The purpose of the public exhibition was to allow members of the public to speak to planning officers directly about the proposed development. These were well attended with 36 people signing the register on the 14<sup>th</sup> and 33 on the 15<sup>th</sup> (although many others who attended did not sign our register). Most of those on the register left comments with the vast majority objecting to the proposals on similar grounds to those mentioned in the previous paragraph with no one supporting the application.
257. 45 attendees filled in pro forma feedback sheets at the event, with many requesting further information on numerous matters. All the feedback sheets that requested further information were responded to (except those without contact details).

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### **Representations Received**

258. Resulting from the above publicity, 1545 representations have been received. An analysis of the representations has identified a multitude of issues/areas of concern, which are presented in the following chart. The analysis involved some grouping of similarly natured concerns, in order to identify the main areas of concern.

	<b>Issues Raised</b>	<b>Number</b>
1	Air Pollution/Impact on Climate	1497
2	Health	1499
3	Increased Traffic/Congestion/Carbon footprint of traffic coming from outside local area	1491
4	Landscape/Visual Impact	1367
5	Impact upon nearby listed buildings including erosion of buildings through pollution (12 Listed Buildings in Garendon Park).	786
6	Conflicts with agreed restoration of quarry for public use/harms regeneration plans for area.	725
7	Impact upon soils/agriculture/organic farms.	425
8	Does not utilise waste heat	365
9	Investment could be better directed on other measures to reduce/recycle waste.	240
10	Ecological Impact	158
11	Undermines recycling/other waste processes/zero waste strategy	105
12	Proximity to residential areas	77
13	Impact upon Charnwood Forest/National Forest	60
14	Impact upon reputation of university	34
15	Noise pollution	32
16	Impact on property and land values	26
17	Discourages investment and has limited employment benefits.	24
18	Odour	15
19	Impact upon recreation/tourism	16
20	No need for incineration plant, burning other counties' waste.	14
22	Dust	6
23	Impact upon local business	5
24	Support	3
25	Vermin	3
26	Water pollution	3
27	Litter being deposited on highway	1

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260. Other issues were raised including:

- New Transport Survey needs to be undertaken.
- Dispersion modelling exercise was not carried out using data from the site.
- Impact upon National Forest. Contradicts County Council's objective to support the National Forest.
- Quarry currently acts as a buffer from the M1, which would be lost.
- Filters not been developed to trap the smallest nitrogen oxides, dioxides and particulate matter from incinerator emissions. These cause most damage to health. CBC Air quality assessments show that the levels of some of these particles exceed EU limits. An incinerator would worsen the situation.
- Incinerator emissions are shown to cause hormone imbalances which can provoke allergies and respiratory problems.
- Short-term employment benefit to area, but limited long term benefit with low staff levels.
- Would discourage businesses from investing in the area with the presence of an incinerator. Site is prime location for business next to the M1.
- Would encourage transportation of waste from outside the county.
- Incinerators emit more CO<sub>2</sub> than coal-fired, natural gas fired or oil fired power stations. Government legislation states new fossil fuel power stations have to include carbon capture technology. Not present on proposal.
- Extent of visual impact not assessed within application.
- Ample landfill disposal sites for dealing with its own waste which have a remaining life of at least 20 years. No need for ERF to deal with Leicestershire's waste.
- Contradicts zero waste policy of Charnwood BC.
- No estimate of average energy consumption per ton of waste delivered to the facility.
- County Council does not have the technical capacity to analyse the implications of the application e.g. air quality section.
- The height of the stack would be an eyesore for miles.
- What benefits would Shepshed gain from the facility?
- Availability of alternative sites.
- Leicestershire County Council announced ERF as preferred option before applications for the PFI project were invited – not democratic.
- Impact upon local visitor attractions such as The Outwoods.
- Proposal to bring waste in by road from other counties contravenes proximity principle in dealing with waste.
- Concerns over treating C&I with municipal waste.
- References to 'The Health Effects of Incineration, 4<sup>th</sup> Report to the British Society for Ecological Medicine, 2<sup>nd</sup> Edition, June 2008', see link below: [http://www.ecomed.org.uk/content/IncineratorReport\\_v3.pdf](http://www.ecomed.org.uk/content/IncineratorReport_v3.pdf)
- Concerns over the process of incineration and ability of applicant to comply with Environmental Permit. Previously fined at other sites for breaching regulations.
- Incineration is not a sustainable option.
- Have meteorological investigations been carried out to determine whether the westerly winds with Soar Valley mists would adversely affect deposition of toxins in Loughborough.

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- 9 proposed incinerators along the M1 corridor (5 of them within 15m of the site). No coordination of sites.
- Incomplete combustion will result in carbon monoxide and smoke being released.
- No guarantee of burning pure hydrocarbons. Plastics, sulphur materials, heavy metals etc. ensure that a pure hydrocarbon furnace is not achievable. Although controlled temperatures can mitigate these, it is inevitable that particles will be released into local environment.
- Impact upon 2 organic farms within close proximity.
- Atmospheric conditions and weather patterns may cause a local source of pollution (i.e. released gases from ERF) to linger, for example through rainfall.
- Large scale incinerator unaccountable and burden upon tax-payers.
- Traffic will back up to the M1 causing congestion.
- Incinerators less efficient than conventional power stations and not under the same regulatory constraints with respect to carbon capture.
- Risk to reputation of area and setting of Loughborough University.
- Concerns that an application will be forthcoming to dispose of ash within the site.
- Not enough is understood about the adverse impacts of incineration.
- Erection of further traffic lights will cause greater congestion.
- Impact upon reputation of Loughborough University.
- Adverse impacts on nearby areas of natural beauty.
- Transportation and disposal of ash is hazardous and will lead to pollution both locally and at the disposal point.
- Emissions limits imposed by the Environment Agency are based on what is achievable rather than what is safe for human health.
- References to Commons Environmental Audit Report as reported by Press Association article 22<sup>nd</sup> March 2010.
- Cities with incinerators have poorer recycling record e.g. 5% in Sheffield.
- No information as to how electricity will be distributed to grid – will there be pylons?
- No information on volume of steam emissions.
- Possibility of technical problems developing and causing a release of toxic emissions.
- Biffa fined previously for breaches of environmental permits.
- Issues over more emissions being released during start up of the incinerator after maintenance.
- Cumulative effect caused by continuous burning at incinerator.
- Cannot guarantee that the required temperatures will be maintained especially during shut down and start up, therefore causing harm to the environment.
- Have studies of emissions been independently verified?
- Design of building based on older German model. Is the operating performance of this plant available?
- Could access not be gained straight from the M1 to the site?
- No details of plans for the restoration of voids of Longcliffe and Newhurst quarries within application. Would like to see these used for rock climbing.

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- 2008 Eunomia report “Greenhouse gas balances of Waste Management Scenarios” states incineration gives less CO<sub>2</sub> reduction than other electricity from waste facilities such as MBT or AD.
- Will clinical waste be processed?
- Concern over fine particles entering the atmosphere and affecting health.
- Information on incineration process, industrial waste and stack emissions have been made available to the public.
- Request for an independent EIA study.
- Where will waste be sourced from?
- UK Health Protection Agency position statement 2009 concludes “it is possible that such small additions could have an impact on health”.
- Data from 24/7 monitoring of emissions should be published daily on the Internet.
- What will it cost the taxpayer?
- In making their report have Highways taken account of the impact which developments such as the extension to the truck stop, new university Science Park and proposed Garendon Park housing estate would make.
- Health impacts of incineration are unknown.
- Impact of proposal on proposed housing estate at Garendon Park.
- Dioxins and small particulates not covered by regulations or legislation will have an impact upon the health of local communities.
- Alternatives sites such as MOD airfield near Wymeswold?
- Newhurst Quarry contains areas of geological interest and the site would compromise studies of these.
- Impacts upon Blackbrook Reservoir – pollution of drinking water supply.
- Statutory monitoring and controls of emissions are inadequate (too brief and infrequent) which could expose local environment and population to potentially severe adverse environmental and health risks.
- HPA statement is misleading – further studies are required to ascertain health impacts of emissions.
- Punitive measures have not been imposed upon operators of incinerators by regulators and do not go far enough in preventing breaches.
- What mitigation measures could be imposed should odour become an issue with the incinerator?
- What assurances are there that the incinerator will not create odour?
- Will monitoring of vehicle movements/breaches be published to allow involvement of the public in reporting breaches?
- Reduced need for the incinerator. Biffa have been dropped as bidders for the LCC waste PFI contract. Would therefore mainly handle C&I commercial waste and increased recycling will greatly reduce this type of mixed waste. Could make better use of non-mixed waste e.g. animal and food waste could feed AD or composting operations. Biffa’s comments on C&I waste are misleading.
- No proven need for the incinerator without LCC waste contract. Other waste streams would be added from outside of the County.
- Landfill waste falling within the county every year and there is spare capacity at existing waste plants in Leicester, Coventry and Nottingham.
- The type of plant proposed performs badly in comparison with other power plants as its net thermal efficiency would be approximately 18-22% compared with 58% for other power plants.

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- Biffa climate change report is misleading, as the high landfill tax means that most non-inert waste would be diverted from landfill even if the proposed plant was not built, with alternatives such as composting and AD producing less CO2.
  - Best available technology has not been proposed by the applicant.
  - The applicant's technology procedures, WRATE analysis and Life Cycle Impact are flawed.
261. A written petition containing 927 signatures and an electronic petition containing 377 signatures (although this has now reached 423 online) objecting to the proposal were also handed in.
262. The written petition stated:  
 "We, the undersigned residents of Loughborough/Shepshed/Leicestershire [*three different forms were used*], object to proposals for an incinerator at Newhurst Quarry (on the A512 near J23 M1 roundabout). Emissions from an incinerator so near to a populated area would endanger the health of residents, contribute to global warming and increase heavy vehicle movements in the area. The visual and landscape setting of Shepshed would also be degraded and regeneration of the Quarry area prevented for the foreseeable future."
263. The online petition states the same as the written petition but only refers to Leicestershire.
264. A representation was received from the Shepshed Against Incineration Action Group and this is appended in full at the rear of this report (see Appendix B)
265. A total of 3 representations were received in support of the proposal.
266. 529 separate representations in the form of a postcard have also been received. These representations object to the use of incineration in close proximity to residential areas and suggest that anaerobic digestion should be the preferred method of dealing with waste arisings. A copy of the postcards can be found in Appendix C.

**Assessment of Proposal**Development Plan

267. The starting point for the assessment of this application is the development plan and other relevant planning policies. In this case the constituent parts of the development plan are detailed in paragraphs 119 – 144 above. Other material considerations also need to be assessed, including the 'fall back' position at the Newhurst Quarry site.
268. The LLWDF Core Strategy policies relate to objectives for waste management that seek to allocate sufficient provision to meet identified needs to enable self-sufficiency within the plan area, locate provision close to waste arisings; limit impacts on the environment and surrounding land uses and users; reduce the amount of road borne related traffic on unsuitable roads; and supporting the recovery of waste, although no particular technologies are preferred over others.

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269. The main strategic policies relating to the site are Policy WLP 15 which allocates a site at Newhurst Quarry for the release of land to establish a new waste disposal site for industrial/commercial and household/civic amenity waste and Policies WCS 2 and WCS 4 of the LLWDF Core Strategy and Development Control Policies document.
270. Policy WLP 15 states that a planning application will only be permitted where a full supporting statement has been submitted and where the operations do not cause environmental harm having regard to Policy WLP 8 (since replaced with Policy WCS10 of LLWDF). It is considered that the planning application and accompanying Environmental Statement, together with further information that has been submitted, provide the information necessary to consider fully the likely effects of the development. The supporting text of WLP 15 makes particular mention of the geological interest at the site, the need to improve the site access and for an effective bird exclusion system. It states that the adjoining quarry processing area could beneficially accommodate various waste treatment options.
271. The preamble to Policy WCS 2 of the LLWDF sets out the criteria to be used to define whether a particular proposal is classed as a '**strategic waste site**'. It is considered that this application meets the criteria for a strategic waste site and the locational requirements of Policy WCS 2 are applicable, i.e. the site should be within the Broad Locations indicated in the Key Diagram, which includes the Newhurst Quarry site.
272. Policy WCS 4 then sets out the priorities for the specific types of land use that would be acceptable for waste management facilities. Priority one will be given to land with an existing waste management use, where transport, operational and environmental benefits can be demonstrated as a consequence of the co-location of waste management facilities. It is considered that this proposal does not conform to this priority, as although there is an extant waste management permission on the site, there would be no co-locational benefits arising from the proposal. However, the site falls within priority two, because the land forms part of an existing mineral site.
273. In the light of the above, it is considered that, *in principle*, the proposed Newhurst Energy Recovery Facility (ERF) meets the locational requirements of the development plan at strategic and local levels. The ERF would assist in achieving self-sufficiency in terms of waste management for the waste plan area and is also well located for the management of significant waste arisings close to source (Loughborough is the largest settlement in the County).

#### National Waste Policy Considerations

274. PPS10 confirms the overall objective of Government policy on waste and sets out key planning objectives to be achieved through the delivery of planning strategies, and aims to make the management of waste more sustainable by driving it up the waste hierarchy. It also covers decision-making principles, and at paragraph 5 sets out principles which WPAs should adhere to in determining

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planning applications, i.e. that planning and pollution controls should avoid conflict and complement rather than duplicate each other, ensure effective working with pollution control authorities and have regard to the policies contained in PPS 10.

275. Advice on the approach WPAs should take in determining planning applications is set out in paragraphs 22 – 32, and this expands on the above principles. It states that when proposals are consistent with an up to date development plan, *there should be no requirement to demonstrate a quantitative or market need*. It also provides that WPAs should not seek to control the processes which are a matter for the pollution control authorities but should consider the likely impact on the local environment and on amenity with reference to the criteria set out in Annex E. These are by and large repeated by policies within the WDF Core Strategy and Development Control Policies document and are discussed below. The Environment Agency has confirmed that it will be relying on the Environmental Permit to control environmental impacts arising from the operation of the proposed facility.
276. Waste Strategy for England 2007 puts a greater emphasis on waste prevention and sets new targets, including higher rates for recycling and composting of household waste. It aims to bring environmental benefits through resource and energy efficiency, and less landfilling of biodegradable waste thereby reducing the production of methane which is a potent greenhouse gas (approximately 21 times more potent than carbon dioxide). The existing Landfill Directive Targets for reducing biodegradable municipal waste are being carried forward and are expected to be delivered through the Landfill Allowance Trading Scheme. Targets for reducing the amounts of Commercial and Industrial Waste and Construction and Demolition Waste are likely to be set at a future date following further assessment.
277. The applicant states that the ERF would primarily combust C&I waste, thus reducing reliance on landfilling and would therefore contribute to moving some residual waste up the waste hierarchy, as advocated in national policy. It is considered that the facility would not have a detrimental impact on the long term recycling rates of Leicestershire's Municipal Solid Waste (MSW). This is borne out through evidence gathered from other EU countries which rely heavily on incineration as a waste management option but also exceed current UK recycling rates – see table 1 below. These proposals would therefore meet the intentions and main policy objectives mentioned above in PPS10 and Waste Strategy 2007.

Table 1 – Selected EU Municipal Waste Recycling Rates – Source: Eurostat

Municipal Waste 2007	Municipal waste generated, kg per person	Municipal Waste Treated %		
		Landfilled	Recycled and Composted	Incinerated
Belgium	49	4	62	34
Austria	597	13	59	28
Denmark	801	5	41	53
Sweden	518	4	49	47
Germany	564	1	64	35
France	541	34	30	36
Luxembourg	694	25	28	47
Netherlands	630	3	60	38
UK	572	57	34	9

### Landscape and Visual Impact

278. The current site is well contained within the local landscape with existing screen planting and bunding limiting views into the site. A few isolated dwellings on Ingleberry Road have more open views of the southern part of the Newhurst site, and there are also passing views into the site from the M1 and from local footpaths.
279. The site is located within the National Forest, the Charnwood Forest and is within an area designated as an Area of Particularly Attractive Countryside in the extant Charnwood Local Plan. Accordingly there are numerous policies in the Development Plan seeking to ensure that these sensitive designations are protected from inappropriate development.
280. The proposed development would result in an extremely large structure being erected on slightly elevated land adjacent to Junction 23 of M1 motorway. The overall length of the building would be 330 metres including the IBA storage area, the highest part of the building would measure 46.5 metres high and the two flue stacks 96.5 metres high. Although the site benefits from a certain degree of mature screening in most directions, it is clear that the proposed building would be highly visible from views to the north and east in particular, including the Garendon Park estate to the north east of J23 of the M1.
281. There are other industrial buildings in the locality, most notably the GWL Feeds buildings to the north of Ashby Road East, although it is considered that the proposed development would dwarf these structures both in height and scale. The base of the proposed building would be 95mAOD with the top of the building extending to 139.6mAOD.
282. The County Council's landscape architect has assessed the information submitted in support of the development and does not agree with the overall conclusion of the ES. The applicant supplied further information in support of the ES which including three additional viewpoints and in all three the massive scale of the proposed ERF and its stark appearance in contrast with the surrounding landscape is apparent.

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283. After giving full and detailed analysis to the submitted documentation, it is considered that the proposal would have an unacceptable impact on grounds of its scale and intrusive appearance on the edge of, and what is effectively the 'entrance' to, the Charnwood Forest, contrary to Policy WCS12 of the Waste Development Framework Core Strategy and Development Control Policies document. Further, the development would introduce a prominent, visually obtrusive and incongruous building which would detract from the essentially undeveloped rural character of the landscape contrary to Policies WCS10 and WDC5 of the Waste Development Framework Core Strategy and Development Control Policies document and Policies CT/1, CT/2 and CT/7 of the Charnwood Local Plan. It is considered that significant weight should be given to this issue.

#### Cultural and Heritage Impacts

284. Garendon Park, to the north east of the Newhurst site, is a grade II listed Historic Park and Garden and within the park are numerous listed buildings including the Triumphal Arch (listed grade I) and the Temple of Venus (listed grade II\*), both of which are including on the Heritage at Risk register. In line with the requirements of PPS 5, the impacts on the setting and character of these listed structures are material planning considerations.
285. Policy WDC2 of the WDF states that planning permission will not be granted for waste management developments that would have significant adverse effects on historic parks and gardens, historic landscapes and listed buildings, unless there is an overriding reason of national importance for the development in that location which clearly outweighs the impacts it is likely to have on the features of interest.
286. Concerns were raised by English Heritage (EH) regarding the potential impacts on the nationally designated Garendon Park and its associated listed structures therein. The applicant supplied additional information, including three different photomontages from the park in support of its application and EH was consulted again.
287. EH and the County Heritage Officer considered the additional information and object to the proposal on grounds of the substantial harm on the historic park and listed buildings. Policy HE9.1 of PPS 5 states that developments affecting any designated heritage asset should require *clear and convincing justification*. Where there would be substantial harm to a grade II park, the proposed development should be *exceptional* and to a grade I or grade II\* heritage asset *wholly exceptional*. Where the application will lead to substantial harm to or total loss of significance, local planning authorities should refuse consent unless it can be demonstrated that:
- (i) the substantial harm to or loss of significance is necessary in order to deliver substantial public benefits that outweigh that harm or loss; or
  - (ii) (a) the nature of the heritage asset prevents all reasonable uses of the site; and
    - (b) no viable use of the heritage asset itself can be found in the medium term that will enable its conservation; and

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- (c) conservation through grant-funding or some form of charitable or public ownership is not possible; and
- (d) the harm to or loss of the heritage asset is outweighed by the benefits of bringing the site back into use.

288. In addition, the archaeological advisor has raised concerns regarding the potential for matters of archaeological interest to be located within the Garendon Park and has requested that, prior to permission being granted for works that could affect the park, a full archaeological assessment of the southern area of the park referred to in the applicant's letter dated 16<sup>th</sup> September 2010.
289. It is considered that the proposed building would have significant adverse effects upon, and substantial harm to, the character and setting of the Garendon Park heritage assets. Therefore, it is necessary to determine whether the proposed development meets the tests set out in Policy WDC2 and Policy HE9.1.
290. With regard to Policy WDC2, it is clear that the proposed development would provide a significant local public benefit by helping the County Council achieve its target of self-sufficiency in dealing with the C&I waste arisings within the County. However, the policy refers to overriding reasons of *national importance* and it is considered that the local benefits of such a waste management facility do not meet the requirements of this policy. It is also clear that this location is not the only one available for large-scale waste management facilities within the County. On the basis of the above assessment, it is considered that the proposal conflicts with Policies WCS10, WCS12 and WDC2 of the Waste Development Framework Core Strategy and Development Control Policies document.
291. With regard to 'substantial harm', PPS 5 requires that for a development to be acceptable, there must be substantial public benefits from the proposal that outweigh this harm. There would be substantial public benefits in meeting the waste disposal needs of the County. However, given the substantial harm to the grade I and grade II\* listed buildings, the development must be wholly exceptional. It is considered that this site is not the only site available for this type of development, i.e. there are no overriding reasons why it has to be located at Newhurst Quarry, and there are alternative waste management options available that could necessitate less visually intrusive buildings, such as those approved under the extant planning permission on the site. In this regard it is considered that the proposed development is not wholly exceptional and the proposal conflicts with Policy HE9.1 of Planning Policy Statement 5: Planning for the Historic Environment.
292. Members should give significant weight to the detrimental impacts on local heritage sites and listed structures of national importance. It should also be noted by Members that should they be minded to grant planning permission, EH has the power to request that the Secretary of State (SoS) 'call in' the application. Should this situation occur it is considered likely that the SoS would request that the planning permission not be granted and that the Planning Inspectorate conduct a Public Inquiry in to the proposal.

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Fall back position

293. There is an extant planning permission on the site that allows for landfilling, in-vessel composting, and recycling operations. The maximum size of the buildings approved is 15.5m above ground levels, 31.5 metres lower than that which is proposed as part of this development. Whilst the use of the site for waste management is accepted *in principle*, this particular proposal needs to be judged on its merits given the scale of the development proposed.

Need for the ERF

294. Numerous representations state that there is not enough waste within the plan area to require such a large scale ERF facility and that further emphasis should be placed on reduction, reuse and recycling/composting/anaerobic digestion of waste instead.
295. Table 2 below reproduces data from the Leicestershire County Council Waste Needs Assessment document dated June 2008.

Table 2

	<b>Arisings (tonnes)</b>	<b>Residual Waste capacity gap (tonnes)</b>
<b>Municipal Waste</b>		
2010	582,350	124,450
2015	633,650	144,400
2020	633,650	185,250
<b>Commercial/Industrial</b>		
2010	1,429,750	833,150
2015	1,420,250	827,450
2020	1,384,150	806,550
<b>Total capacity gap</b>		
2010	-	957,600 (657,600)
2015	-	971,850 (671,850)
2020	-	991,800 (691,800)

296. The residual figures shown for C&I waste are the waste quantities per annum that remain to be treated after recycling and composting has taken place and for which there is no existing treatment capacity, i.e. the “need”.
297. As preparation for the Leicestershire and Leicester Waste Development Framework Site Allocation document, further work has been undertaken to ascertain the current situation regarding waste arisings and management capacity. The aforementioned work has provided evidence indicating that significant new waste management capacity has been approved in the plan area since the 2008 Waste Needs Assessment document. In total, 130,250 tonnes per annum of new capacity for C&I waste recycling has been approved and is operational. Further to this, 414,000 tonnes per annum of capacity for C&I waste recycling and recovery has been ‘committed’ (i.e. granted planning permission but is yet to commence). However, 19,000 tonnes/annum C&I capacity has been lost due to the closure of one facility. This equates to a total

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of 525,250 tonnes per annum of new capacity which can be taken off the C&I residual waste capacity gap contained within Table 2 above, which leaves an identifiable shortfall in C&I capacity of around 281,300 tonnes per annum by 2020.

298. Also, this identified shortfall assumes that no C&I waste would be taken to landfill. Whilst it is the Government's and the Council's aim to reduce reliance on landfill and move waste up the hierarchy, it is accepted that landfill will continue to be required throughout the plan period. There are currently two operational landfills in the County, Cotesbach and New Albion, both with a capacity of 240,000 tonnes per annum. Both these sites are former mineral extraction sites and landfilling serves a purpose in the restoration of these sites.
299. New Albion's planning permission expires in 2014, although it has capacity for a significantly longer period. The operator of the site has recently been given permission by the County Council to seek to vary the current 2014 deadline and has put the site forward for inclusion in the Leicestershire and Leicester Waste Site Allocations document for a period up to 2030.
300. Irrespective of the landfill capacity there remains an identifiable shortfall for C&I waste management of 281,300. This of course does not include any planning applications awaiting determination or put forward as part of the Council's invitation to promote sites through its Site Allocations document.
301. Questions have been raised as to the accuracy of the figures used in the Core Strategy as they date from 2003. These figures were supplied to the County Council by the then East Midlands Regional Assembly (EMRA) as part of its regional planning function. These figures informed the extant Waste Development Framework Core Strategy and arose from the now abolished approved Regional Spatial Strategy (RSS). Therefore, they have been subject to a sustainability appraisal and scrutinised by Planning Inspectors during two Examinations in Public into the RSS and the Waste Core Strategy.

### Alternatives

302. Alternative technologies such as anaerobic digestion (AD) have been raised by many objectors as a viable and more environmentally friendly alternative to incineration. Whilst AD does produce lower CO<sub>2</sub> emissions than incineration, it can be only used for segregated organic waste and not the residual waste stream. Biffa are responsible for MSW collections within Leicester city and currently operate an AD facility at Wanlip Sewage Treatment Works, which digests the organic fraction arisings from the "Ball Mill" MBT recycling plant at Beaumont Leys. This generates enough electricity to power about 1,500 homes and also produces a 'cake' product that can be used as a soil conditioner. Unfortunately, as the operator cannot guarantee the make-up of the waste that enters the AD facility, the 'cake' is currently banned from spreading on agricultural land (save for trials in conjunction with the EA) and is ultimately disposed of elsewhere.

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303. Other sites such as Wymeswold Airfield have been put forward by some objectors as viable alternatives to the Newhurst site. An application for development on an alternative site would have to be judged on its merits, with particular regard being given to the preferred locations for strategic waste management facilities contained within the Waste Development Framework. Land ownership and control would also be critical issues before the submission of a planning application.

#### Renewable Energy

304. The Government states that the electricity from Energy from Waste facilities that can demonstrate Combined Heat and Power capacity is to be considered as renewable energy, with the producers of the electricity from such facilities now able to claim full Renewable Obligation Certificates (ROCs) for each megawatt of energy supplied to the grid.

305. The renewable energy from the proposed facility would contribute to the UK target of delivering 15% of energy from renewable sources overall by 2020. The proposed ERF would therefore meet the intentions of the RES with regard to renewable energy production.

306. The applicant states that the facility is designed to export waste heat from the facility to nearby interested consumers. Exporting waste heat reduces the overall electricity available to the National Grid, but can increase the overall efficiency of the plant from around 25% to around 80%, depending on the overall ratio of heat to electricity. Policy WCS6 requires that energy recovery is maximised and failure to export heat is likely to lead to the proposal failing to meet the requirements of this policy.

307. At this stage the applicant has not formally identified potential buyers for the waste heat, although it is understood that preliminary discussions have taken place with at least two local employers. The applicant has stated that it wishes to export the waste heat from the site to local industry, but cannot guarantee that this will occur at this stage. Given the 'lead in time' of around 4-5 years for the proposed facility it is accepted that it is highly unlikely that a firm commitment for the heat could be concluded when the facility is unlikely to operate until 2014 at the earliest (dependent on planning permission and the Environmental Permit being granted). It is considered that, if Members are minded to grant permission, then the applicant should be asked to enter into a S106 agreement to the extent that they will use their 'best endeavours' at a later date to identify and supply local industry with waste heat.

308. Numerous representations state that electricity generated from ERF facilities produces more carbon dioxide per mega watt hour than coal-fired, natural gas-fired or oil-fired power stations and therefore the electricity produced is not 'green', particularly as there is no Carbon Capture scheme planned for the facility.

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309. The applicant has investigated the source of these claims and disagrees strongly with them. Biffa state that the basis for this information has come from a 2006 Friends of the Earth (FoE) report which had a headline of “*Electricity only incinerators emit 33 percent more fossil CO<sub>2</sub> than gas fired power stations*”. Biffa state that the headline fails to mention that electricity only incinerators have 40% less emissions than a coal fired power station and that emissions from an incinerator with CHP (as is proposed) are slightly better than a gas fired power station, with these facts also being available within the 2006 report.
310. In any case, the comparisons are misleading as an ERF has a dual purpose of waste treatment and energy production. This is a much broader issue than just simply power generation. What needs to be considered are the overall greenhouse gas emissions savings by not landfilling the waste and the saving in fossil fuel use that would be burnt at large power stations. The ERF scenario in Leicestershire results in a net saving of circa -25,000 tonnes CO<sub>2</sub> equivalent, whilst landfill results in a net burden of circa 62,000 tonnes equivalent.
311. It is considered that in terms of strategic development plan policies, waste planning guidance and renewable energy provision, significant weight should be afforded in support of the proposed ERF.

#### Traffic

312. The preamble to Saved Policy WLP 15 identifies a need to improve the site access onto the A512, and the consultation process on the planning application identified traffic levels and congestion on the A512 as being of particular local concern. This proposal does include measures to upgrade the existing priority controlled junction at the site access, and a study of the impact of traffic generated by the proposal on the A512 has been undertaken, including a survey in April 2006. The submission has been assessed by the Highway Authority and Highways Agency.
313. The issue of a direct access to the M1 has been raised again, and whilst this does not form part of the current proposals or receive the support of the Highways Agency, it is appropriate to refer to the Waste Local Plan Inspector's comments on the access to the Newhurst Quarry. In considering this matter in his report he concluded, *"However, as the improvements to the existing access would allow quite satisfactory ingress to and egress from the site the provision of a direct access to the roundabout is not something that the WLP should or could insist upon."* In addition, on the subject of queuing traffic he commented, *"Ashby Road East might experience some queuing traffic at the motorway roundabout and at the Charnwood Road traffic lights at peak times. However, some queuing is a widespread feature of most urban areas during peak periods and there appears to be few problems during off peak periods when the majority of waste traffic would be using it"*. Whilst the Inspector's comments may be slightly dated it is considered that they remain relevant to the current proposal.

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314. The extant landfill permission, when taking the worst case scenario, would have resulted in a maximum of 286 HGV movements per day, which equates to a predicted percentage increase in overall traffic along the A512 generated by the proposal of less than 2%, with just under an 18% increase in the number of total HGVs. The extant quarrying permission on the site does not restrict HGV vehicle numbers.
315. The current application predicts a maximum of 242 HGV movements per day, which is 44 *less* movements than that currently permitted. Of these, it is estimated that up to 92% (of HGVs) would travel east towards the M1. In examining the trip profile of the proposal it is predicted that during the AM Peak (8am to 9am) 40 two-way movements would be generated, which is one movement less than the extant permission, whilst during the PM Peak (5pm to 6pm) 24 two-way movements would occur; three *more* than that currently permitted.
316. Having considered the impacts of the proposal on the local highway network, including the issue of queuing traffic on the A512 and new and proposed development in the locality, the Highway Authority advises that there is unlikely to be a material increase in traffic using the access on to Ashby Road. However, the Highway Authority would wish to see the junction signalised, and the existing bus stop relocated with an appropriate footway put in place before the development is brought into use. These aspects could be required by conditions attached to any planning permission. The Highway Authority also requires that matters relating to the provision of gates, barriers, bollards and wheel cleansing facilities are secured by planning conditions, together with the submission of a Green Commuter Plan, covering travel to work, car use, emissions, and alternative transport modes for journeys to work.
317. The Highways Agency has also raised no objection to the proposal subject to a 'queue detector loop' being placed on the A512 to 'flush' queuing traffic through the proposed new traffic lights at exceptionally busy periods. The Agency has also confirmed that the previous plans to widen the M1 motorway around the J23 section have been shelved indefinitely.
318. Concern has been raised regarding HGVs accessing the site via the built-up area of Shepshed, although it is unclear where HGVs would be coming from to do so. It is considered that there are also sufficient weight restriction orders in this locality to prevent this from happening. However, the applicant is willing to enter into a S106 agreement restricting HGVs from accessing the main built-up areas of Shepshed, save for vehicles collecting waste in these areas.
319. Although the Highways Agency and the Highway Authority have not raised objections to the proposal, it is clear that it is vital that should planning permission be granted for the ERF, the extant quarrying and landfill permissions would need to be surrendered. This would ensure that the cumulative impacts of different operations would not cause unacceptable impacts on the local highways (along with potential impacts on air quality, noise etc.). This issue could be resolved via a S106 legal agreement.
320. Several representations refer to problems on the local highway network when the M1 becomes blocked, stating that local roads become gridlocked. In these

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instances it is considered that the HGVs visiting and leaving the site, around one every 4-5 minutes, would add a very tiny percentage to the already busy roads, and that refusing permission on these grounds would be unreasonable and such a stance could not be sustained at an appeal.

321. Matters relating to vehicle routeing and limiting inputs to the site during AM and PM peak times could be achieved through a combination of an appropriate legal agreement and planning conditions. Subject to these measures and the controls outlined above it is considered that the traffic and highways matters have been satisfactorily resolved in conjunction with the Highways Agency and Highway Authority's recommendations.
322. Several representations refer to section 7.15 of the Charnwood Borough Local Plan (2006) which sets out the main local traffic problems for the Borough. Part (ii) refers to Shepshed and states that it would not be desirable to introduce more traffic onto this road network (serving the central area) which does not appear capable of realistic improvement. This section of the Local Plan is *not* relevant to this application as the proposal would not increase the traffic entering the central area of Shepshed.

#### Emissions, Air Quality and Health Impacts

323. The effects of the development on local air quality can be broadly divided into those which may affect the health of persons working and living around the site, nuisance caused by dust and particulates, and any contribution to global pollution levels. Air quality conditions at and adjoining the site have been modelled, and the ES concludes that taking into account mitigation measures, no significant effects on air quality are anticipated.
324. The ES assesses the potential impacts of a multitude of pollutants and considers the increase on background levels, the magnitude of change and the significance of such change. The ES works on the 'worst case' scenario and the only pollutant that may have anything more than a negligible impact is Nitrogen Dioxide, which could have a minor adverse impact both in the short and long term.
325. Detailed consultation has taken place with the EHO, the HPA and the EA and their advice has been fundamental in considering this issue. Initially the Borough Council considered that their monitoring of nitrogen dioxide in the Ashby Road area had produced results which were very close to breaching air quality standards and that a monitoring regime would be required of Biffa in the event that permission was granted. Subsequent monitoring data suggests that their earlier concerns were exaggerated and nitrogen dioxide levels at sensitive properties along Ashby Road East are well within the air quality standards.
326. In relation to dust and particulate emissions the ES concludes that these are a potential risk to health due to the size of the site and activities proposed. The EA and EHO have considered the information submitted and raise no objection. In relation to the proposed waste activities these matters would come under the jurisdiction of the Environment Agency's controls that are applicable through a waste management licence and an integrated pollution prevention and control (IPPC) permit. This approach is advocated in PPS10, which confirms that the

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pollution control and planning regimes are separate, and that Waste Planning Authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced.

327. UK waste incinerators do emit ultrafine particulate matter, but this is less than 0.1% of the UK's emissions. However, other sources such as road traffic, agriculture and household cooking and heating emit much larger amounts of ultrafine particulate matter than waste incinerators. Some of these sources such as road traffic and domestic sources are close to where people live, increasing the potential for exposure of individuals.
328. In terms of air quality impacts on human health, the Environmental Statement concludes that all modelled concentrations of emissions are based on the worst-case scenario and fall within the relevant air quality standards and guidelines, and on this basis no significant effects on health in the area are expected. It is anticipated that due to the processes involved, the emissions will be much lower than the maximum permissible levels.
329. There have been a significant number of objections to the proposal on the grounds that the pollutants emitted from the stacks would result in health impacts for those living within the vicinity of the site. The majority of objections refer to the release of fine particles (PM2.5 and below), dioxins and heavy metals and their impacts on local health, in particular asthma and COPD. The local General Practitioners have objected, stating that Shepshed has a much greater number of residents with these two ailments than the national and County average and attributes this to the impact of air pollution from the M1 and A42 and the Ratcliffe on Soar power station.
330. There appears to be a misconception that nanoparticles and PM2.5 particles are not routinely monitored by incinerator operators and only the larger particles PM10 are collected. The following is taken from the HPA position statement (*ibid*):

*It is sometimes claimed that PM10 measurements ignore particles most likely to be deposited in the lung, or, more specifically, in the gas exchange zone of the lungs. This is incorrect and stems from a misunderstanding of the term PM10.*

*Tapered element oscillating microbalance (TEOM) monitors are equipped with a sampling head that selects essentially all particles of less than 10 µm aerodynamic diameter. PM10 measurement is designed to collect effectively all those particles small enough to pass the upper airways (nose, mouth, pharynx, larynx) and thus of a size that allows a chance of deposition in the lung. PM2.5 is intended to represent that fraction of the aerosol with a high probability of deposition in the gas exchange zone of the lung in vulnerable individuals. It will be obvious that PM10 includes PM2.5 and that PM2.5 cannot exceed PM10 in any given sample of air.*

*It is sometimes, further, claimed that PM10 or PM2.5 do not include nanoparticles present in the air. This is also incorrect. Nanoparticles are efficiently collected by PM10 and PM2.5 samplers but make only a small contribution to the results expressed as PM10 or PM2.5. If particles of less than*

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*100 nm diameter alone were collected from a known volume of air and weighed, the resulting concentration could be expressed as PM0.1 (100 nm = 0.1 microns). In a sample of air collected in a UK urban area on a typical day we might expect results similar to those given below:*

PM10	-	20 µg/m <sup>3</sup>
PM2.5	-	13 µg/m <sup>3</sup>
PM0.1	-	1-2 µg/m <sup>3</sup>

*PM10 includes and exceeds PM2.5 which in turn includes and exceeds PM0.1.*

331. PPS23 sets out those circumstances where air quality may be a material issue for planning applications and provides guidance to planning authorities on making these decisions. It states that air quality is likely to be particularly important where:
- the development is proposed inside, or adjacent to, an Air Quality Management Area (AQMA) as designated under Part IV of the Environment Act 1995;
  - the development could in itself result in the designation of an AQMA; and/or
  - to grant planning permission would conflict with, or render unworkable, elements of a local authority's air quality action plan.
332. Data provided by Defra (National Emissions Inventory [www.naei.org.uk](http://www.naei.org.uk)) show that 2006 national emissions of PM10 (i.e. particles of 10 µm diameter and smaller) from the combustion of waste are 0.03% of the total anthropogenic emissions compared with 27% and 25% for traffic and industry as a whole respectively. This low proportion is also found at a local level; one incinerator modelling study found a modelled ground level increment in PM10 of 0.0005µg/m<sup>3</sup> as an annual average (EA 2009). Therefore, any contribution of particles to the atmosphere arising from the proposed incinerator would be very low.
333. The area around Newhurst Quarry has not been designated as an AQMA and the EHO has not stated that the proposed development, if granted, would lead to such an area being designated. The EHO has also not stated that granting permission would conflict with, or render unworkable, elements of Charnwood Borough Council's air quality action plan.
334. Several of those who objected referred to reviews into the health impacts of incinerators and many highlighted the 4<sup>th</sup> report of the British Society for Ecological Medicine: "The Health Effects of Waste Incinerators". The British Society for Ecological Medicine 4<sup>th</sup> Report is highly critical of the health impacts created by waste incinerators and disagrees strongly with the general Government attitude that incineration is acceptable in principle.
335. In response, the Health Protection Agency (HPA), which raises no objection to the proposal, evaluated the report. It is extremely critical of the methodologies used, numerous misleading statements, and general inaccuracies within the document and unsubstantiated assertions. The HPA concluded its evaluation by maintaining its position that contemporary and effectively managed and regulated waste incineration processes contribute little to the concentrations of

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monitored pollutants in ambient air and that emissions from such plants have little effect on health. Enviro Consulting also critically evaluated the report and came to fundamentally different conclusions to that of the British Society regarding the acceptability of waste incineration.

336. Concern over the process of incineration and the ability of the applicant to comply with Environmental Permit (EP) conditions has been raised and it has been noted that the company has previously been fined at other sites for breaching regulations. Also, it has been stated by several objectors that every incinerator in the country has breached its EP conditions and that the penalties for such breaches are not robust enough. It is considered that these matters are for the EA to investigate and enforce against as part of the EP regime and are not material to the current application.
337. The following parliamentary exchange took place on 1<sup>st</sup> July 2010 regarding the Government's policy on incineration and subsequent health impacts:  
(Source: Hansard)

**Nicky Morgan (Loughborough) (Con):** *What his policy is on the building of energy-from-waste incinerators. [4933]*

**The Secretary of State for Energy and Climate Change (Chris Huhne):** *We support modern energy generation from waste where local communities want it and where it makes good environmental sense. It is the responsibility of local authority managers and planners, and the local authorities themselves of course, to decide on the best waste management arrangements in their areas. Recognising the concern that incineration can raise, the Government are committed to a huge expansion in energy from waste using anaerobic digestion, and we are taking steps to drive progress and greater ambition in that area. In Germany, for example, combustion recovery energy-from-waste plants provide 7.5% of renewable energy.*

**Nicky Morgan:** *I thank my right hon. Friend for that answer. In light of the policy, does he understand the concerns of my constituents in Shepshed, who are facing the building of an incinerator at Newhurst quarry, which is both a site of special scientific interest and on the edge of the national forest, as well as another possible incinerator not 6 miles away? Will he encourage local authorities seriously to pursue alternative waste management strategies?*

**Chris Huhne:** *I am grateful to my hon. Friend for her question. The latest scientific evidence on the health effects of modern municipal waste incinerators—this might be reassuring for her constituents—was reviewed independently by the Health Protection Agency. Its report, published in September 2009, concluded that although it is not possible to rule out adverse health effects completely, any potential damage from modern, well-run and regulated incinerators is likely to be so small as to be undetectable.*

**Chris Leslie (Nottingham East) (Lab/Co-op):** *I commend to the Secretary of State the report on energy-from-waste issues by the New Local Government Network, which I had a hand in writing a couple of years ago [The NLGN report argues that the Government should **shift its emphasis onto creating energy-from-waste through a new generation of incineration plants**]. In particular, will he consider ameliorating some of the concerns that residents can have*

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*about incinerators, even the new generation incinerators? Although, as he says, they can be quite successful, local people get very concerned about them. Given the controversies that can arise, giving back to local residents the proceeds from the sale of some of the energy generated could make them slightly more palatable.*

**Chris Huhne:** *That is certainly an interesting model. It has been tried with other schemes, such as with wind turbines. I know of a wind farm in the highlands where that was the case. It certainly helps to get local support for particular schemes. However, fundamentally it has to be a local decision for the local authority. Local authorities know very well that we want to recycle first before going through to waste and energy recovery, but very high rates of recycling and energy from waste can co-exist. In the Netherlands, for example, there is a 65% recycling rate with 33% energy from waste. Local authorities must make their own decisions on this, but if they get the waste hierarchy right they can get the whole mix right.*

338. It is clear from the above Parliamentary exchange that the current Government does not have any objection to the development of further energy from waste incinerators in principle.
339. It has been stated in some representations that incinerators are not the 'best available technique' (BAT) for dealing with residual waste, that better alternatives exist and as a result the application fails to meet the requirements of the WID directive or the Stockholm Convention on the production and use of Persistent Organic Pollutants.
340. It is considered that these representations fail to understand fully what is meant by BAT. The concept of BAT is not aimed at the prescription of any specific technique or technology, but at taking into account the technical characteristics of the particular installation concerned, its geographical location and the local environmental conditions.
341. The Stockholm Convention on the production and use of Persistent Organic Pollutants (POPs) was signed in 2001 and requires signatories to ensure that global action is taken on POPs, which it defined as "chemical substances that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment". In the UK the EA, through their Environmental Permitting Regulations, are the competent authority and have the responsibility in this regard.
342. Reference has been made to the fact that several applications for incinerators have been turned down by LPAs recently on health grounds and that these refusals are material considerations. The "Sinfin" application in Derby is the only application refused on grounds relating emissions that this Council is aware of (note: the refusal was made against professional officer recommendation). The applicant has lodged an appeal and until the outcome of the Inspector's Report is known, this decision should carry very little weight.
343. Paragraph 30 of PPS10 states that "The detailed consideration of a waste management process and the implications, if any, for human health is the

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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”.

344. Whilst Paragraph 30 of PPS 10 states that health can be a material planning consideration, the competent authorities in this regard appear to be satisfied that the proposed development would not lead to any significant impact on the health of local residents. Therefore, and whilst it is acknowledged that the issue of health is of primary concern, given the contemporary design of the ERF proposed there is little evidence to suggest that there would be any significant health impacts arising from this development.
345. It is considered that the majority of concerns raised by objectors relate to ‘old’ and/or ‘hazardous’ waste incinerators. The current application is for a modern non-hazardous waste incinerator whose emissions would be subject to the Environmental Permit regime, which is a rigorous assessment process undertaken by the Environment Agency within the remit of the Waste Incineration Directive, which places much tighter controls on these facilities than previously in place.
346. It is concluded on this issue that the proposed facility would inevitably result in the controlled release of some emissions to air – it is impossible for any combustion process not to release emissions to some degree, however, neither the EA, HPA or PCT raise an objection.
347. Planning authorities are advised not to duplicate other statutory controls and therefore it is considered that a refusal on grounds of air quality or health impacts could not be sustained in this instance and little weight should be given to the objections relating to air quality, emissions and health impacts.

#### Employment

348. The construction of the ERF would require around 200 employees for the three year construction period; although the applicant states that the majority of these would be brought in from outside the area. The operational phase would lead to the employment of around 40 full time positions and the applicant states that many of these jobs would be filled locally. There would therefore be positive impacts upon the local economy from the increase in employment and this should be given some weight when the application is determined.

#### PFI Contract and Incineration

349. There have been numerous letters of objection relating to the PFI contract which are generally misinformed. It is worth noting that, despite several comments to the contrary, this application has not been put forward by the County Council, nor was it requested of the applicant. Also, the PFI specification does not require the winning contractor to build an incinerator; it merely states that such a facility would be acceptable in principle.
350. In any event, the County Council has decided to reject the applicant from the selection process for the PFI bid, and therefore the application needs to be assessed as a merchant facility only, as it is intended that all Leicestershire

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MSW would be sent to a purpose-built waste management facility elsewhere. However, there remains the possibility that MSW from other local authorities could be imported to the facility.

#### Waste Types and Sources

351. Concerns have been raised about both the types of waste and the origin of wastes to be tipped at the site. In relation to the types of waste, the application relates to non-hazardous wastes from the following waste streams: Municipal (i.e. that collected from households and similar commercial sector waste outwith the county boundary) and Commercial and Industrial sources. The European Council Decision on Waste Acceptance Criteria sets out the acceptable standards that waste must meet and the range of wastes accepted at a site has to meet criteria set down by the Environment Agency having regard to technical suitability.
352. With regard to the origin of the waste, one of the main thrusts of Government policy in achieving sustainable waste management is to treat waste as near to source as possible (in fact Charnwood Borough Council's residual MSW is currently taken to landfill in Warwickshire). Waste transportation is largely contract-driven, and given the good location of the Newhurst site it is not inconceivable therefore that waste arising from neighbouring counties would be brought there for management and disposal. Waste Development Frameworks around the country should be aiming to ensure that, for all plan areas, there are appropriate waste management facilities and sites identified to achieve self-sufficiency in dealing with the different arisings in their own plan areas. It is not for the WDF to seek to restrict the inputs to a site to a specific area.

#### Odour, Pests and Litter

353. There have been concerns raised regarding potential impacts of odour, pests and litter arising from the proposed ERF. The waste would be tipped straight in to a 10 metre deep concrete bunker with any unacceptable materials being taken out and placed straight into a skip for disposal off site. Also, the tipping hall would be maintained under negative pressure due to air being taken from this area for the combustion process. Given these factors, it is considered that there would not be a significant impact by way of odour, pests or litter arising from this development. Odour control and mitigation at the site is a pollution control matter that would fall under the jurisdiction of the Environmental Permit controls as defined by government advice in PPS10, and therefore be subject to consideration by the Environment Agency. The EHO and the EA have not raised any concerns regarding this matter.

#### Noise

354. The ES states that assuming that the building itself has no acoustic reduction on noise levels, then at the four closest receptors, the predicted day time noise levels would be less than 10 dB below background levels and night time levels would be between 1.4dB and 7.4dB below current background levels. The building has been designed to have a Sound Reduction Index of 20dB(A) and therefore the predicted levels range from 15.2dB and 41.7dB below existing

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background levels, indicating that noise from the ERF is very unlikely to lead to complaints.

355. The EHO has considered the Environmental Statement and concludes that subject to the proposed mitigation measures being implemented in full, she would raise no objection to the proposal. Given the impact of the M1 motorway and the A512, the additional HGVs accessing the site would have no impact on existing background noise levels. If the proposed development or mitigation measures change then the EHO has stated that a revised noise assessment would be required.

Restoration of the existing quarry areas

356. The extant planning permission would have led to the comprehensive restoration of both Newhurst and Longcliffe Quarries, with Newhurst being restored using MSW landfill with proposals for public access upon completion.
357. The application boundary includes neither quarry void, although the Newhurst Quarry void is included as being under the applicant's control. Therefore, in the event that permission is granted for the ERF, it would be possible to include planning conditions to ensure the restoration of the Newhurst void and the surrounding land. With regard to Longcliffe Quarry, this is not part of the application area and in the event that the extant landfill permission was not implemented, the fall back is to the extant mineral permission. Therefore, it is considered that the issue of restoring the wider site area to an acceptable standard is achievable using other means and very little weight should be given to this issue.

Ecology and Protected Species

358. Natural England (NE) and the County Ecologist have raised no objections to the proposal subject to conditions. There are protected species on the site, including Great Crested Newts (GCN). Measures are proposed to ensure that protected species would not be unacceptably disturbed as a result of the proposed development.
359. NE consider that the applicant has proposed over-mitigation for the potential impact on the GCN population and subject to a condition rectifying this problem, the proposals will not be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range (as defined in Regulation 44 of the Habitat Regulations).
360. Given the European Protected Species (EPS) status of Bats, regard must be had to the tests that need to be satisfied to allow derogation to be granted from the protection afforded to EPS (as required by Regulation 3(4) of the Conservation (Natural Habitats, &c.) Regulations (1994)) and as set out in Circular 06/05 and PPS9. The tests are:
- that there should be no satisfactory alternative to the plan or project as a whole or in the way it is implemented;
  - that the plan or project must be “in the interests of preserving public health or public safety, or for other imperative reasons of overriding public interest

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- (IROPI), including those of a social or economic nature and beneficial consequences of importance for the environment”; and
- that the favourable conservation status of the species affected must be maintained
361. Bat surveys have been undertaken and the ES concludes that there are no roosting bats on the site and the likelihood of their presence in the wider area is low. There have been no objections raised regarding potential impacts upon protected species from Natural England or the County Ecologist.
362. There have been several requests to increase the public access to the quarry area for general recreational purposes and rock climbing. It is considered that increasing public access could impact detrimentally on the GCN population and breeding birds in the quarry, notably a colony of peregrine falcons. Whilst there is in principle support to increase public access following restoration, this must be done in a sensitive manner and it is considered appropriate that should permission be granted, a condition should be imposed regarding the future use of the restored Newhurst Quarry void and the need to ensure that protected species are not put at risk.
363. Subject to the imposition of conditions relating to the protection of protected species, it is considered that there would be no adverse impacts on local flora and fauna.

#### Hydrology, Geology and Hydrogeology

364. Natural England is satisfied that the proposal, subject to conditions, is not considered to have a significant effect on the features of interest of the Newhurst Quarry geological SSSI.
365. The Environment Agency (EA) considers the groundwater beneath the site to be of high sensitivity. The SLR ‘Phase 1 Preliminary Land Quality Assessment’ report identifies a number of potentially contaminative historical site activities/uses, including the storage and dispensing of oils (both on site and off site), refuse tipping, vehicle and plant maintenance and rail operations. In addition, the Environment Agency considers there to be a potential for contamination to exist within made ground/fill material deposited within the former canal.
366. Given the above information, there is the potential for contamination associated with historical site activities/uses, including off site oil storage, to impact groundwater beneath the site. Therefore, the Environment Agency considers that planning permission should only be granted for the proposed development as submitted if planning conditions are imposed to ensure the protection of groundwater quality.
367. To minimise impacts to local water courses it is considered expedient that conditions be imposed on any planning permission relating to surface water drainage, which would include limiting run-off from the site and hard surfacing of operational areas which drain positively to appropriately designed lagoons.

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368. One representation objects on the grounds that emissions from the stacks would contaminate surface water, in particular Blackbrook Reservoir, which provides local drinking water. The EA, the EHO and Severn Trent Water have been fully consulted and neither has raised an objection on grounds of emissions to local watercourses.
369. Subject to the imposition of conditions relating to the above, it is considered that there would be no unacceptable impacts arising from the development in terms of hydrology, geology and hydrogeology.

#### Impacts on Loughborough University and the 2012 Olympic Training Camps

370. Concern has been raised regarding the detrimental impacts an incinerator at Shepshed would have on the image of Loughborough University and the health of the students and those expected to use their facilities as a training camp for the 2012 Olympic Games.
371. The University has been consulted and has not responded formally on this application. It is acknowledged that the University may be extending westwards towards the M1 in the future and there is the possibility that it could take advantage of the waste heat that an incinerator would generate. With regard to the 2012 Olympics, if permission is granted then building works would take three years to complete, and they could only commence building once pre-commencement conditions have been discharged and an Environmental Permit is in place. Given these factors, it is unlikely that the facility would have a detrimental impact on the 2012 Olympic Games training camps.

#### Rights of Way

372. The County Council's Rights of Way team has requested that improvements to the local rights of way network could be achieved as a result of this development. Unfortunately the whole of the site is in private ownership, and the tunnel link under the M1 is outside the application boundary and the applicant's control. The applicant has reservations about allowing public access to the potentially hazardous operational site and the quarry area, which is not only dangerous but has important ecological interests. It is considered that this application could not be used to provide a meaningful and joined up improvement to the local rights of way network.

#### Conclusion

373. The proposal conforms well with the thrust of locational policies for strategic waste management facilities in the development plan, and the use of the site for waste management operations has been found to be acceptable in principle previously. The type of process preferred by the applicant is well established and the positive benefits that the Waste Incineration Directive have had on this type of facility have been substantial. The export of renewable energy from the facility would also contribute towards meeting the region's renewable energy contribution and help diversify the supply of energy into the National Grid, in accordance with the thrust of national energy policies.

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374. The EHO and EA have raised no objections to the proposal on environmental impact grounds, subject to the imposition of conditions. Also, there have been no objections from the Highways Authority and Highways Agency or the agencies involved in protecting local air quality or matters of ecological importance. On the basis of available evidence and advice, there is no sustainable reason to object to the proposal on 'health' grounds.
375. The main issues of contention relate to the visual impact of the proposed building and its impact on the local landscape and local heritage assets. It is considered that the application, due to the scale of the building proposed, conflicts with Policies CT/1, CT/2 and CT/7 of the Charnwood Local Plan, Policies WCS10, WCS12, WDC2 and WDC5 of the Waste Development Framework Core Strategy and Development Control Policies document and Policy HE9.1 of Planning Policy Statement 5.
376. Paragraph 22 of PPS 10 states that when proposals are consistent with an up-to-date development plan, waste planning authorities should not require applicants for new or enhanced waste management facilities to demonstrate a quantitative or market need for their proposal. It is considered that this proposal is *not* consistent with the up-to-date development plan.
377. Given the harm that the proposal will have to interests of acknowledged importance contrary to the development plan, consideration can be given as to whether the need for the facility would outweigh that harm.
378. The monitoring of the waste development plans shows that there is a need for additional waste facilities both for municipal waste and commercial and industrial waste. With regard to C&I waste, there is an identified shortfall in the region of 280,000 tonnes per annum going forward to 2020. The proposal would more than meet that need. However, whilst that need is significant, in the absence of acceptable mitigation or compensatory measures, it is not sufficient to override the adverse impact that the development would have on the character and setting of Garendon Park, a nationally significant Grade II listed park, the Grade I and II\* listed structures therein or the unacceptable adverse impacts that the scale and mass of the proposed building and structures would have on the countryside, the Area of Particularly Attractive Countryside, and the character and setting of the Charnwood Forest.

**Recommendation:**

REFUSE for the following reasons:

- 1) The development would have an unacceptable impact on the countryside by virtue of its scale, intrusive appearance and visual impact, contrary to Policies WCS10: (Environmental Protection) and WDC5: (Countryside) of the Leicestershire and Leicester Waste Development Framework Core Strategy and Development Control Policies document and Policies EV/1(i), CT/1, CT/2 and CT/6 of the Borough of Charnwood Local Plan.
- 2) The development would have an unacceptable impact on the designated Area of Particularly Attractive Countryside by way of the introduction of a prominent, visually intrusive and incongruous building and would not maintain or enhance

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the character and appearance of the landscape, contrary to Policy CT/7 of the Borough of Charnwood Local Plan.

- 3) The development would conflict with Policy WCS12 of the Leicestershire and Leicester Waste Development Framework Core Strategy and Development Control Policies document insofar as it would have a detrimental impact upon the landscape, cultural heritage and built heritage of the Charnwood Forest and the siting and scale of the development do not reflect and compliment the character of the surrounding landscape.
- 4) In the absence of a satisfactory mitigation scheme, the development would have an unacceptable impact on the character and setting of the Garendon Park, which is a nationally designated grade II listed Historic Park and Garden, by virtue of its scale, intrusive appearance and visual impact, contrary to Policies WCS10 and WDC2 of the Leicestershire and Leicester Waste Development Framework Core Strategy and Development Control Policies document, Policy EV/9 of the Borough of Charnwood Local Plan and Policy HE9.1 of Planning Policy Statement 5: Planning for the Historic Environment.
- 5) Any mitigation measures need to be informed by appropriate archaeological investigation and assessment, without which the proposal conflicts with the relevant advice and Policies HE6.1, HE7.1 and HE8.1 set out in PPS5.
- 6) The development would have substantial harm on the setting of the listed structures within Garendon Park, including the Triumphal Arch (listed grade I) and the Temple of Venus (listed grade II\*), contrary to Policies WCS10, WCS12 and WDC2 of the Leicestershire and Leicester Waste Development Framework Core Strategy and Development Control Policies document and Policy HE9.1 of Planning Policy Statement 5: Planning for the Historic Environment.

## **Appendices**

Appendix A - Response from Shepshed Town Council.

Appendix B - Response from Shepshed Against Incineration Action Group.

Appendix C - Copy of postcard representations submitted.

## RESPONSE FROM SHEPSHED TOWN COUNCIL

### Comments on BIFFA's Non Technical Summary

#### 1. THE SITE – Land Use

#### 11. *Planning permission exists for a waste transfer station, materials recycling facility, in vessel composting plant .....*

Planning permission does not exist for an incinerator which is a vastly different proposition than the land use described in section 11 above. Planning permission for an incinerator should not be given on the basis that the land is already permitted for 'waste management uses'. Permission was given for landfill because the quarry could accept large volumes of waste. There was some justification in this since Leicestershire has few locations suitable for landfill. But Newhurst Quarry is not suitable for an incinerator.

#### 13. *To the south of the site, the area is more rural, interspersed with isolated farmsteads and properties. Immediately to the east is the M1 corridor, beyond which is an area designated as a "green wedge" in the Borough Local Plan, and comprises a golf course, Garendon Park and agricultural land .....*

#### 14. *...The development site is located within the National Forest, and designated as an "area of particularly attractive countryside" in the Charnwood Borough Local Plan.....*

There are plans for further tree planting in the area and longer term aspirations to turn the quarry and surrounding land into a water themed leisure area. This will not be possible if an incinerator is built, preventing regeneration of the site for at least 30 years. Garendon Park has some 12 listed buildings that are already deteriorating because of erosion, acid rain and poor air quality resulting from vehicle emissions from the M1 and A512. English Heritage officials visited Garendon Estate in November 2006 to inspect the buildings and concluded that some of them should continue to be included on the National Buildings at Risk register. Additional emissions from an incinerator would accelerate this process. The Park also has abundant wildlife which would be affected by the emissions as would crops on the agricultural land.

### THE PROPOSED DEVELOPMENT

#### 20. *The facility would have two flue stacks, located adjacent to each other on the western side of the building.*

These flue stacks would be very high (three and a half times higher than the Angel of the North!) and have a significant impact on the visual amenity of the approaches to Shepshead as well as the town's residents.

#### 21. *It is understood that the ERF would generate in excess of 25 MW of electricity annually for supply to the National Grid and the plant itself (referred to as "parasitic load"), which would improve resource efficiency and offset reliance on fossil fuels. In addition, the Applicant is considering the potential local use of heat.*

The use of the term Energy Recovery Unit (ERU) gives the impression that energy would otherwise be lost and that somehow it is 'green energy'. Rather than the ERU 'improving resource efficiency and offsetting reliance on fossil fuels' the opposite is the case. Research by the Institute for Local Self Reliance in America indicates that incineration can produce up to twice the Carbon Dioxide (Co2) per unit of power than energy produced from fossil fuels. An independent review on behalf of Friends of the Earth found that 'waste incinerators that generate electricity emit a third more greenhouse gases for the electricity they produce than gas fired power stations'. The review also stated that 'the situation will get worse in the future, as power generation from gas (and even coal) becomes more efficient, whilst carbon dioxide emissions from incinerators are predicted to increase due to a higher percentage of fossil-fuel containing plastics in the waste they burn'. In effect, the ERU is like a mini fossil fuel power station except that it would emit more global warming gasses. Government policy is to concentrate on green, renewable energy sources such as wind farms and wave energy. Government legislation states that new fossil fuel power stations will only be permitted if carbon capture technology is incorporated. BIFFA have already stated they will not use carbon capture technology. Although the legislation does not cover incinerators, only larger power stations, this does not relieve BIFFA of the moral responsibility to limit the emission of greenhouse gases, not increase them.

There is also the question of how electricity will be exported to the National Grid. BIFFA do not explain this in any detail and there is certainly the potential that electricity pylons would be used, again blighting the landscape. Local use of heat either in Shepshed or Loughborough University is unlikely to be practicable. The Application does not follow the Planning Guidance that waste heat must be used as effectively as possible. As it stands, the application contains no confirmed off take for the neither waste heat nor indication of how it would be transported. Furthermore, it does not address what the optimum balance of electricity generation and heat export would be. Similarly, in Section 14 of the Environmental Statement, the greenhouse gas footprint of the plant (without heat export) is compared with alternatives but no comparison is made with the footprint if all heat were to be exported. We suggest this has been included simply to exaggerate the supposed benefits of an incinerator.

## POLICY BACKGROUND

26. *The application is generally free from land use planning constraints; however, it is located within "an area of attractive Countryside" in the Borough Local Plan, and the quarry is designated for its geological importance.*

Clearly the 'area of attractive Countryside' will be blighted by an incinerator as will The National Forest (TNF). Various areas in TNF, such as coal mines and landfill sites have, or will be, regenerated. But this will not be possible with an incinerator development since the whole area will be contaminated for decades to come. Access to the quarry itself will also be limited and prevent further exploration of an area of 'geological importance'.

27. *The Development Framework seeks to reconcile the development needs of society against safeguarding the environment and amenity of local communities. In so doing, the Development Framework sets out a series of Policies which seek to guide developments in terms of acceptable limits and design, whilst ensuring interests of archaeological, cultural heritage, ecological interest and importance are protected, and that the local amenity and environment of communities are not derogated through pollution to air, land or water.*

Building an incinerator close to Shepshed will not 'safeguard the environment and amenity of local communities'. Archaeological and cultural heritage on the listed Garendon Park will not be protected, nor will the ecology of TNF or the Garendon Estate. The local amenity and environment of Shepshed residents will indeed be derogated through additional pollution to air and soil.

29. *National Policy and guidance indicates that obtaining energy from waste falls within the scope of "renewable energy", which forms an integral part of the overall energy strategy.*

It is not within National Policy to obtain energy from sources that emit high levels of greenhouse gasses, particularly Carbon Dioxide. It is also doubtful if the energy can be considered to be from renewable sources. The main aim of Government Policy is to reduce the amount of waste produced by substantially increasing the proportion of waste recycled. If Government is successful in this then large incinerators will become redundant since there will not be enough non-recyclable waste to keep them operational.

#### ALTERNATIVES

32. *In terms of alternative sites, the ES notes the following:*

□ *Newhurst was specifically allocated in the former Waste Local Plan, and is currently one of three sites identified in the Site Allocations DPD*

The reason Newhurst Quarry was chosen as a waste site was because of its suitability for landfill – not because it was a suitable location for an incinerator. Clearly the quarry provided long term capacity for landfill which was said to be an urgent need for Leicestershire. This is why Shepshed Town Council reluctantly supported the planning application for a landfill site. But there is no such justification for an incinerator and the current permission for the site to be used for 'waste management' should not be included as a reason for allowing an incinerator to be built.

#### AIR QUALITY

38. *The assessments of dust, litter, odour and bioaerosols during operation have been undertaken qualitatively and have found that the risk of significant generation of emissions during operational phase is insignificant.*

39. *The significance of impacts at the location of maximum ground level concentration for all pollutants is assessed as negligible, with the exception of nitrogen dioxide (short-term and long-term) impacts which are classified as minor adverse.*

We dispute these conclusions and contend that not enough research has been undertaken on these issues. Although normally emissions are low, over time there will be a cumulative effect because:

- The incinerator will be operational 24/7 for perhaps 30 years building up the contaminants in the soil and air.
- Studies overseas show that high levels are emitted during start-up and close-down when dioxins are not monitored in the UK
- Maximum ground level concentration of nitrogen dioxide is shown over Garendon Park and Estate. This would have an adverse effect on the 12 listed buildings in Garendon Park as well as the residents of a new town planned on the Estate
- Although emissions will be monitored, this will only be after the event so any excesses will not be prevented – only recorded.
- BIFFA have no experience in operating such a facility and undoubtedly mistakes will occur causing further problems
- With 121 loads entering the facility each day BIFFA will only be able to undertake cursory checks to prevent toxic waste entering the system
- Air quality will also be significantly worsened by 242 HGV movements per day on the A512 (this is dealt with in more detail later, under TRANSPORTATION)

#### LANDSCAPE AND VISUAL IMPACT

46. *The application site includes parts of a disused quarry and adjacent offices with an existing planning permission for non-hazardous landfill and associated waste management buildings and infrastructure. In the absence of the proposed ERF development it is assumed that the planning permission for the integrated waste management facility would be carried out.*  
 BIFFA have justified their switch from landfill to incineration by saying that the landfill option was no longer commercially viable because of increasing taxes and changes in Leicestershire County Council policy. It is wrong to assume that landfill will go ahead if the incinerator development does not get planning permission. It is **not** a choice between landfill and incineration.
47. *Although there is some natural regeneration and mature trees/woodland plantation, the character of the application site is of a largely abandoned/derelict state. This is irrespective of the Charnwood local landscape designation ('Area of Particularly Attractive Countryside'), proposed Charnwood Forest Regional Park and National Forest designation which covers most of the application site.*  
 The character of the application site is, indeed, 'of a largely abandoned/derelict state'. This is the point! This is not acceptable within the Charnwood Forest Regional Park or the National Forest. Building an incinerator here will not remedy this situation but make it even worse - and for many decades to come. The County Council, Charnwood Borough Council, the Regional Park and National Forest authorities should join together in regenerating the area by, for instance, creating a water-based leisure complex.
51. *Notwithstanding this, the proposed development is large in scale and height and the main building mass, flue stacks and plume all have the potential to be visible, depending on conditions.*

52. *The assessment has concluded that the proposed development would not result in significant visual effects for the majority of viewpoints within the study area..*

The main building mass, flue stacks and plume not only have the **potential** to be visible – they **will** be visible from many viewpoints both approaching and within Shepshed. The original 3D video representation presented by BIFFA shows this very clearly. The assessments, which are only judgements, have been done by consultants employed by BIFFA and are not objective. Our judgement is that the visual impacts will be significant and detrimental to the area.

## TRANSPORTATION

55. *Planning permission has already been granted for an Integrated Waste Management Facility which would manage 375,000 tonnes of residual waste per annum. This facility would generate on average 146 HGV movements a day. This approved development forms the baseline situation on which any impacts resultant from the proposed development must be assessed.*
56. *The proposed ERF has a capacity to manage 300,000 tonnes of residual waste per annum, with HGV movements into the site typically being 121 per day.*
61. *Consequently, with regard to the above, it is considered that the development proposals would not discernibly or materially worsen the existing operation of the highway network and that, by virtue of this, the development proposal is acceptable in traffic and transport terms.*

The original transport study for the landfill development was flawed. It didn't take into account a number of developments and current problems as regards the A512 which is already congested at peak times and will become even more so in the future.

The Leicestershire Structure Plan Chapter 7 Transport and Traffic Management include the following statements:

'Much of the highway network in and around Shepshed is of a poor standard. The settlement has experienced substantial growth in recent years bringing further traffic with no significant improvement to the road network serving the central area. It would not be desirable to introduce more traffic onto this road network which does not appear capable of realistic improvement'.

### 'POLICY TR/1

Planning permission will not be granted for development which would result in serious congestion on the Specified Road Network or otherwise prejudice its ability to provide for the safe and most efficient movement of traffic within the Borough. The County's Specified Road Network within Charnwood Borough includes the following roads: M1, A6, A512'.

Air quality monitoring by Charnwood Borough Council shows that the worst areas are Ashby Road Central on the A512 (along with Baxtergate and High Street in the centre of Loughborough). This gives a good indication of the density of traffic on the A512 at present. It should also be noted that Ashby

Road Central is from Ingleberry Road towards Ashby and doesn't cover the A512 towards J23 and Loughborough. Air quality in this area will be even worse because of the proximity of the M1 and the expanded Truck Stop. This is also the section of the A512 where all the additional HGV movements (242 per day) will take place. This is clearly unsustainable and is not 'acceptable in traffic and transport terms' as stated in the BIFFA report. The incinerator complex will draw waste from a wide area, only some of which will be able to use the M1. Many HGVs will come from the east (including Loughborough) using the A512 from Epinal Way. Similarly, waste from the west will mean HGVs travelling on the A512 from Ashby and the A42. Many HGVs from Derbyshire and Nottinghamshire will not be able to use the M1. The Truck Stop, almost opposite the incinerator complex, is being expanded and there are already many hold ups with lorries entering and leaving the area. HGVs also use nearby laybys overnight. A major haulage company further along the A512 generates much HGV traffic as does an industrial site off Charnwood Road/A512. Gelders Hall industrial estate is used by HGVs for overnight parking – all of which use the A512.

Charnwood Borough Council is proposing to build a new town of 3,500 houses on the Garendon Estate, together with employment areas, shops and other services. A road will be built from the town, through Garendon Park to the A512 near Junction 23. This will generate a huge amount of traffic on the Shepshed - Loughborough - Ashby road creating logjams and traffic hold ups. A new Science Park on the A512 adjacent to the University and Snells Nook Lane will add to the congestion. All these developments will materially worsen the existing operation of the highway network and the additional HGV and employee traffic from the incinerator site will make the situation unsustainable. **There needs to be another full-scale transport and road survey before any decision is made on the incinerator planning application.**

#### NOISE

67. *The cumulative impact of all operations would have no effect on the existing ambient noise levels at any of the nearest noise-sensitive receptors assessed.* Clearly there will be increased noise contamination from 242 HGV vehicle movements each day (121 in and 121 out). Residents living near the A512 and M1 already suffer from noise 24/7 and this problem will be exacerbated during construction of the incinerator and widening of the M1.

#### GEOLOGY AND WATER

69. *The geology of the site has been described, having regard to published data and site investigations. The assessment notes that the quarry void is designated for its geological importance. In this respect, the area of interest would not be affected by the proposals.* It would be difficult for students and researchers to access the area of geological interest within what would be a dangerous industrial site.

#### ECOLOGY

77. *Ecological evaluation has identified the following receptors of ecological importance within the site:*
- Mature Woodland and Plantation*
  - Great crested newts (within quarry void)*
  - Foraging badgers*
  - Commuting bats; and*
  - Nesting birds*

It is very difficult to see how these can be protected. It seems clear that the ecological environment will deteriorate.

#### CULTURAL HERITAGE

85. *Amongst these heritage assets are three groups of features identified for detailed impact assessment:*

- *Garendon Park, comprising the remains of a medieval abbey, and post-medieval, 18<sup>th</sup> and 19<sup>th</sup> century parkland, buildings and structures;*
- *Holywell medieval farmhouse and outbuildings; and*
- *Hillforts near Belton and at Beacon Hill*

88. *It is judged that there would be no direct impact on heritage assets or archaeological remains from the proposed development.*

In fact there **would** be 'direct impact on heritage assets or archaeological remains'. Deterioration of the listed buildings on Garendon Park would accelerate due to emissions from the incinerator. At least two of the listed buildings are already on the English Heritage Buildings at Risk Register. There would also be a visual impact with 'moderate adverse' impact for the registered park and listed buildings. The plan is to transform Garendon Park into a Country Park to attract tourists and other visitors. Clearly a large, prominent incinerator virtually across the road would undermine this proposal.

#### SOCIO ECONOMIC

101. *There are no significant visitor attractions in the area, and whilst a number of smaller attractions are present, it is not anticipated that the proposed development would detract visitors from the area.*

The Charnwood Borough Council Core Strategy includes a proposal to transform Garendon Park into a fully fledged Country Park which would be 'a significant visitor attraction'. The likely developer of the proposed new town on the Garendon Estate states that 'the development can deliver restoration of the historic Garendon Park and repair of its listed buildings and monuments whilst providing public access to the Park. It is unfortunate that the authors of the BIFFA report were not aware of this. Building an incinerator at this location would detract potential visitors to the area.

103. *Finally, there is no evidence to suggest that the ERF would result in an increase in ill health in the surrounding area. Consideration has been given to the potential for the development to impact upon the air quality of the surrounding area and found that the proposed ERF would have only a negligible impact on air quality of the area.*

The 4th Report of the British Society for Ecological Medicine – 'The Health Effects of Waste Incinerators' refutes the contention the incinerator would not result in an increase in ill health in the surrounding area. Just two quotes from this 72 page report emphasises this:

'Since the publication of this report, important new data has been published strengthening the evidence that fine particulate pollution plays an important role in both cardiovascular and cerebrovascular mortality and demonstrating that the danger is greater than previously realised. More data has also been released on the dangers to health of ultrafine particulates and about the risks of other pollutants released from incinerators. With each publication the hazards of incineration are becoming more obvious and more difficult to ignore. 'Large studies have shown higher rates of adult and childhood cancer

and also birth defects around municipal waste incinerators: the results are consistent with the associations being causal. A number of smaller epidemiological studies support this interpretation and suggest that the range of illnesses produced by incinerators may be much wider.'

Derby City Council have recently rejected an application to build an incinerator on health grounds. The location of the proposed incinerator on Raynesway is not as close to densely populated areas as Newhurst Quarry and the incinerator would have been only one third of the size. So it is difficult to see how BIFFA and Leicestershire County Council can say there are no health problems when a few miles away the authorities and councillors say there are.

A recently published report by a Commons Environmental Audit Committee stated:

'Pollutants such as ozone, nitrogen oxides and "particulate matter" – tiny particles – from transport and power stations have been blamed for contributing to early deaths. Particulate matter is estimated to reduce people's lives by an average of seven to eight months, while in pollution hotspots vulnerable residents, such as those with asthma, could be dying up to nine years early. Air pollution also leads to damage to wildlife and agriculture, with ground-level ozone estimated to reduce wheat yields in the south of Britain by 5% to 15%. EAC Chairman Tim Yeo said: "Air pollution probably causes more deaths than passive smoking, traffic accidents or obesity, yet it receives very little attention from government or the media".'

Charnwood Borough Council Environmental Protection Department reports that 'There has been an increase of about 50% in the number of cases of asthma in the UK over the last 30 years. It has been documented that environmental factors such as air pollution can provoke or aggravate asthma symptoms in those who are already asthmatic'. Anecdotal evidence suggests that the incidence of asthma in Shepshed children and adults is already higher than the national average. Many studies round the world have shown that living near a motorway or busy highway greatly increases the incidence of asthma (and other respiratory diseases). A major study in America in 2007 (published by The Lancet) links motorway pollution with permanent and life-limiting damage to children's lungs. People who live within 500 metres of a motorway grow up with significantly reduced lung capacity, and even children who have never experienced asthma are at risk, scientists warn. Government health officials are considering the findings of the study to decide if any action is needed. An incinerator would exacerbate this problem with increased HGV traffic in addition to the emissions from the flue stack itself. It should also be remembered that the M1 is to be widened near junction 23 which will bring traffic emissions closer to Shepshed schools.

**It is essential that further research be undertaken by Borough and County Council Officers to investigate the health dangers of building an incinerator. BIFFA consultants have clearly not presented an objective report on this important issue.**

## CLIMATE CHANGE

105. *The Environment Agency life cycle assessment software 'Waste and Resource Assessment Tool for the Environment (WRATE)' was utilised to model the potential environmental impacts of the proposed facility. This has shown that the facility would result in an overall reduction in environmental impacts such as global Co2 emissions. This can be attributed to the generation of electricity from waste and the subsequent displacement of fossil fuel electricity generation.*

Incinerators emit more Co2 per megawatt-hour than coal-fired, natural-gas-fired, or oil-fired power stations. Incinerating materials such as plastic, wood, paper, yard debris and food discards is far from 'climate neutral'; rather, incinerating these and other materials is detrimental to the climate. An American Report states that:

'Incinerators are significant sources of Co2 and also emit nitrous oxide (N2o), a potent greenhouse gas that is approximately 300 times more effective than carbon dioxide at trapping heat in the atmosphere. By destroying resources rather than conserving them, all incinerators cause significant and unnecessary life cycle greenhouse gas emissions. Incineration is also a pollution ridden and cost prohibitive, and is a direct obstacle to reducing waste and increasing recycling.'

BIFFA admit that the main emission from the incinerator will be Co2 as well as N2o but will not install carbon capture technology because it is too expensive. **It is not correct that 'the facility would result in an overall reduction in environmental impacts such as global Co2 emissions.**

106. *Whilst the ERF would produce carbon emissions, these are less harmful greenhouse gases than methane, which would be produced if the waste was land filled.*

This is perhaps true, but there should be increased recycling so there would be no emissions from either landfill or incineration.

107. *The ERF and offices would be powered by energy produced on site and the surplus energy would be exported to the National Grid. Recovered energy avoids the need to produce electricity from non renewable (fossil) sources, which in turn reduces emissions associated with the extraction and combustion of fossil fuels.*

It is worth repeating that Incinerators emit more Co2 per megawatt-hour than coal-fired, natural-gas-fired or oil-fired power stations. Energy would also be used in producing products to replace the ones that have been incinerated instead of recycled. There is still no detail of how electricity would be exported and therefore there remains the possibility that pylons may need to be constructed, again blighting the landscape.

- 109 *Finally the ERF would have the potential to provide heat to existing and future developments in a 5km area around the site. New development in the vicinity of the facility could be future proofed by ensuring the infrastructure is in place to allow CHP system to be fitted retrospectively.*

BIFFA have not made any investigation as to whether this idea is either practical or financially viable. If it was surely BIFFA would have plans to implement such a project? It strikes us that this is something included only to exaggerate the supposed benefits of the project. The fact is that 80% of the heat would go up the chimney.

#### CUMULATIVE IMPACTS

111. *Cumulative impacts, which considers the proposed ERF with other developments in the area, be they historic, current or planned, have been considered in the context of other waste management facilities and uses of land.*

113. *With regard to other land uses around the applications site, none have been identified that would result in any cumulative impacts in terms of air quality, traffic, noise, surface water or landscape and visual amenity.*

- 115 *For the ERF, no significant impacts have been identified for any of the environmental topics considered as part of the EIA. Thus, no receptors are likely to experience any significant accumulated impacts from two or more sources.*

BIFFA have not taken into account a number of developments that are planned around Shepshed and within 5km of the incinerator. All these projects will have a very significant cumulative impact on air quality, traffic, noise and landscape and visual amenity. These developments are as follows:

- Core Strategy plans to build 3,500 houses and associated facilities (shops, employment areas, schools etc) on the Garendon Estate together with a road through Garendon Park onto the A512 near junction 23.
- The M1 is to be widened between J24 and J22 of the M1
- Expansion of the Truck Stop located almost opposite to the incinerator complex;
- Plans to build a major hotel, two golf courses and a golf academy to the west of Shepshed which will bring additional traffic on the A512 as well as through the town
- Plans to expand East Midlands Airport with a ten-fold increase in freight and fourfold increase in passengers will inevitably mean a second runway at the airport. This runway would be near Diseworth bringing air traffic over Shepshed and the surrounding areas. The cumulative effect on air quality, noise, traffic and visual amenity around Shepshed would be catastrophic. **It is essential that an in depth study of the affect of all these developments be undertaken before any further consideration of the application for an incinerator be undertaken.**

## CONCLUSIONS

118. *The ES has not identified any significant impact from the proposed development. Of the assessments undertaken, the greatest impact is in respect to landscape and visual impact; however, due to the surrounding topography and vegetation, the impact is contained to a limited geographical area around Junction 23 of the M1.*

The reason 'the ES has not identified any significant impact from the proposed development' is that it has not been done properly! **It is essential that the ES should be done again in much more depth and taking into account all the factors described above.**

The landscape and visual impact is much more than around Junction 23 and it is disingenuous to suggest otherwise.

### **Financial and Recycling Issues**

We have had no details of any economic appraisal of this project. No doubt it will cost many £millions and since the only income appears to be sale of electricity it is clear that taxpayers at national, county and borough level will bear most of the costs. Councillors and taxpayers should be given full details of the costs and income from this project before decisions are made.

It would be much better if these huge investments were directed to improving recycling facilities. Britain lags far behind European countries in terms of recycling percentages and instead of incinerators we should be investing in state of the art recycling facilities instead.

Much more use should be made of anaerobic digesters to deal with the large amounts of food waste. Let's make Leicestershire a leader in this!

Perhaps the most useful way to reduce the amount of waste to be disposed of is not to make waste in the first place! The County Council should make more effort to persuade industry and supermarkets to reduce packaging.

Incineration has been shown to be a disincentive to recycling. The more money invested in building incinerators means less available to invest in recycling improvements. Residents will be less inclined to recycle properly since they will know much of the waste is going to be incinerated anyway. Incinerators must be kept operating all the time and need huge amounts of waste to keep going. The more successful Leicestershire is in recycling, the less waste will be available for incineration. A point will be reached when incineration is no longer economically viable so there will be tremendous commercial pressures to limit the amount of waste being recycled. An incinerator is a monster that needs feeding.

### **Location**

Finally we come to the question of location of the incinerator. The following factors detail why we consider the incinerator to be in the wrong location:

- It is near areas of dense population with many schools and children who would be affected by emissions from the incinerator ie there would be health problems;
- The location of the facility within both the Charnwood Forest Regional Park and The National Forest would be detrimental to these wonderful initiatives. Regeneration of Newhurst Quarry would be prevented for decades to come;

- The road network and vehicular traffic on the A512 are unsustainable
- Being located in the extreme north west of Leicestershire would mean that HGVs would have to travel long distances from other parts of the County;
- The incinerators proximity to Nottinghamshire and Derbyshire would mean that much of the waste would come from these counties so Leicestershire's waste disposal problem would not be solved; and
- Proximity to Garendon Park would cause deterioration of the 12 listed buildings in the Park and prevent its opening as a Country Park as proposed in the Charnwood Core Strategy.

## Response from Shepshed Against Incineration Action Group

### Location

Biffa already have planning permission for landfill, a waste transfer station, materials recycling facility and an in-vessel composting plant and are trying to use this as a basis for permission to build an incinerator. But it is important that when a decision is made on the new application the existing permission is not taken into account. The reason permission was given for landfill was the existence of a quarry with capacity to take waste for 25 years. This was logical at the time since there were few other suitable places in Leicestershire. However, this reason cannot be 'rolled over' to support the application for an incinerator since completely different criteria need to be applied. Nor do Biffa have permission for handling hazardous waste which will be generated from incineration.

Biffa have justified their switch from landfill to incineration by saying that the landfill option is no longer commercially viable because of increasing taxes and changes in Leicestershire County Council waste policy. It is therefore not a choice between landfill and incineration as is sometimes suggested.

The site lies within the boundaries of The National Forest (TNF) and is therefore a totally inappropriate location for construction of an incinerator. Various areas in TNF, such as coal mines and landfill sites have, or will be, regenerated. Discussions have already taken place between TNF and Shepshed Town Council about plans to regenerate the area and local residents have put forward the idea of a water-based leisure complex. If an incinerator is built, there will be no chance of this happening.

The site is also within the Charnwood Forest and Charnwood Borough Council has expressed 'deep concern about the height, size and impact of the building and the effect it will have on the appearance of the landscape, which is protected in local planning policy as having special Charnwood Forest character'.

The facility is huge with two flues necessarily built to a great height - three times the height of the 'Angel of the North' (it has been suggested that the incinerator could become known as the 'Demon of the East Midlands' !). This will be clearly visible approaching J23 of the M1 - dominating the landscape. Since most visitors to Loughborough and Shepshed travel via the M1 this means their first impression of the area will be a large ugly incinerator with fumes from the high flues drifting towards Loughborough. This is particularly unfortunate in that Loughborough University is the premier sporting university in the UK and will be hosting both the British and Japanese teams for the 2012 Olympics. What impression will athletes have of the University facilities when they see emissions from the incinerator being carried on the wind towards their training grounds? The main building mass, flue stacks and plume will be visible from many viewpoints within Shepshed and the visual impacts will be significant and detrimental to the area.

The Charnwood Borough Council Core Strategy envisages creating a Country Park on the listed Garendon Park. This was to become one of Charnwood's tourist attractions. However, Garendon Park is directly across J23 from the incinerator, which would therefore be highly visible. What tourist or local resident would want to visit a so-called Country Park which is overlooked by a major incinerator complex? Not many, we would suggest.

Perhaps the main reason for objecting to this location for an incinerator is its proximity to high density population including many children and schools. It is only a few hundred yards from properties in Shepshed and 1.4 miles from the centre of the town. Loughborough University is only 2.4 miles from the site and emissions from the facility will be carried by the wind to all these areas - with the consequent health problems.

The road network around the site is already subject to severe congestion and extra traffic on the A512 is unsustainable. Being located in the extreme north west of Leicestershire means that HGVs would have to travel long distances from other parts of the County. The incinerator's proximity to Nottinghamshire and Derbyshire would result in much of the waste coming from these counties so Leicestershire's waste disposal problems would not be solved.

Newhurst Quarry contains areas of geological interest and it would be difficult for students and researchers to access the area of geological interest within what would be a dangerous industrial site. It would also be difficult to protect receptors of ecological importance within the site such as mature woodland and plantation; great crested newts (within quarry void); foraging badgers; commuting bats; and nesting birds, including a rookery.

In general the construction and operation of this type of incinerator is incompatible with the requirements set out in Charnwood's Policy EV/1: *Charnwood has a richly diverse built and natural environment, much valued by the local population. It incorporates extensive tracts of attractive countryside, most notably the Charnwood Forest area.*

*The Borough council will set out to conserve, protect and enhance those features of the natural, historic and built environment which are particularly valued by the community and introduce measures to safeguard against pollution and promote the conservation of energy;*

*Planning permission will be granted for new development which safeguards important viewpoints, landmarks and skylines.*

### **Emissions, Air Quality and Health**

Air quality monitoring by Charnwood Borough Council shows the worst areas in Charnwood to be Ashby Road Central on the A512 (along with Baxtergate and High Street in the centre of Loughborough). Ashby Road East (from Ingleberry Road to J23 of the M1) is even worse because of prodigious emissions from M1 traffic and the expanded Truck Stop, which is located opposite the incinerator site. Yet this is the very section of road where the 242 daily HGV movements into and out of the site will be, along with additional staff vehicles. Air quality standards would become totally unacceptable.

This is supported by Charnwood's Environmental Health Manager who comments:

'I am concerned that properties on the A512, and in particular Cow Hill Lodge on Ashby Road East, are currently marginally compliant with the national air quality objectives for NO<sub>2</sub>. The additional contribution of nitrogen dioxide from the proposed waste facility is likely to be small as a percentage of existing levels, but could squeeze the margins of compliance with the air quality objectives and possibly cause an exceedence.'

Although emissions from the incinerator will be low in terms of pollutants such as ozone, nitrogen oxides, dioxins and particulate matter they are still significant. The incinerator will operate 24/7 for perhaps 30 years. Clearly there will be a build up of toxicity over this length of time. Studies from overseas show that high levels are emitted during start-up and close-down of incinerators when dioxins are not monitored in the UK. Although emissions will normally be monitored, this will only be after the event so any excesses will not be prevented - only recorded. Biffa have no experience in operating such a facility and undoubtedly mistakes will occur causing further problems. With 121 loads entering the site each day, Biffa will only be able to undertake cursory checks to prevent toxic waste entering the system.

Charnwood Borough Council Environmental Protection Department reports that 'There has been an increase of about 50% in the number of cases of asthma in the UK over the last 30 years. It has been documented that environmental factors such as air pollution can provoke or aggravate asthma symptoms in those who are already asthmatic'. A major study in America in 2007 (published by the Lancet) links motorway pollution with permanent and life-limiting damage to children's lungs. People who live within 500 metres of a motorway grow up with significantly reduced lung capacity, and even children who have never experienced asthma are at risk, scientists warn. There are already health problems in Shepshed, particularly associated with asthma and other respiratory diseases. Incidence of asthma in both adults and children is above the national average caused largely by the proximity of the M1. This can only be exacerbated by emissions from an incinerator and the 242 HGV movements per day. It should also be taken into account that the M1 is to be widened near J23, which will bring traffic pollution closer to Shepshed schools.

A recently published report by a Commons Environmental Audit Committee stated:

'Pollutants such as ozone, nitrogen oxides and "particulate matter" - tiny particles – from transport and power stations have been blamed for contributing to early deaths. Particulate matter is estimated to reduce people's lives by an average of seven to eight months, while in pollution hotspots vulnerable residents, such as those with asthma, could be dying up to nine years early. Air pollution also leads to damage to wildlife and agriculture, with ground-level ozone estimated to reduce wheat yields in the south of Britain by 5% to 15%.'

EAC Chairman Tim Yeo said: "Air pollution probably causes more deaths than passive smoking, traffic accidents or obesity, yet it receives very little attention from government or the media".

An incinerator (or Energy Recovery Facility as Biffa prefer to call it) is like a mini power station exhibiting all the problems noted above.

The 4th Report of the British Society for Ecological Medicine - 'The Health Effects of Waste Incinerators' refutes the contention that the incinerator would not result in an increase in ill health in the surrounding area. Just two quotes from this 72 page report emphasise this:

'Since the publication of this report, important new data has been published strengthening the evidence that fine particulate pollution plays an important role in both cardiovascular and cerebrovascular mortality and demonstrating that the danger is greater than previously realised. More data has also been released on the dangers to health of ultrafine particulates and about the risks of other pollutants released from incinerators. With each publication the hazards of incineration are becoming more obvious and more difficult to ignore.'

'Large studies have shown higher rates of adult and childhood cancer and also birth defects around municipal waste incinerators: the results are consistent with the associations being causal. A number of smaller epidemiological studies support this interpretation and suggest that the range of illnesses produced by incinerators may be much wider.'

It is essential that further research be undertaken by the Borough Council, County Council and Leicestershire Primary Care Trust to investigate the health dangers of building an incinerator.

A further consequence of emissions from the incinerator and the extra traffic will be accelerated deterioration of 12 listed buildings on Garendon Park. English Heritage officials visited Garendon Park in November 2006 to inspect the buildings and concluded that some of them should continue to be included on the National Buildings at Risk register. The Park also has abundant wildlife which would be affected by emissions, as would crops on the agricultural land.

It is clear from the above analysis that the application does not conform to the following County and Borough Policies:

County Council Core Strategy and Development Control Policy WDC8 in relation to health and amenity:

*"Planning permission will not be granted for waste management development which is likely to generate significant adverse effects from noise, dust, vibration, odour, emissions, illumination, visual intrusion of traffic to adjoining land uses and users and those in close proximity to the waste management development."*

And Policy EV/39 of the Charnwood Borough Local Plan:

*"Planning permission will not be granted for new development which:*

*i) because of its nature or operation, would be likely to result in a serious risk to the health or general amenities of nearby residents, the public generally or the natural environment;"*

## Roads and Transportation

The Leicestershire Structure Plan Chapter 7 Transport and Traffic Management includes the following statements:

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'Much of the highway network in and around Shepshed is of a poor standard. The settlement has experienced substantial growth in recent years bringing further traffic with no significant improvement to the road network serving the central area. It would not be desirable to introduce more traffic onto this road network which does not appear capable of realistic improvement'.

### POLICY TR/I

'Planning permission will not be granted for development which would result in serious congestion on the Specified Road Network or otherwise prejudice its ability to provide for the safe and most efficient movement of traffic within the Borough. The County's Specified Road Network within Charnwood Borough includes the following roads: M1, A6, A512.'

The A512 is already heavily congested at peak times and when there are problems on the M1. The Truck Stop, located almost opposite the incinerator complex, is being expanded and there are already many hold-ups with lorries entering and leaving the area. HGVs also use the nearby lay-bys overnight. A major haulage company further along the A512 generates much HGV traffic as do a number of industrial sites off Charnwood Road/A512. Gelders Hall industrial estate is used by HGVs for overnight parking - all of which use the A512.

Charnwood Borough Council is proposing to build a new town of 3,500 houses on the Garendon Estate, together with employment areas, shops and other services. A road will be built from the town, through Garendon Park to the A512 near J23. This will generate a huge amount of traffic on the Shepshed - Loughborough - Ashby road creating logjams and traffic hold-ups. A new Science Park on the A512 adjacent to the University and Snells Nook Lane will add to the congestion.

The incinerator complex will draw waste from a wide area, only some of which will be able to use the M1. Many HGVs will come from the east (including through Loughborough) using the A512 from Epinal Way. Similarly, waste from the west will mean HGVs travelling on the A512 from Ashby and the A42. Many HGVs from Derbyshire and Nottinghamshire will not be able to use the M1. The suggestion that over 90% of the incinerator traffic will use the M1 is simply not feasible.

The addition of 242 HGV movements per day (ie one every five minutes) plus staff and visitors car journeys would make the situation, in traffic and transport terms, unsustainable as well as increasing noise pollution.

It is essential that another full-scale transport and road survey is undertaken before any decision is made on the incinerator planning application.

## Electricity Generation and Climate Change

Research by the Institute for Local Self Reliance in America shows that incinerators emit more CO<sub>2</sub> per megawatt-hour of electricity produced than coal-fired, natural gas-fired, or oil-fired power stations. An independent review on behalf of Friends of the Earth found that 'waste incinerators that generate electricity emit a third more greenhouse gases for the electricity they produce than gas fired power stations'. The review also states that 'the situation will get worse in the future, as power generation from gas (and even coal) becomes more efficient, whilst carbon dioxide emissions from incinerators are predicted to increase due to a higher percentage of fossil-fuel containing plastics in the waste they burn'.

In effect, the ERF is like a mini fossil fuel power station except that it would emit more global warming gasses. Government policy is to concentrate on green, renewable energy sources such as wind farms and wave energy. Government legislation requires that new fossil fuel power stations will only be permitted if carbon capture technology is incorporated. Biffa have already stated they will not use carbon capture technology because 'it is too expensive'. Although the legislation does not cover incinerators, only larger power stations, this does not relieve Biffa of the moral responsibility to limit the emission of greenhouse gasses, not increase them.

Incinerating materials such as plastic, wood, paper, yard debris and food discards is far from 'climate neutral'; rather, incinerating these and other materials is detrimental to the climate. Another American Report states that:

'Incinerators are significant sources of CO<sub>2</sub> and also emit nitrous oxide (N<sub>2</sub>O), a potent greenhouse gas that is approximately 300 times more effective than carbon dioxide at trapping heat in the atmosphere. By destroying resources rather than conserving them, all incinerators cause significant and unnecessary life cycle greenhouse gas emissions. Incineration is also pollution ridden and cost prohibitive, and is a direct obstacle to reducing waste and increasing recycling.' Energy would also be used in producing products to replace the ones that have been incinerated instead of recycled.

There is still no detail of how the electricity produced by the incinerator would be exported. Therefore there remains a possibility that pylons may need to be used, again blighting the landscape. Biffa also claim that the ERF would have the potential to provide heat to existing and future developments in a 5km area around the site, including Loughborough University, through a Combined Heat and Power (CHP) system. The Application does not follow the Planning Guidance that waste heat must be used as effectively as possible. As it stands, the Application contains no confirmed off-take for the waste heat or indication of how it would be transported. Furthermore, it does not address what the optimum balance of electricity generation and heat export would be. Similarly, in Section 14 of the Environmental Statement, the greenhouse gas footprint of the plant (without heat export) is compared with alternatives. But no comparison is made with the footprint if all heat were to be exported. Since Biffa are not proposing to do this themselves it is unlikely that such a project would actually happen. This is only being put forward to exaggerate the supposed benefits of incineration. The fact is that 80% of the heat would go up the chimney.

## Financial and Recycling Issues

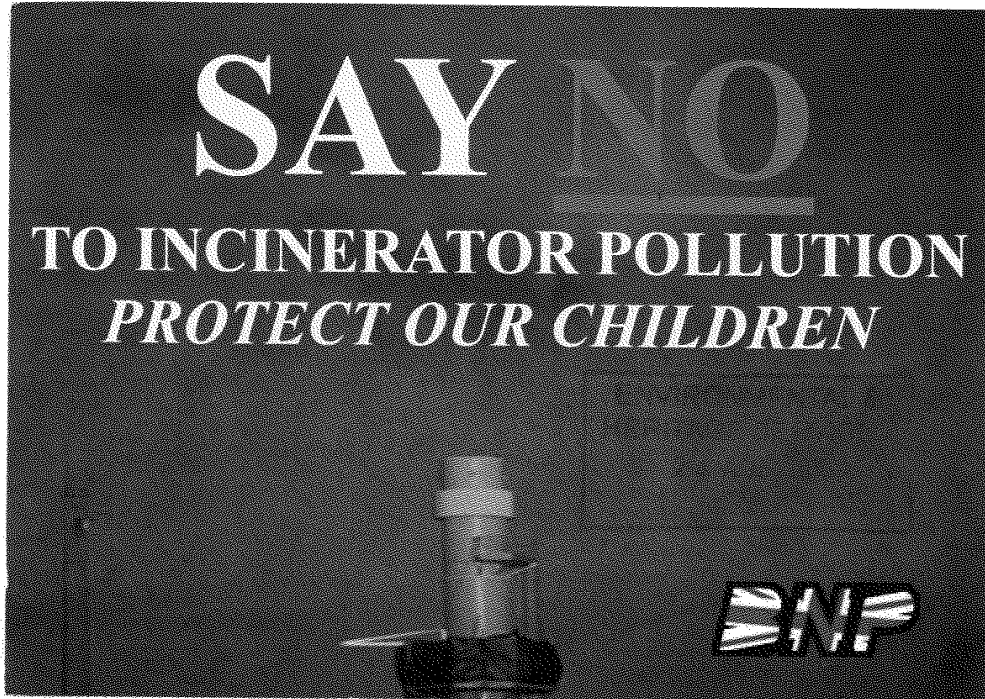
There does not appear to be an economic appraisal of this project available. Undoubtedly the investment will be many £millions and since the only income appears to be sale of electricity it is clear that taxpayers at national, county and borough level will bear most of the costs. Leicestershire Councillors and residents should be given full details of the costs and benefits of the project before decisions are made. As it stands this application is an attempt to take advantage of a lucrative opportunity from being 'first past the post'. Alternative proposals should be invited for consideration. Leicestershire County Council announced that ERF incineration was their preferred option before applications for the PFI project were invited and thus discouraged any applications for other methods. This is of dubious logic.

There may be better ways of investing the funds available such as the following:

1. The County Council should work with Government Agencies to encourage and force industry and supermarkets to reduce the amount of packaging used. What packaging has to be used should be eco-friendly.
2. Britain lags far behind European countries in terms of recycling percentages and instead of incinerators we should be investing in state of the art recycling facilities instead.
3. Much more use should be made of anaerobic digesters to deal with the large amounts of food waste. The methane from this process can be used as an energy source.

Incineration has been shown to be a disincentive to recycling. The more money invested in building incinerators means less available to invest in recycling improvements. Residents will be less inclined to recycle properly since they will know much of the waste is going to be incinerated anyway. Incinerators must be kept operating all the time and need huge amounts of waste to keep going. The more successful Leicestershire is in recycling, the less waste will be available for incineration. A point will be reached when incineration is no longer economically viable so there will be tremendous commercial pressures to limit the amount of waste being recycled. Waste will also have to be brought from further and further away. An incinerator is a monster that needs feeding continually.

Prepared by Cllr Roy Kershaw on behalf of SAIG (Shepshed Against Incinerator Group)  
April 2010



**SAY NO TO INCINERATION**

DATE 18/8/10

Dear Mr Bond,

I am disturbed at proposals to locate incineration waste plants close to our homes at BARDON and at SHEPSHED. Emissions of toxic fumes, dioxins and carcinogenic particles could seriously endanger the health of local residents.

I urge you to relocate the proposed waste facilities far away from inhabited areas — or use non-polluting anaerobic waste digesters. Germany has over 4,000 digesters, but Britain has only a handful.

NAME  
ADDRESS

PLEASE COMPLETE & POST IMMEDIATELY TO:



**Peter Bond**  
Principal Planning Officer  
Leicestershire County Council  
County Hall, Leicester Road  
Glenfield  
Leicester  
LE3 8RA

## **DEVELOPMENT CONTROL AND REGULATORY BOARD**

The considerations set out below apply to all the preceeding applications.

### **EQUAL OPPORTUNITIES IMPLICATIONS**

Unless otherwise stated in the report there are no discernible equal opportunities implications.

### **IMPLICATIONS FOR DISABLED PERSONS**

On all educational proposals the Director of Children and Young People's Service and the Director of Corporate Resources will be informed as follows:

#### **Note to Applicant Department**

Your attention is drawn to the provisions of the Chronically Sick and Disabled Person's Act 1970, the Design Note 18 "Access for the Disabled People to Educational Buildings" 1984 and to the Disability Discrimination Act 1995. You are advised to contact the County Council's Assistant Personnel Officer (Disabled People) if you require further advice on this aspect of the proposal.

### **COMMUNITY SAFETY IMPLICATIONS**

Section 17 of the Crime and Disorder Act 1998 places a very broad duty on all local authorities 'to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all reasonably can to prevent, crime and disorder in its area'. Unless otherwise stated in the report, there are no discernible implications for crime reduction or community safety.

### **BACKGROUND PAPERS**

Unless otherwise stated in the report the background papers used in the preparation of this report are available on the relevant planning application files.

### **SECTION 38(6) OF PLANNING AND COMPULSORY PURCHASE ACT 2004**

Members are reminded that Section 38(6) of the 2004 Act requires that:

"If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise."

Any relevant provisions of the development plan (i.e. any approved Local Plans) are identified in the individual reports.

The circumstances in which the Board is required to "have regard" to the development plan are given in the Town and Country Planning Act 1990:

Section 70(2)	:	determination of applications;
Section 77(4)	:	called-in applications (applying s. 70);
Section 79(4)	:	planning appeals (applying s. 70);
Section 81(3)	:	provisions relating to compensation directions by Secretary of State (this section is repealed by the Planning and Compensation Act 1991);
Section 91(2)	:	power to vary period in statutory condition requiring development to be begun;
Section 92(6)	:	power to vary applicable period for outline planning permission;
Section 97(2)	:	revocation or modification of planning permission;
Section 102(1)	:	discontinuance orders;
Section 172(1)	:	enforcement notices;
Section 177(2)	:	Secretary of State's power to grant planning permission on enforcement appeal;
Section 226(2)	:	compulsory acquisition of land for planning purposes;
Section 294(3)	:	special enforcement notices in relation to Crown land;
Sched. 9 para (1)	:	minerals discontinuance orders.