Nottinghamshire County Council

Report to Planning and Licensing Committee

21st October 2014

Agenda Item:

REPORT OF CORPORATE DIRECTOR POLICY, PLANNING AND CORPORATE SERVICES

NEWARK AND SHERWOOD DISTRICT REF. NO.: 3/13/01767/CMW

PROPOSAL: **PROPOSED DEVELOPMENT OF THE BILSTHORPE ENERGY CENTRE (BEC) TO MANAGE UNPROCESSED AND PRE-TREATED WASTE MATERIALS THROUGH THE CONSTRUCTION AND OPERATION OF A PLASMA GASIFICATION FACILITY, MATERIALS RECOVERY FACILITY AND ENERGY GENERATION INFRASTRUCTURE TOGETHER WITH SUPPORTING INFRASTRUCTURE**

LOCATION: **BILSTHORPE BUSINESS PARK, OFF EAKRING ROAD, BILSTHORPE**

APPLICANT: **PEEL ENVIRONMENTAL**

Purpose of Report

1. To consider a planning application for the construction and operation of waste facility to manage residual waste and solid recovered fuel through a plasma gasification process together with a materials recovery facility, energy generation infrastructure and ancillary development. A key fact sheet is attached as Appendix 1 to this report which provides a factual summary of the development proposed.

2. The application is accompanied by an Environment Impact Assessment (EIA) which has been prepared in accordance with the requirements of the relevant EIA Regulations.

3. The recommendation is to grant planning permission subject to a Section 106 legal agreement and the planning conditions attached as appendix 2 to this report.

The Site and Surroundings

4. The proposed Bilsthorpe Energy Centre (BEC) would be located on land within Bilsthorpe Business Park. The Business Park is located circa 24 kilometres (km) to the north of the City of Nottingham, 19km west of Newark and 11km east of the centre of Mansfield. The location of the site and its context to Bilsthorpe is shown on Plan 1.

5. The Business Park occupies 24 hectares (ha) of land which historically accommodated the operational pit head area of the former Bilsthorpe Colliery.

The pit head area has been cleared of its buildings and is progressively being redeveloped for general industrial and storage and distribution uses. To date, several business units have been completed including Nottinghamshire County Council's (NCC's) Northern Area Highways Depot which has been constructed on land to the immediate west of the application site. In addition, the Business Park also contains a mine gas utilisation plant which generates energy from the gas that is extracted from the former colliery. The location of the application site within the Business Park is shown on Plan 2.

6. The Bilsthorpe Business Park is on the edge of Bilsthorpe village, approximately 420 metres (m) to the north-east of the village. It lies within a bowl-shaped landform which is bounded to the north, east, and south by restored colliery spoil tips lying approximately 20m higher than the level of the development site. A disused railway line runs along the southern boundary. A 5m high earth mound planted with trees (provided as part of the restoration of the colliery) forms a mature woodland belt which runs along the western boundary. There is a surface water lagoon circa 80m to the north east which is used by Bilsthorpe Fisheries Angling Club and five wind turbines with a blade tip heights of around 100m have recently been constructed on the land to the east.

7. In terms of the wider context,

- to the south east is the site of a restored landfill, beyond which the land is predominantly in agricultural use;
- To the south is an undeveloped area of the former Bilsthorpe Colliery, beyond which is the boundary of the village of Bilsthorpe.
- Part of the land to the south (associated with the former colliery) has recently received planning permission for the development of a large Solar Farm;
- To the west is Eakring Road, beyond which are a series of agricultural fields that are punctuated by a row of residential properties;
- To the south west is the main body of the village of Bilsthorpe at a distance of approximately 420m; and
- To the north is Deerdale Lane, beyond which the land is predominantly within agricultural use.

8. The proposed BEC development would be situated within a 4.35ha parcel of land that is located within the Bilsthorpe Business Park. The application site is broadly flat and clear of vegetation and buildings, standing at a level of around 74.5m above ordnance datum. The ground surface is entirely made ground formed by a combination of demolition rubble, reworked topsoil and silty coal. The site is underlain by two former mine shafts which have been backfilled and capped.

9. The BEC would be accessed via the internal estate roads of the Bilsthorpe Business Park, which in turn accesses the public highway by a circa 250m long private road which connects to Eakring Road via a priority 'T' junction. Eakring Road connects to Deerdale Lane approximately 500m to the north which, in turn, connects to the A614 Old Rufford Road some 950m to the

west. This route is signposted as a Heavy Goods Vehicle (HGV) advisory route.

10. The application site and its wider environment are located within the Bilsthorpe Colliery Local Wildlife Site (LWS). This area has been designated on the basis of its importance for breeding waders and dingy skipper butterflies. The site lies 6.3km to the south of the Birklands and Bilhaugh Special Area of Conservation (SAC) and within the 5km buffer zone of the Sherwood Important Bird Area and is within 2km of an indicative core area identified by Natural England for a potential prospective Special Protection Area (ppSPA).

11. The nearest residential properties to the application site are two isolated properties located circa 400m to the west on Eakring Road. The main body of residential properties within the settlement of Bilsthorpe are located circa 420m (at the nearest point) from the site boundary. (see Plan 3)

Planning History

12. Bilsthorpe Colliery was an inter-war period colliery complex that was built for the Stanton Iron Works company between 1925 and 1928. The Colliery operated for around 70 years before its ultimate closure in 1997. Following its closure the Colliery has been the subject of a number of planning applications, developments and engineering / remediation works which have resulted in the partial redevelopment of the pit head area as a business park and restoration of the colliery spoil tips to an amenity/ecological end use.

13. In 1989 planning permission was sought to erect a coal fired power station on the Bilsthorpe Colliery site. A planning decision was never issued for this development and the planning application was withdrawn in 1995.

14. In March 2004 Newark and Sherwood District Council gave outline planning permission (reference: 02/01392/OUTM) for the redevelopment of the former colliery pit head site for Class B2 (General Industrial) and B8 (Storage and Distribution) uses. This planning permission imposes a legal obligation through a Section 106 agreement to undertake highway improvements at the junction of the A614 / Deerdale Lane at a point in the future once an agreed level of industrial redevelopment has been undertaken within the pit head area. The BEC development site is within the boundary of the consented industrial area.

15. Industrial/commercial redevelopment of the business park preceded through reserved matters and full planning permission approvals issued by the District Council. With the shift from the use of reserved matters to detailed full applications to build out the Business Park, the original outline planning permission has been allowed to lapse.

16. The development of the NCC Northern Area Highways Depot was granted planning permission in July 2010 by the County Council. As part of this planning permission the legal agreement was updated in April 2009 such that the requirement for a junction improvement scheme would only be triggered by future development beyond the following development elements at the Bilsthorpe Colliery site:

- UK Coal 'Phase 1' units (partially completed);
- NCC Highways Depot (completed); and
- Additional development totalling 10,000m2 B2 / B8 in any combination, save that no more than 6,000m2 shall be B2 land use (no progress).

Proposed Development

Development overview

17. The proposed Bilsthorpe Energy Centre (BEC) development would comprise two main buildings accommodating a waste receipt area/integrated materials recovery facility (MRF) and a gasification facility, syngas processing area and power generation facilities/exhaust stacks. Associated process development includes the construction of an attenuation pond, effluent treatment area, ancillary plant/equipment and landscaping.

18. The site is designed to manage a maximum 117,310 tonnes per annum (tpa) of waste which would either arrive pre-treated as a Solid Recovered Fuel (SRF) ready for gasification, or require pre-treatment within the MRF to recover recyclables and produce a SRF for gasification.

19. The electricity would be generated through the gasification of the 'feedstock'. The gasification process would produce a carbon-rich syngas which would be collected and used within a series of internal combustion engines (ICE's) to generate electricity. The gasifier and associated power generating facilities would have an electricity generating capacity of approximately 13.6 Megawatts (MW) of which circa 4.0MWe would be used within the energy centre itself and around 9.6MWe would be available to export to the electricity grid. In addition, the proposed development would also have the potential to produce around 5.5MW of heat in the form of hot water recovered from the cooling systems associated with the engines.

Proposed Buildings and Structures

20. The proposed BEC development would be based around two main buildings linked by three enclosed elevated conveyor belts (see plan 4). The BEC would also include a site office / control room, effluent treatment plant, a series of ancillary structures, access roads, vehicle circulation areas, a surface water attenuation feature and landscaping.

21. The southern building would incorporate a reception hall, bunkers for the receipt of untreated waste, hoppers for receipt of SRF, silos for SRF, metallurgical coke and limestone storage, materials recovery plant and recyclables storage/loading area. The building would measure circa 97m by 81.8m and would be flat roofed with an overall height of 15.8m. The building would be clad in steel sheeting finished in a composite of colours incorporating greys, silver and terracotta finishes.

22. The northern building would accommodate the gasification facility. This building would range in length between 75m through the main body of the building and 99.4m, where the oxygen production facility extends out of the main body of the building to the north and the office / control room to the

south. The buildings width would range between 70.6m wide, through the main body of the building, to 93.6m wide where the power generation building extends out of the main body of the building to the west. The height of the building would reflect the operational heights required for the various elements of internal process equipment. The highest part of the building would house the vertical gasifier units. This part of the building would extend to a height of 31.8m (top of parapet) with the remainder of the gasification facility and gas processing facility extending to a height of 21.8m (top of parapet). The elevation of the oxygen production area and power generation area would extend to a height of 11.8m (top of parapet). The parapet would screen roof mounted blast chillers. The office / control room element of the building would be 4.0m in height. The two exhaust stacks associated with the gas engines would be incorporated into the roof of the power generation area within the western part of the building. Each exhaust stack would measure 60m in height and circa 2.3m in diameter and would incorporate the exhausts for four of the eight ICEs at the proposed BEC development. The building would be externally steel clad and finished in a predominant silver colour but with sections of grey, and terracotta finish to break up the profile of the building. The exhaust stack would have a powder coated steel finish in white.

23. The syngas processing system would generate an effluent which would be treated within the effluent treatment area located immediately to the north of the MRF building. The system is capable of treating up to 30 cubic metres of liquid per hour utilising a number of chemicals which are stored within a collection of tanks and silos (23 no.). The treatment process utilises a number of stages to remove solids and clean liquid discharges so that these liquids can either be discharged to surface water or the foul drainage system

24. In addition to the main buildings and effluent treatment area described above there are also a number of ancillary structures proposed which include:

- External slag container storage area (located to the immediate south of the Gasification Facility building);
- A Wet Electrostatic Precipitator (WESP), which is used for the removal of fine particulates from the syngas, located to the east of the Gasification Facility building measuring circa 3.5m wide x 4.0m long x 18.0m in height;
- A cooling tower (which would measure 12.0m in diameter and 0.7m in height and sit within a louvered shroud measuring 15.0m wide, 15.0m long and 10.0m in height;
- A flare stack which would measure 30.0m high and have a diameter of 1.0m;
- Pump House (6.0m wide x 6.0m long x 4.0m high) and firewater tank of 12.0m diameter and 9.25m in height, with a capacity of 500m3;
- Electrical Sub-station and Switchgear;
- Engine oil tanks (adjacent to Power Generation Area); and External tanks for the storage of Oxygen and Nitrogen located in within the Oxygen Production compound.

25. The final specification of all ancillary structures and plant, including those within the effluent treatment area would be subject to detailed design by the

technology provider which the applicant anticipates would be controlled through a submission made under planning condition.

26. The gatehouse and associated pit-mounted weighbridges would be located on the main site access road opposite the south west corner of the power generation area and near to the control room / office. The gatehouse building would measure 1.9m long by 1.2m wide and 2.56m high. The structure would be externally clad in grey steel sheeting. Adjacent to the weighbridge office would be a vehicle crew building measuring 6.8m long by 4m wide and 3.5m high.

27. The proposed BEC development would incorporate segregated vehicle/HGV access and site circulation, 41 car parking spaces, a coach parking space, two covered motorcycle sheds and a covered cycle shed, drainage including a surface water drainage lagoon to provide sustainable urban drainage (SUDs) , utilities and service connections, lighting and CCTV; 2.4m high security fencing and gates and landscaping.

Proposed Site Operations

28. The unprocessed waste material and pre-treated SRF would be delivered to the MRF in covered road vehicles that would report to the weighbridge where they would be weighed. After passing over the weighbridge vehicles would then proceed on the internal one way system into the reception / storage hall contained within the MRF.

29. Unprocessed waste would be unloaded into the reception bunker. The bunker is designed to have storage capacity for three days of normal operation of the MRF. The reception hall would be equipped with rapid closing doors which would remain closed when delivery of waste is not taking place and be equipped with an air filtration system.

30. Waste would be fed from the bunker to the MRF where it would undergo a series of mechanical processes to remove rubble, ferrous and non-ferrous metals, polyvinyl Chloride (PVC) plastics and other materials and make the residual material suitable as fuel for the gasification facility. The MRF would have a design capacity of around 117,310tpa. This has been specifically set at a higher capacity than the gasification facility (95,000tpa) to take into account the proportion of material that would be removed from the incoming waste which is unsuitable for recovery purposes and the proportion which is removed for recycling.

31. Deliveries of pre-processed SRF would be stored within a silo which provides up to 1.5 days capacity for normal operations of the Gasification Facility.

32. In addition to the unprocessed or pre-treated waste materials there is also a requirement for consumables (limestone and metallurgical coke) to be delivered to the reception / storage hall via the weighbridge and one-way traffic system. This material would also be discharged into hoppers before being conveyed into dedicated silos. The silo for the limestone would have a capacity of circa 60m3 and the silo for the metallurgical coke would have a capacity of around 30m3, adequate for 4.5 days of normal operation of the Gasification Facility.

33. The SRF material, limestone and metallurgical coke would be fed from their respective silos via three small conveyors into a further hopper for blending. Blended 'feedstock' would then be delivered to the Gasification Facility along one of the three enclosed external conveyors.

34. The gasifier is a vessel that operates at very high temperatures (in excess of 5,500^{0}C) and maintains an oxygen starved environment. The vessel would be equipped with a plasma torch system which generates high internal temperatures in the vessel that are sufficient to convert organic material into a gas and to melt all the inorganic material contained within the feedstock. The vessel would be designed to allow a controlled amount of the oxygen (produced on site in the Oxygen Production Building), to be injected at various levels of the gasifier vessel, which correspond with the various oxidation / gasification zones in the vessel.

35. The high temperature and oxygen deprived environment inside the vessel breaks the organic component of the feedstock down to create a gas called synthesis gas or 'syngas'. The inorganic components, like glass, metal and concrete, are melted inside the vessel and flow out of the bottom as a non-toxic vitrified molten 'slag' which can be used safely as a secondary aggregate. The feedstock for the gasifier contains limestone to act as a flux and promote the flow of slag within the gasifier, whilst the metallurgical coke forms a bed within the vessel.

36. The slag, flows through a series of tapholes at the bottom of the gasifier following which it is quenched. The resulting vitreous granules are conveyed and collected in containers for storage before being exported off-site. It is anticipated that up to 23,000tpa of slag would be produced by the proposed BEC development. The slag is inert and therefore suitable for re-use in the construction industry.

37. The 'syngas' rises to the top of the gasifier vessel and would exit via two syngas outlet ports, where it would be rapidly cooled before being cleaning in the syngas processing area. The syngas processing system generates an effluent during both the cooling and gas processing operations. This effluent includes solids which are to be removed and re-injected into the gasifier to minimise any waste by products from the process.

38. Once processed the syngas would be fed into the power generation area which would incorporate up to eight acoustically screened internal combustion engines which run similarly to diesel engines. Each engine drives a 400v generator. The power is transformed to 11Kv voltage and supplied to the site switch room, where electricity is distributed to low voltage transformers around the site and to a 33Kv transformer for export to the local distribution grid network. In total it is anticipated that the engines would be capable of generating up to 13.6MW of electricity and that around 9.6MW of this would be available to the local electrical distribution grid with the remainder being used to power the proposed BEC development itself. In addition to the production of electricity the engines also provide the potential to capture waste heat (from the water jackets and after coolers jacket) which could also potentially be exported from the proposed BEC development. The planning application however does not identify any specific local market for this heat and it is therefore proposed to vent the excess heat to the atmosphere.

39. The applicant outlines that in the future there is also potential for hydrogen extraction from the syngas and an area has been provided within the application site for the development of an alkaline fuel cells recharging facility in the future. This currently does not form part of this proposal, but if subsequently developed could replace some or all of the engines.

40. Following the combustion of the syngas within the engines, the exhaust emissions would undergo cleaning prior to their release to the atmosphere via one of the two exhaust stacks. Each of the exhaust stacks would be 60m high from ground level.

41. The proposed BEC development would operate under an Environmental Permit which requires emissions from the stacks to be monitored by a Continuous Emissions Monitoring System and reported in accordance with the Environment Agency's requirements.

42. The design incorporates a flare system to flare off any excess syngas, although it is not anticipated that this system would be regularly used.

Working Hours and Employment

43. The proposed BEC development would be open for the import / export of materials from Monday to Friday (07:00hrs to 19:00hrs) and Saturday (07:00hrs to 13:00hrs). No HGV deliveries / collections would take place on Sundays, Public or Bank Holidays.

44. The MRF facility would operate over two shifts between 07:00hrs and 23:00hrs on weekdays and an additional shift on Saturdays (07:00hrs and 16:00hrs). No operations would take place on Sundays, Public and Bank Holidays.

45. The Gasification Facility and associated energy generation would operate 24 hours per day, 7 days per week, 365 days per year except during planned maintenance shut-downs.

46. The proposed BEC development would provide permanent employment for 46 people.

Vehicle Numbers

47. On the basis of the predicted tonnage figures for the proposed BEC development, it is anticipated that the proposed development would generate in total 112 daily HGV two-way movements (i.e. 56 in and 56 out). This includes all HGV movements associated with the delivery of waste, consumables and the removal of residues and recyclables from the site.

Site Construction

48. It is anticipated that the development would take approximately 24 months to complete construction work and install/commission the plant. The construction would provide temporary employment, for up to 300 personnel at the peak of construction activity

49. Hours of construction operations would generally be limited to between Monday to Friday, 07:00 to 19:00hrs and Saturday 08:00 to 17:00hrs. Site

access would be via the established HGV route to Bilsthorpe Business Park which is from the A614 Old Rufford Road, Deerdale Lane and Eakring Road. It is anticipated that it may be necessary to accommodate a small number of abnormal load delivery events to the main application site. Such movements would be associated with the delivery of oversized development components including the gasifier unit, engine units, compressor and fire water tank.

50. The main site compound would be located within the application red line boundary towards the northern end of the site and close to the site entrance. This would comprise the site offices, staff welfare facilities, staff parking as well as being used for the temporary storage and lay-down of materials and plant.

51. Appropriate bunding and environmental protection measures would be implemented during construction operations to minimise pollution risks. The protection measures would be defined in a Construction Environmental Management Plan (CEMP) and would be in line with Environment Agency's Pollution Protection Guidelines.

Regulation 22 Submission

52. The planning application is accompanied by an Environmental Impact Assessment (EIA). Following the receipt of planning consultation responses and officer assessment of the original submission were it became apparent that further environmental assessments and clarifications were required to ensure that the EIA provides a full assessment of the potential environmental impacts resulting from the development and objections could be resolved. The applicant was therefore served with two formal requests to submit supplementary information under Regulation 22 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (Reg. 22 request).

53. The responses to the two Reg. 22 requests incorporate supplementary reports and technical appendices including non-technical summaries. These reports do not alter the overall design concept of the development. However the additional submissions provide the necessary information to satisfy Officers that the Environmental Statement provides a full assessment of the potential environmental impacts resulting from the development.

54. The first Reg. 22 report is structured to address the following matters:

    a. Supplementary information setting out the detailed arrangements for establishing compensatory habitat for little ringed plover and lapwings which may potentially be displaced by the BEC development.

    b. Clarification relating to noise contour plans.

    c. Clarification relating to water quality within the attenuation pond, particularly concerning its potential to support a habitat of ecological interest.

    d. A supplementary report to consider the magnitude of any impact to sensitive lichens (plants) within nearby ecologically sensitive habitats for atmospheric pollution from the process.

    e. Supplementary ecological survey to identify whether woodlark are present on the development site.

f. An assessment of the potential impact to nightjars that occupy habitat at Cutts Wood.

g. An assessment of impact to the feeding and breeding behaviours of bats in the area.

h. Supplementary information to demonstrate the facility qualifies for recovery status within the EU definition.

i. Supplementary information to describe the operation of the materials recovery facility, composition of the waste stream and compliance with the waste hierarchy.

j. Supplementary information relating to the transport of waste to the facility and the extent that these transport options are sustainable in the context of Policy WCS11 of the Waste Core Strategy.

k. Supplementary information relating to the choice of technology, its reliability/safety and its use within similar facilities in the UK or Europe.

l. Supplementary information comparing the efficiency of the proposed gasification process in relation to alternative waste recovery technologies.

m. Confirmation of the proposed timetable for the Environmental Permit submission.

n. Clarification information relating to the eradication of invasive vegetation in the vicinity of the site, methodology used within the landscape and visual assessment, enforcement of lorry routeing controls and a review of air quality impacts to lichens within the Birklands and Bilhaugh Special Area of Conservation.

55. The second Reg. 22 report is structured to address the following matters:

a. Ecology and Nature Conservation including updated wader mitigation plan and a further assessment of nutrient deposition from emissions on local wildlife sites and nearby SSSI's.

b. Assessment of impacts to the setting of surrounding heritage assets including Rufford Abbey Historic Park and St Margaret's Church in Bilsthorpe.

c. Other clarifications including a response to UKWIN's Part 2 objection specifically in respect of the efficiency of the plant, the operation of the Materials Recovery Facility, waste composition, compliance with the Waste Hierarchy and climate change issues. Confirmation is also provided that the developer does not proposed to submit an application for an Environmental Permit until a planning decision has been issued.

Consultations

56. The planning application has been subject to three rounds of planning consultation. These rounds of consultation coincide with the following stages of the planning process:

Consultation 1: The first round of planning consultation was carried out in connection with the original planning application submission.

Consultation 2: The second round of planning consultation was carried out following the submission of the first Regulation 22 response.

Consultation 3: The third and final round of planning consultation was carried out in connection with the second Regulation 22 Submission response.

57. The responses that have been received from each stage of the planning consultation process are summarised below, the response to Consultation 1 being listed first with any response to consultation 2 & 3 listed thereafter.

58. Newark & Sherwood District Council: Object to the planning application. At the time of going to print the County Council had not received a written notification of the District Council's concerns. It is understood that members of the District Council's Planning Committee unanimously resolved to object to the planning application on all the grounds that the planning officer's report recommended the County Council should give serious regard to. The officer recommendation is set out below:

'That in determining the planning application, Nottinghamshire County Council will need to have serious regard to the following:

- *The acceptability of the use on land retained for employment delivery, especially with regard to the criteria under Core Policy 6 including how the proposal responds to a demonstrable need, whether there are suitable alternative, available and viable sites available across Nottinghamshire that will not require the use of B use employment sites, and whether any impacts on neighbouring land uses are addressed*
- *Impact on the highway network*
- *Impact on amenity of nearby dwellings and settlements taking into consideration air quality, dust, noise and vibration*
- *Impact on ecology with the comments of Nottinghamshire Wildlife Trust a significant material consideration.*
- *Impact on heritage assets having particular regard to the statutory tests and policy guidance to assess any identified harm.*

It is recommended that a copy of this report and any recorded minutes are forwarded to County together with any formal consultation reply as may be agreed by Committee.'

An oral update will be provided to the Planning and Licensing Committee following receipt of the District Council's formal response.

59. Bilsthorpe Parish Council: Raise o*bjections to the planning application. The Parish Council state the basis of their objections are set out within the letter from the Residents Against Gasification Experiment (RAGE) group.* The issues raised in the RAGE letter of representation are summarised later in this report.

60. Consultation 2: *Bilsthorpe Parish Council maintain its strong objection to the planning application, raising concerns to the impacts on wildlife, suitability of*

road infrastructure to accommodate additional HGVs and potential for accidents and noise, landscape and visual impacts and potential health impacts caused by pollution.

61. Rufford Parish Council: *Raise objections to the development. The Parish Council has referenced its response against the 14 objectives of the sustainability appraisal which was used to assess the soundness of the Waste Core Strategy. The following conclusions are reached:*

    a. *The development would not assist with providing a network of sustainable waste management sites for the safe treatment and disposal of waste.*
    b. *The proposal would increase overall transport distances, bringing waste from outside Nottinghamshire to process and therefore would provide less sustainable patterns of transport.*
    c. *The height of both the main building and the smoke stacks would adversely affect the landscape and dominate the skyline in a rural setting.*
    d. *The Parish Council consider the development would not minimise impacts on climate change due to the lorry and vehicle movements it generates and the gases it produces. Similar plants in the USA have been shut down for various reasons.*
    e. *Emissions would affect the agricultural production of surrounding land.*
    f. *The Parish Council acknowledge that the development could promote an efficient use of land and resources and promote energy efficiency through maximising renewable energy resources.*
    g. *The development would not protect and improve local air quality.*
    h. *The development would provide employment opportunities but consider many of these would not be for local people.*
    i. *The development would adversely affect the quality of life of those who live in the area from noise, traffic and light pollution. It would also impact upon tourism.*

    Rufford Parish Council also supports the concerns raised within the objection letter from RAGE.

62. *Consultation 2: Rufford Parish Council have re-iterated its objections to the development. The following additional concerns are raised in respect of the information submitted as part of the Regulation 22 submission:*

    a. *A detailed assessment to demonstrate that the plant operates as a recovery facility should be undertaken before a planning decision is made.*
    b. *The Parish Council considers any syngas generated by the facility should be considered as waste rather than a product.*
    c. *The checks on waste products entering the facility appear to rely upon the judgments of third parties delivering waste to the site. The applicant cannot guarantee that unacceptable wastes would not be brought to the site.*
    d. *The planning application should incorporate sufficient information to demonstrate that the facility would comply with the waste hierarchy.*

e. *The efficiency of the plant is either less or at best equal to conventional incineration and therefore provides no benefits.*

f. *The future potential to incorporate a hydrogen fuel cell plant is untested and needs further investigation.*

g. *A waste permit should be obtained from the Environment Agency before the planning application is determined.*

h. *Traffic concerns are raised relating to HGVs on Deerdale Lane/Eakring Road, the A614 junction, visibility at junctions and concerns are raised regarding the workability of weight restriction orders.*

63. Edingley Parish Council: *Raise objections to the development on the following grounds:*

a. Pollution: The plant would incinerate heavy metals in addition to ordinary waste and as a result would be dangerous to humans, animals and crops. The area around the development is well known for its agricultural production. Emissions would fall out from the chimney onto these crops and toxins will be carcinogenic to the public. The emissions would increase climate change impacts. Liquid emissions could affect groundwaters.

b. Recycling: The facility could adversely affect recycling rates.

c. Traffic: The traffic would take a heavy toll on currently under-financed and poorly maintained roads and waste would travel significant distance to feed the plant, including waste from outside the UK.

d. Untried technology: It is understood there are four plants using a similar technology to Bilsthorpe, two of these have been closed down as they were unsafe. Why should Bilsthorpe be treated as a 'guinea pig' or test location for this type of waste plant and would the plant be closed down if it is judged to be dangerous?

e. Tourism: The facility would deter tourists coming to Sherwood Forest due to its significant visual impacts.

64. Eakring Parish Council: *Object to the planning application. The basis of the Parish Council's objections are set out within the representation from RAGE. The Parish Council has specifically made reference to the Waste Core Strategy Sustainability Appraisal Objectives and Decision Making Criteria wherein they argue that the development would be contrary to its key objectives insofar that the development would not reduce the distance waste is transported, is located within a designated Local Wildlife Site, is visible from public footpaths and located in open countryside, does not enhance the historic environment, adversely affects local landscape character and open space, the process is an unknown technology with potentially dangerous emissions, would adversely affect agricultural land from emissions, and would create very few local jobs.*

65. Consultation 2: *Eakring Parish Council maintains its objection to the development, noting that the additional information fails to take account of the impacts to Eakring Conservation Area. The Parish Council consider vital questions have been ignored including what is the composition of waste and how this would affect emissions since, if it is not known what is being burnt, how is it possible to know the output of the process? Concerns are raised that*

the pollution control regimes will not adequately protect residents, particularly with regard to long term effects. The developer has failed to identify where the waste would come from with potential for long distance deliveries. The delivery traffic would add to traffic problems in the area.

66. Kirklington Parish Council: *Object to the planning application, the basis of the Parish Council's objections are set out within the representation from RAGE.*

67. Farnsfield Parish Council: *The Parish Council does not object but raises concerns regarding the impact on health from potential pollution and seeks an assurance that the plant would be monitored for safety and to minimise any future potential harm to residents.*

68. Environment Agency (EA): *Raise no objections in principle. The EA advise that the operation of the facility would require an Environmental Permit, noting that a permit application has not been submitted by the applicant. The permit would consider potential impacts from emissions to air, land or water to consider the potential impact to human health and ecological systems, demonstrating that Best Available Technique (BAT) has been applied to the plant design which would necessitate consideration of alternative options for treatment.*

The EA have sought further reassurances that waste recovered within the BEC would not undermine the management of this waste at a higher level in the waste hierarchy but acknowledge that the facility could provide benefit if it managed low quality waste materials which are currently disposed of.

The EA state that the most efficient energy recovery facilities would usually recover heat and power consistent with BAT techniques. The EA note that the facility does not incorporate specific proposals for the recovery of heat energy.

The EA express some caution that the use of permitted capacity of facilities to determine need for the plant since these figures do not necessarily relate to actual operational capacity of existing plans and could result in an overestimation of actual operational capacity.

In the event that planning permission is granted the EA request that planning conditions be imposed relating to:

- *Land drainage and flood prevention,*
- *Surface and foul water drainage;*
- *Potential pollution during construction periods;*
- *Identification and management of any potential ground contaminant;*
- *Management of attenuation pond to provide ecological benefits;*
- *Provision of compensatory habitat to off-set potential habitats lost.*

69. Consultation 2: *The EA is satisfied with the submitted Wader Mitigation Plan subject to the compensation measures being commenced prior to the development. It is desirable that the design of the attenuation pond allows retention of permanent water; if this is not possible the planting should be tailored to be of benefit to protected and priority species.*

70. Consultation 3: The EA add no further comments to raise.

71. Natural England: Natural England raise no objection on the basis that they are satisfied that the development is unlikely to affect any statutorily protected sites or landscapes. They have not provided any specific advice regarding the significance of impact to protected species and local wildlife sites, referring the Council to their standing advice. Natural England request that opportunities for biodiversity or landscape enhancements be investigated.

Clarification has been sought from Natural England to confirm whether they have assessed impact from emissions within Redgate Woods and Mansey Common SSSI, Birklands and Bilhaugh Special Area of Conservation (SAC) and the prospective Sherwood potential Special Protection Areas (pSPA). In response Natural England confirm that they have utilised their standard distance criteria approach which shows that a 20MW input combustion facility is unlikely to have influence on sensitive habitats beyond 500m. This therefore screens out potential for unacceptable pollution to the Birklands and Bilhaugh SAC and the SSSIs or habitats which would contribute towards any future Sherwood pSPA.

Natural England have been made aware of the presence of nightjar within Cutts Wood for their views. They have requested further assessments of potential impacts be undertaken to assess whether there would be any impacts from the development to these birds.

72. *Consultation 2: Natural England have confirmed that the Reg. 22 submission does not identify any additional environmental impacts relating to their interest relating to statutory designated sites and protected landscapes. The air quality assessment now takes account of the presence of lichens in the Birklands and Bilhaugh SAC, the presence of lichens in this area does not change the overall conclusion of the air quality assessment insofar that the predicted process contribution from the proposed development at the SAC would be insignificant and significant effects are anticipated.*

73. Consultation 3: *Natural England do not wish to raise any further comments.*

74. Nottinghamshire Wildlife Trust (NWT): *Raise objections to the development identifying the following concerns:*

a. *The Phase 1 survey shows that much of the development site has been cleared of vegetation and therefore incorporates no habitats of botanical value. The site is currently not used for breeding or foraging amphibians, reptiles, roosting or foraging bats or invertebrates.*

b. *The development site is used by breeding schedule 1 birds (little ringed plover, lapwing and oystercatcher) and therefore the development would result in the loss of this habitat. Although the application discusses potential off-setting through habitat enhancement works on the former colliery tip, there is a lack of detail regarding how this would be established and therefore it is not clear whether it would provide appropriate mitigation.*

c. *The breeding bird survey was not undertaken at the optimum time and may have missed the presence of breeding woodlark on the site, The site should be resurveyed in the early part of the breeding season (Feb March) so as to provide a robust assessment.*

d. *The land surrounding the development site incorporates ponds, small wetlands and substantial areas of semi-natural grassland which have ecological value. Furthermore the site is near to habitats which contribute towards the Sherwood pSPA and the Birklands and Bilhaugh SAC as well as SSSIs*

e. *The air quality assessment is not sufficiently robust to consider potential impacts from an increase in nitrogen deposition on a clearing within Cutts Wood were there are records of breeding nightjar. Furthermore it is not clear whether the effects at Mansey Common SSSI have been properly assessed.*

f. *The site drainage should be designed to avoid further pollution of local watercourses and appropriate management for drainage systems should be agreed.*

g. *On the land surrounding the development site there is potential for disturbance to bats from noise and lighting, and noise affecting birds which have not been assessed.*

h. *There is no assessment of cumulative effects resulting from this development to enable an appropriate assessment to be carried out.*

i. *NWT reference policy within the National Planning Policy Framework and Waste Core Strategy in their consultation response which establishes an ecological protection hierarchy that seeks to avoid and minimise ecological impacts wherever possible. NWT considers the development fails to satisfy this protection hierarchy.*

75. Consultation 2: *NWT maintain their objection to the development raising the following additional observations:*

a. *Cumulative effects on the local wildlife site, particularly waders – The approved colliery tip restoration scheme has not been fully delivered. Despite this the tip has developed a valuable habitat of County importance for waders. A number of developments within the former Bilsthorpe Colliery complex including the NCC Highways Depot, the wind turbines and the solar farm have displaced waders and appropriate mitigation measures have either not been agreed or not been satisfactorily provided. These developments have predominantly pushed breeding waders to the west and south west quadrant of the tip where they would now be impacted by noise, disturbance, lights etc. of a large industrial energy recovery facility during construction and operation. Thus the ability of the mitigation requirements for the other developments to deliver could be compromised by this development and therefore NWT believe the wader mitigation is not sufficient.*

b. *NWT has little confidence that the proposed wader mitigation would be successfully delivered and maintained, even if it was adequate in the first place.*

c. *Clarification is sought that air quality effects on Mansey Common SSSI have been properly assessed.*

d. *Subject to controls to the light regime, working hours, appropriate construction management and noise through planning condition, no significant impacts to bats are anticipated.*

e. *Concerns originally allayed regarding potential impacts to nightjar have been partly addressed, but discrepancies regarding the accuracy of the original survey remain.*

f. *The likely effects of future connection to the grid have not been assessed.*

g. *Adequate and suitable habitat for dingy skippers has not been provided.*

76. Consultation 3: *NWT maintain their objections, restating their concerns that the wader mitigation plan does not recognise that some of the habitat within the proposed new habitat may be compromised by the proximity of a building of the large scale proposed, particularly in terms of construction noise impacts. NWT are of the opinion that some of the historical developments in the wider Bilsthorpe colliery area have been deficient in their ecological mitigation, resulting in a displacement of little ringed plovers and lapwings nearer to the proposed BEC site. They consider the BEC would further impact these displaced species resulting in cumulative impacts. With regard to the mitigation area NWT are not reassured that adequate areas of wetland would be provided. They are also concerned that any intensification of grazing on the wider colliery tip could adversely affect the habitat of birds. NWT believe a precautionary approach should be taken as to the likelihood of impacts on the Bilsthorpe Colliery LWS and biannual surveys of plant assemblages from process emissions should be undertaken on this land to identify any changes that may occur.*

77. NCC (Nature Conservation): *Raise no objections subject to appropriate ecological management practices, off-setting and mitigation being secured through planning conditions and legal agreement. The following specific items were noted:*

a. *The area of the proposed development is part of a larger area currently designated as Bilsthorpe Colliery SINC or Local Wildlife Site (LWS).*

b. *The Extended Phase 1 Habitat Survey identified that the development site, at the present time, comprises bare ground consisting of building waste, colliery spoil and earth (suggesting recent disturbance), and is very sparsely vegetated, the site is therefore of very limited value as a habitat in its own right. No notable plants were found within the development area. The site is of interest to wader birds including little ringed plover, oystercatcher and lapwing and dingy skipper butterflies.*

c. *The development, if permitted, would result in the displacement of a pair each of little ringed plover and oystercatcher, and without mitigation, it is unlikely that the site would continue to qualify as an LWS for birds (although it would potentially qualify for other species, such as dingy skipper). The ES also identifies that the predicted adverse impacts of the proposed development on little ringed plover and lapwing are likely to act cumulatively with the impacts of the Solar Farm development (which will displace 5 pairs of lapwing and result in the loss of habitat used by foraging little ringed plovers). The ES states that the impact on Bilsthorpe Colliery LWS and breeding little ringed plover is assessed as being of moderate significance but the impact could be considered to be of major significance. The application is supported by mitigation measures to off-set these impacts including plans to create a wader habitat nearby the site, although without a specific design it is unclear whether impacts would be satisfactory compensated.*

d. *A range of potential indirect impacts on ecological receptors are identified in the ES, these are considered in detail within the planning considerations section but in summary adverse ecological impacts from emissions, noise, light, disturbance and water pollution are not anticipated. There is no likely significant effect on the 'prospective' Sherwood SPA as a consequence of the proposed development.*

e. *Measures are requested to control initial ground preparation works, the development of habitat in the attenuation pond, ecologically sensitive planting within landscaping works and eradication of invasive planting nearby the site.*

f. *Potential impacts to nightjar within Cutts Wood have not been assessed.*

78. <u>*Consultation 2:*</u> *NCC Nature Conservation have supplemented their original response with the following observations:*

a. *A wader mitigation plan has been produced which is generally considered appropriate, subject to a number of issues being addressed.*

b. *It is acknowledged that the habitat within the attenuation pond no longer holds permanent water and would now provide a semi-improved grassland habitat.*

c. *The woodlark survey confirms that the application site does not provide habitat for these species.*

d. *A more detailed assessment has been undertaken which demonstrates that the proposals are unlikely to give rise to any significant impacts on nightjars.*

e. *The proposals are unlikely to give rise to significant impacts to bats*

f. *Invasive species would be eradicated.*

g. *Concerns remain that air quality impacts to local wildlife sites have not been adequately assessed and further information is therefore requested.*

79. <u>Consultation 3:</u> *Further comments have been provided in response to the supplementary ecological information provided in the second Regulation 22 response which enables NCC Nature Conservation to withdraw their objections/concerns to the development noting the following observations:*

a. *The modified wader mitigation plan ensures that the proposed mitigation has been designed to ensure its chances of success are maximised. The plan is therefore considered satisfactory, subject to it being controlled through a Section 106 legal agreement.*

b. *The supplementary information confirms that significant adverse impacts from nitrogen deposition would not occur at Redgate Woods and Mansey Common SSSI.*

c. *There is likely to an increase in nitrogen deposition at Eakring Brail Wood but it is not anticipated that this would not have a measurable effect or result in an ecological effect.*

d. *The supplementary Reg. 22 information confirms that significant adverse impacts from nitrogen deposition at other surrounding Local Wildlife Sites are not anticipated.*

e. *The objections raised by Nottinghamshire Wildlife Trust have been reviewed. In summary NCC's Nature Conservation Officer does not agree with the conclusions reached by NWT that the BEC development would adversely affect ecological mitigation works for surrounding development, result in significant cumulative ecological impacts, adversely affect wading birds, result in significant adverse air quality impacts and concludes ecological impacts have been appropriately assessed.*

80. NCC (Countryside Access): *Raise no objections on the basis that no public rights of way are affected by this proposal, and there are no claims for a right of way across the site.*

81. Consultations 2 & 3: *The Reg. 22 submission does not identify any additional environmental information relating to rights of way.*

82. NCC (Planning Policy): *Raise no objections to the development, noting the following points.*

a. *National planning policy as set out in the Waste Management Plan for England (December 2013) and accompanying Waste Prevention Programme; Planning Policy Statement 10: Planning for Sustainable Waste Management (revised March 2011); and the emerging updated national waste planning policy published for consultation in July 2013; all underline the importance of the waste hierarchy in preventing waste, re-using or recycling as much as possible then recovering energy from what is left rather than disposing of this to landfill.*

b. *National energy policy also supports the use of energy recovery where this can help to provide a source of local, low carbon or renewable energy to offset fossil fuel use and increase overall energy security (National Policy Statement for Renewable Energy Infrastructure (EN-3).*

c. *The Nottinghamshire and Nottingham Waste Core Strategy therefore promotes sustainable waste management in accordance with the waste hierarchy, including the appropriate use of energy recovery, to minimise future disposal needs.*

d. *Specifically, Policy WCS3(b) of the Waste Core Strategy supports the use of energy recovery, as proposed in this application, where this will help to divert waste out of landfill and the heat and/or electricity can be used locally or fed into the national grid.*

e. *National policy is clear that where facilities are in line with an up to date local plan, there is no requirement to demonstrate a market or quantitative need for a proposal. The Waste Core Strategy was adopted in December 2013 and is therefore an up to date plan which identifies a need for additional energy recovery capacity for commercial and industrial waste, alongside future recycling increases.*

f. *The recently announced closure of two of the County's remaining non-hazardous landfill sites, near Nottingham and Worksop, further highlights the need to divert waste out of landfill as this will leave only two landfill sites, near Newark and Retford, to meet the future disposal needs of both Nottinghamshire and Nottingham. This situation is therefore likely to increase the County's reliance on exporting waste to other areas for treatment or disposal.*

g. *In policy terms recovering energy from this waste, and reducing the need for disposal and/or export, would be in line with local and national policy on sustainable waste management - by both moving waste up the hierarchy and minimising the distance waste has to be transported. As a merchant facility taking only residual waste in the form of Solid Refuse Derived Fuel, the proposal is considered unlikely to prejudice possible future increases in recycling and is therefore fully supported by Policy WCS3.*

h. *The spatial approach of the Waste Core Strategy set out in Policy WCS4 (Broad locations for waste treatment facilities) seeks to concentrate larger facilities in or close to the main urban areas with the purpose of managing waste close to where it is produced as far as reasonably possible. Bilsthorpe is not within the broad areas identified within Policy WCS4 but does offer a central location when considered against the likely sources of waste and is supported by Policy WCS7 (General site criteria) which identifies existing or proposed employment sites as the most appropriate location for large scale energy from waste facilities such as that proposed.*

i. *PPS10 advises that 'modern, appropriately located, well-run and well-regulated, waste management facilities operated in line with current pollution control techniques and standards should pose little risk to human health'. The detailed consideration of the waste management process and the implications, if any, for human health is therefore a matter for the relevant pollution control authorities who will advise if there are any locational implications arising from the development which would be a material planning consideration.*

j. *Subject to detailed responses on highways, ecology and other matters, the proposed facility is considered, in strategic policy terms, to be of an appropriate scale and in an appropriate location to manage a significant proportion of Nottinghamshire and Nottingham's residual municipal, commercial or industrial waste in line with both national and local planning policy.*

83. NCC (Archaeology): No representation received

84. English Heritage: *English Heritage do not wish to raise any comments on the application and request the planning application be determined in accordance with national and local policy guidance after taking specialist conservation advice.*

85. Garden History Society: No representation received.

86. NCC (Built Heritage): Consultation 2: *Raise objections to the development on the basis that impacts to the setting of Rufford Abbey Historic Park and Bilsthorpe St Margaret's School have not been fully assessed. Further assessment work has been requested to consider these matters.*

87. Consultation 3: *The additional information is sufficient to fulfil the requirements of paragraph 128 of the NPPF and demonstrate the effect of the proposals on the setting of St Margaret's Church is restricted to a slight view of the chimney of the incinerator over the roof tops of the adjacent recently converted farmstead. Views from the tower of the church would be more extensive, but it is fair to say that the impact of the proposals on the setting of*

the church is negligible and that any harm is very much 'less than substantial'. The effect of the proposals on the wider setting of Rufford Abbey country house and registered parkland is likely to be less than substantial when considered in isolation. In conjunction with the nearby wind turbines, a more substantial cumulative impact will occur. In essence the turbines have the main harmful impact in so far as they are a very significant distraction that deflects attention from the surrounding subtle landscape views. The C18th documentary evidence clearly identifies that vistas were focussed on the hills around this area. The chimney and the main building of the proposed development are not insubstantial in their own right and together with the turbines will combine to create cumulative impact by further introducing industrial elements into the existing rural views. The proposals have impact that is harmful, but less than substantial, it is therefore in accordance with paragraph 134 of the NPPF that these impacts can be balanced against the benefits of the proposal. These impacts may be further reduced if interpretation boards were erected in the surrounding landscape to ensure that 18th Century vistoes of Rufford Abbey country house and registered parkland were to be provided.

88. Nottinghamshire Police Force Architectural Liaison Officer: No representation received

89. NCC (Landscape): The landscape team does not object to the proposal on the basis that it does not result in any significant adverse landscape or visual impacts.

a. Specifically with regard to physical landscape impacts, these are not really spelt out within the Landscape and Visual Assessment document but impacts are negligible because there is no existing vegetation on the site that needs to be removed in order for the scheme to go ahead.

b. In terms of landscape character, the applicants conclude that there would be a significant beneficial effect on the landscape fabric of the site due to the fact that the proposed development is meeting the requirements of the landscape character assessment *'to create a new industrial economy within the area*'. This 'beneficial effect' conclusion is not accepted and it is considered the effect would more accurately be described as adverse but not significantly adverse, however the magnitude of impact would not affect the underlying character of the landscape further afield.

c. With regard to the visual impact, it is concluded that there would be a slight adverse to moderate adverse effect which is not significant in terms of the Environmental Assessment Regulations. With regard to cumulative visual impact, the visual impact is not considered to be significant in terms of the Environmental Assessment Regulations assessment criteria.

90. Consultation 2 & 3: *The Reg. 22 submissions do not identify any additional environmental information relating to landscape matters.*

91. NCC (Reclamation): *The Phase 1 Site Investigation Report provides sufficient information to enable the determination of the planning application. A further Phase 2 intrusive investigation should be undertaken prior to commencement of construction and the results used to update the conceptual site model and risk assessment and the final building design. It is noted that potential fall-out*

from the emission stacks would be determined by the EA under the site permitting regulations.

92. Consultation 2: *The Reg. 22 submission does not identify any additional environmental information relating to ground stability/contamination issues.*

93. NCC (Highways): *Raise no highway objections. The applicant's submitted Transport Assessment (TA) provides satisfactory information to address the highway-related aspects of the development. Notably the scheme would result in an overall lower level of traffic generation (both in terms of HGV movements and total traffic movements) when compared to the level of development which has previously been identified as triggering a need for off-site highway improvement works at the A614/Deerdale Lane junction. The development may therefore proceed without a need to undertake junction improvements at the A614. Controls are recommended as part of any planning permission to control lorry routeing, lorry delivery hours, the imposition of a travel plan and construction management plan.*

94. *Subsequently it has been confirmed the County Council is in the process of implementing a traffic regulation order (TRO) in the Bilsthorpe area (Mickledale Lane already has a HGV restriction on it). This order will provide additional regulatory control to HGV routeing ensuring these vehicles are not permitted to travel through the residential areas within Bilsthorpe. Since the TRO is now committed there is no need to include provisions within the S106 legal agreement for the developer to contribute towards a TRO.*

95. NCC (Accident Investigation Unit): Consultation 2: *Raise no objections. The team confirm that they have studied the planning documents and checked the accident records on the proposed HGV route in reaching this conclusion. The introduction of a weight restriction on Mickledale Lane is supported.*

96. NCC (Noise Engineer): *The submitted noise assessment methodology, assumptions and conclusions provide a satisfactory demonstration of the potential noise and vibration impacts of the development and demonstrate that the construction and operation of the development would not result in any unacceptable noise emissions to nearby residential properties and sensitive receptors subject to inclusion of appropriately worded conditions to impose appropriate limits on noise emissions.*

97. Consultations 2 & 3: The Reg. 22 submission does not identify any additional environmental information relating to noise emissions.

98. National Planning Casework Unit: *Have acknowledged receipt of the planning application. The National Planning Casework Unit have subsequently advised the County Council that they have received a request to 'call in' the application but in the first instance have not formally served a 'holding direction' under Article 25 of the Town & Country Planning (Development Management Procedure) Order 2010 upon the County Council, advising that they wish the Committee to make its resolution before deciding what further action, if any, to take.*

99. The Coal Authority: *Raise no objection to the development. The Coal Authority identify that the application site falls within an area where there is likely to be coal mining features and hazards which need to be considered,*

however, they are generally in agreement with the broad conclusions of the Phase 1 Site Investigation Report contained in the Environmental Statement which indicates that coal mining legacy issues are not significant within the application site and do not pose a risk to the proposed development. The imposition of a planning condition is requested to ensure that recommendations of the site investigation report are implemented during construction works.

100. Consultation's 2 & 3: *The Coal Authority has reiterated their observations made to the original consultation response.*

101. Public Health Nottinghamshire County: *There is no public health information about the local population to suggest an exceptional vulnerability amongst people likely to be affected by the proposed development. It is assumed that the relevant regulator will receive an application for any associated changes to processes at the proposed development and that any environmental permit holder/applicant will comply with all relevant best practice and industry guidelines.*

102. Public Heath England: *Public Health England does not raise an objection to the planning application on the basis that there are unlikely to be significant air quality impacts subject to the installation employing best available techniques (BAT) and meeting regulatory requirements concerning emission limits and design parameters. These matters would be secured through the Environmental Permit which would be assessed by the Environment Agency. Reference is made to studies undertaken by the Health Protection Agency (a pre-cursor body which was merged into Public Health England). This study concludes:*

> *'Whilst it is not possible to rule out adverse health effect 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.'*

103. Severn Trent Water Limited: *no representation received*

104. Western Power Distribution: *no representation received*

105. National Grid (Gas): *The Company advise that they have low/ medium pressure gas pipes in the vicinity of the development and therefore request that the developer be informed of the presence of these facilities and to take appropriate care throughout the construction and operation of the development.*

Publicity

106. The County Council has consulted the local community by means of site notices, the publication of a press notice in the Newark Advertiser and the posting of neighbour notification letters to residents in the surrounding area. The publicity has been undertaken in accordance with the County Council's adopted Statement of Community Involvement and is compliant with the publicity requirements set out within the Environmental Impact Assessment Regulations. Both Regulation 22 responses have also been advertised by means of site notices and press notices.

107. Mark Spencer MP has conducted his own survey of residents in the Bilsthorpe and Eakring areas to seek local opinion regarding the development. The survey comprised a letter describing the development, a questionnaire to enable residents to make responses and a pre-paid envelope for the submission of responses. In total 629 responses were received to this survey of which 511 (81%) opposed the development, 71 (11%) supported the development and 47 (8%) had mixed views or were not sure of their opinion. The main grounds for objection related to noise pollution, odour and visual impacts. The main grounds for support were identified as jobs, additional energy generation and improvements to waste management processes.

108. Two petitions have been received, signed by a total of 481 people. The petitions raise objections to the development on the grounds that the development would commit the County to disposal by gasification for the next 25 years, a commitment which is considered environmentally, financially and politically reckless. Objections are raised regarding the environmental impact of the development including concerns that it would result in toxic air emissions and increased risk of cancer and respiratory disease through exposure to mercury and dioxins, the release of additional greenhouse gases, potentially dangerous solid and liquid residuals, additional traffic, that there is no guarantee the jobs would benefit the local community and that the process would consume materials which should be re-used, recycled or composted.

109. A 'pro-forma' objection letter has been received from 17 local businesses which raises objections on the grounds of health impacts; increase of HGV lorries entering and leaving the village and inadequacy of highway infrastructure to cope with the traffic; noise pollution from HGVs; smells; the impact on jobs in the area as some businesses have said that they will leave the village if the proposal goes ahead; impact to local wildlife and ancient woodland; visual impact; and impact on tourism in the area.

110. The statutory publicity undertaken by the County Council resulted in 54 individual letters of objection being received from local residents. The letters raised the following issues:

    a. Air Quality & Health Effects
        - *The development would result in additional air pollution.*
        - *Theoretical levels of pollution do not necessarily translate into healthy, practical, every day levels.*
        - *Emissions would contain particulates including nano particles and include acid gases, dioxins, furans, nitrogen oxides, sulphur dioxide, cadmium, mercury, lead and hydrogen sulphide.*

- *The monitoring of emissions does not include the start-up and set down stages when risks are possibly at their greatest.*
- *The prevailing winds tend to blow westwards which would direct emissions via Eakring and through the valley to Kersall, Maplebeck and Caunton where the gases would fall-out onto root crops, dairy herds and beef cattle, finding its way into the food chain.*
- *Emissions would originate from both the process itself and the associated transport movements.*
- *Waste can contain heavy metals which can cause serious health problems.*

b. Safety
- *The proposed facility should not be constructed in such close proximity to a residential area due to safety risks.*
- *The developers have a poor safety record.*
- *The facility would disperse toxic fumes onto nearby sports pitches (200yds) where approximately 160 children train and play football each week.*
- *Questions are asked about what sort of waste would be processed.*
- *How are the by-products of the process disposed of and what are the risks to the environment.*
- *A gasification facility in Canada had 29 emission incidents and 13 spills in 3 years and a facility in the Isle of Wight was closed down after emitting high dioxins to the atmosphere.*
- *The safety of plasma arc technology in high temperature, highly charged atmosphere is questionable.*

c. Reliability of Process/Experimentation
- *Gasification of mixed waste is an experimental process and the technology has not been satisfactorily tested.*
- *The gasification process is uncertain for dealing with mixed wastes.*
- *The cost/benefit analysis is unclear and there is no proof that the plant would be efficient. There is a lack of evidence that the proposed technology is financially viable.*
- *What happens if the 'experiment' does not work, would the structures be removed? What would happen to contaminated farmland, odours, noise, reduced property prices etc.?*
- *The first large scale gasification plant is being built in the Tees Valley and is due to come on stream in 2014. Development at Bilsthorpe should not progress until this plant has been shown to be safe and operationally reliable. Gasification facilities are banned in the USA.*

d. Noise
- *The noise and vibration during construction of the plant would cause disruption to people and potentially affect the stability of older buildings in the village.*

e. Odour
- *The gasification process produces a pungent smelling tar.*
- *Waste being transported to the facility and stored at the site would be potentially odorous.*

f. Traffic
   - *The junction of the A614 at the Eakring turn off is very busy resulting in significant delays, particularly for vehicles turning north. There can be significant waiting times leading to road safety and dangers.*
   - *There have been a number of fatal accidents on the A614.*
   - *The highway infrastructure will not cope with the additional traffic, with particular capacity issues identified on the A614, the Lockwell Hill roundabout, the Ollerton roundabout and Eakring Road within the village.*
   - *Concerns are raised that the traffic survey underestimates vehicle numbers.*
   - *Eakring Road is unsafe to walk along due to the existing traffic levels, this development will add to these problems.*
   - *Concerns are raised that the lorry routeing arrangements would not be adhered to and HGVs would travel through the village centre.*
   - *Staff cars visiting the facility would not be controlled by the lorry routeing arrangements and would increase vehicle movements in the village.*
   - *The village already has high volumes of traffic due to existing development, particularly the traffic associated with the highways depot.*
   - *Another site should be identified which has the benefit of a rail link, thereby assisting in reducing the number of vehicles on the road.*

g. Impacts to viability of village
   - *The development would deter any new businesses locating to the village and affect the delivery of planned/future housing being developed in the village.*
   - *The village has a wind farm, proposed solar farm, council waste tip and household waste site and therefore the village has had enough intrusive development.*
   - *Businesses will move away from the village, a number of local businesses have stated they will seriously consider re-locating if the facility is built.*
   - *The village has 'suffered' for years with continual nuisance of smells and high traffic from a landfill, the proposal will repeat these nuisances.*
   - *The development will not benefit the village or local community such as through lower energy bills or guarantees of local jobs. Numbers of jobs created are low.*

h. Location
   - *The proposed use is not compliant with Newark and Sherwood DC's Allocation and Development Management Document, in particularly the development site is outside the village boundary and not on land identified for development.*

i. Need
   - *It is questioned whether the facility is needed for anything other than the developer to make profit.*
   - *Bilsthorpe is a quiet country village which is distant from where the waste is generated.*

- *The facility is not required to manage local and neighbouring authority waste arisings.*
- *The planning application does not identify any specific contracts or catchment area for the waste inputs.*

j. Visual Impact
- *The development and its chimneys would be a blot on the landscape.*
- *There would be cumulative impacts with the wind turbines, solar farm and proposed T pylons.*
- *The development would be intrusive within a rural area.*

k. Tourism
- *The facility would have adverse impacts on local tourist facilities including Centre Parcs, Rufford Park, Sherwood Pines, White Post Farm and Wheelgate which are all close by.*

l. Drainage
- *The local sewage facilities are inadequately sized to accommodate drainage from the development.*
- *Thermal pollution from liquid emissions entering local watercourses can decrease the level of dissolved oxygen and affect the ecosystem of nearby streams.*

m. Waste Policy
- *It is questioned whether the facility represents a disposal or recovery facility.*
- *The development goes against Government and County policies which seek to reduce waste and treat it through its re-use, recycling and composting.*
- *Gasification will discourage recycling.*
- *The development conflicts with policies in the replacement Waste Local Plan and PPG10 concerning the protection of the environment, cumulative impacts, impacts to designated heritage and climate change.*
- *The development should be considered against legislation contained in European Directive 2006/12/EC, in particular Article 4(1) which requires waste to be recovered and/or disposed without endangering human health and without using processes or methods which could harm the environment, result in risk to water, air, soil, plants or animals and nuisance through noise or odours, or affect places of special interest. Article 5 requires the establishment of an integrated and adequate network of disposal installation taking account of best available technique not involving excessive cost so that countries can be self-sufficient in their waste management needs and enabling waste to be managed in one of the nearest appropriate installations by means of the most appropriate method of technology.*

n. Efficiency of Plant
- *Concerns are raised that the plant is inefficient; the thermal efficiency is 18% of the calorific value.*
- *Gasification is less efficient than traditional incineration.*

- *Any heat produced would be extremely difficult to export due to the high cost of providing the necessary infrastructure (circa £1mill/km).*
- *The process does not strictly involve renewable sources in that it will release fossil fuel derived from plastics and synthetics.*

o. Impacts to wildlife
- *Detrimental impacts are likely to occur to wildlife, ancient woodland and protected species.*
- *The development would have harmful impacts to the Sherwood Forest Special Protection Area (Area) with potential impacts to nightjar and woodlark.*

p. Heritage Impact
- *The development would adversely impact the character of both Bilsthorpe and Eakring Conservation areas.*

q. Other Issues
- *A power station on the Bilsthorpe site was turned down about 16 years ago.*
- *Detrimental impact to property values would occur.*
- *Concerns are raised that Bilsthorpe is a 'dumping ground' for bad neighbour developments and the village has done its fair bit in supporting development. The village has had enough development and it should be directed to other locations.*
- *There are inconsistences in the application, particularly between pre-application, public consultation and planning application documents relating to the source of feedstock and levels of employment and skills.*
- *Business rates may not be generated from the development if the developer argues the renewables aspect.*
- *There is inadequate information regarding the disposal of ash and the after burn filtered material from the stacks.*
- *The development could result in additional fly-tipping and litter.*

111. One further letter of representation was received in response to the first round of Regulation 22 re-consultation from a local resident which re-iterates comments previously raised regarding potential risks of traffic accidents particularly on the A614, impact to wildlife, loss of jobs, emissions, origins of waste and impacts to Sherwood Forest landscape.

112. 117 further letters of representation were received in response to the second Regulation 22 re-consultation. These representations raise objections to the development, restating many of the issues raised from the original consultation process, raising concerns regarding:

a. Impacts to wildlife;

b. Transport impacts;

c. Noise impacts;

d. Odour impacts;

e. Vermin;

f. Effect on health from pollution including concerns regarding the potential risks from treating hazardous waste;

g. The project would result in air pollution levels close to the statutory EU Environmental standard. Some of the particles would be carcinogenic and would not degrade with time with potential for cumulative doses deposited on nearby land;

h. Concerns relating to weather conditions and prevailing winds that would push pollution towards Eakring and effects from airflow disturbance from turbines;

i. Impacts to farmland and farming communities from emissions;

j. Impacts to property values;

k. Impacts to tourism;

l. Bilsthorpe has enough waste facilities;

m. Concerns regarding unproven technology;

n. Concerns insofar that the origin and constitution of waste is unknown waste origins and its implications in the context of planning policy in the Nottinghamshire and Nottingham Waste Core Srategy.;

o. Impacts to heritage assets particularly the conservation area of Eakring;

p. Visual impacts and the effect on the landscape;

q. Proximity of the development to residential properties;

r. There is already enough 'undesirable' development/industry in the Bilsthorpe area;

s. The development would discourage other businesses opening up in the village;

t. There is not any need for an additional incinerator with adequate capacity at Eastcroft and Sheffield;

u. The development infringes Human Rights (notably Article 12) on the basis that it will affect the right to expect a clean and healthy environment within which to live;

v. Potential risks from methane gas accumulating in dangerous quantities within the historical coal seems under the site;

w. Any jobs created would not be for local people, opportunities should be created for apprentices;

x. Concerns are raised that the electrical outputs of the site are incorrectly stated;

y. The plant is a fire risk;

z. The refusal of planning permission for the Rufford Waste incinerator sets a precedent for this development;

aa. More effort should be made to minimise waste generation, boost recycling and minimise the volumes of waste sent to landfill/incineration;

bb. The developers should make a local contribution to the Parish rates;

113. Residents Against Gasification Experiment (RAGE) are a locally established pressure group which has been established to oppose the BEC development. RAGE has provided a detailed letter of objection to the development, the

concerns of RAGE are also endorsed by Bilsthorpe, Eakring, Kirklington and Rufford Parish Councils. The following observations are raised:

a. *Conflicts with the development plan and in particular the Nottinghamshire and Nottingham Waste Core Strategy (RWLP).*

- *There is not a need for the development since it is unlikely that 117,310tpa of commercial and industrial waste would be available.*
- *Sufficient recovery capacity is already available in the wider regional area.*
- *Municipal waste is unlikely to be available within Nottinghamshire and Nottingham due to contract arrangements which utilise existing facilities at Eastcroft and Sheffield.*
- *Adjoining municipal waste collection authorities already have contracts in place with energy recovery plants for the management of their waste and therefore are unlikely to make use of the BEC.*
- *The applicant's statement of need has not taken account of ambitions to reduce waste arisings and therefore the amount of waste produced.*
- *The development is in conflict with policies of the development plan and therefore cannot benefit from the presumption in favour of sustainable development contained in the NPPF and also stated within WLP Policy WCS1 and N&S DPD Policy 12.*

b. *Conflict with material considerations, including national planning policy advice.*

- *PPS10 requires waste to be managed in compliance with the waste hierarchy. In the absence of clear information regarding source, origin and composition of waste it is difficult to be assured that these objectives would be achieved.*
- *PPS10 Annex E sets out criteria against which the suitability of proposed waste management facilities should be assessed. Potential impacts to water resources, land instability, visual intrusion, nature conservation, historic environment and built heritage, traffic and access, air emissions, odour, vermin, birds, noise and vibration, litter and potential land use conflicts means that PPS10 Annex E criteria cannot be satisfied.*
- *NPPF policy states that the purpose of the planning system is to achieve sustainable development. The BEC would fail to deliver sustainable development due to its location that would result in significant vehicle movements and offers no potential for non-road based haulage movements. Furthermore the uncertainties over the reliability of the gasification process means that it does not represent the best available waste management solution with regard to reducing the causes of climate change.*

c. *Conflict with the overarching purpose of planning to help achieve sustainable development.*

- *The development would create additional climate change impacts due to its reliance on road haulage, the geographical extent of the haulage distances has not been defined in the planning application. The development therefore is not compliant with NSCS Policy 10 which sets out a commitment to tackling climate change.*
- *The Newark and Sherwood Allocations and Development Management Document (DPD) Policy DM4 incorporates a criteria based approach to assess proposals for renewable and low carbon energy generation, however, since the development has a landscape impact, heritage impact, amenity impact, highway impact and ecological impact, the benefits of the development do not outweigh the harm and therefore the development is not supported by this policy.*

d. *Conflict with the lawful land use designation of the site for the purposes of the Newark and Sherwood Local Plan and with the types of development allowed on greenfield sites within open countryside.*

- *There is no extant planning permission for the development of the site for employment purposes.*
- *The application site is not within the Bilsthorpe village envelope and it is located within land designated as open countryside.*
- *Whilst it is understood that the development site contributes to the employment land supply for annual monitoring purposes, it is not allocated for development in the NSCS.*
- *Since the development is outwith of the Bilsthorpe settlement in open countryside the development is contrary to NSCS Spatial Policy 2 which seeks to concentrate development within the defined village.*
- *The development is also contrary to NSCS Spatial Policy 3 which seeks to control development within countryside areas.*
- *The development is contrary to the requirements of NSCS Core Policy 6 which adopts a plan led approach to the provision of new employment development, with the objective of undertaking such development on safeguarded and allocated employment land.*
- *The Newark and Sherwood Allocations DPD does not identify the Bilsthorpe Colliery site for employment development (Policies Bi/E/1 & Bi/E/2) and is not supported by DPD Policy DM1 which supports employment development within the village envelope of Bilsthorpe. Since the application site is not allocated for employment development it is not supported by DPD Policy DM2. DPD Policy DM8 does not support the development within the open countryside. The BEC therefore is in conflict the DPD.*

e. *Conflict with those policies that seek to protect landscape character and appearance, taking account of cumulative impacts of development.*

- *The scale and height of the BEC is not in scale with surrounding development and would be harmful to the immediate and wider*

landscape. These impacts would be exacerbated by the chimneys and their plume.

- *The development therefore fails to comply with NSCS Policy 13 which seeks to conserve and enhance landscape character.*
- *The combined visual and landscape impact of the BEC, the adjoining wind turbines and the solar farm cumulatively affect the integrity of the local landscape character.*
- *The cumulative impacts would also mean the development is contrary to WLP Policy W3.29 relating to cumulative impacts, most notably the development would result in cumulative impacts to landscape character.*

f. Conflict with those policies that seek to protect designated heritage assets and the historic environmental.

- *The BEC would affect the setting of Bilsthorpe and Eakring Conservation Areas, notably due to its height and scale. The development is therefore contrary to NSCS Policy 14 and DPD Policy DM9 which seek to preserve and enhance the character, appearance and setting of heritage assets.*
- *There would be a cumulative impact to heritage assets from the BEC and nearby wind turbine developments.*
- *The development is contrary to WLP Policy W3.28 which also provides protection to the setting of conservation areas and other heritage assets.*

g. Conflict with those policies that seek to protect neighbouring residential amenity and the locality in general.

- *The BEC would be detrimental to adjoining businesses and a number have expressed concerns that they may have to relocate.*
- *Harmful impacts from access, parking, amenity, local distinctiveness/character, biodiversity, ecology, flood risk and water management mean that the development fails to comply with DPD Policy DM5 design criteria.*
- *DPD Policy DM10 seeks to control potentially polluting development. The Bilsthorpe and Eakring area has the lowest life expectancy in Newark and Sherwood (75.9 years). The BEC would exacerbate this situation. It would also increase nitrogen deposition to sensitive ecological habitats. DPD Policy DM10 is therefore not satisfied.*
- *The development would also be contrary to RWLP Policy which seeks to protect residential amenity.*

h. Conflict with those policies that seek to protect ecological interests and in particular nature conservation interests of international importance.

- *The application site is designated as a LWS, is in close proximity to a SSSI and is within an area identified by Natural England as a potential Special protection area (pSPA). Potential impacts could occur to these ecological interests*

which would be contrary to NSCS Core Policy 12, NSCS Policy ShAP 1 and DPD Policy DM7.

- *The development may have adverse impacts to Eakring Brail Wood from emissions and therefore the development is contrary of WLP Policies W3.19 which seeks to protect ancient woodland, W3.20 relating to heathlands. The development would also fail to satisfy Policies W3.22 & W3.23 relating to ecological protection.*

i. Conflict with those policies that seek to avoid detrimental impacts on the safety and capacity of the highway network.

- *The development would intensify the use of the Deerdale Lane/A614 junction exacerbating existing traffic problems at this junction.*
- *The application site has no potential to transport materials other than by road haulage.*
- *The development is contrary to NSCS Spatial Policy 7 which seeks to minimise traffic flows and ensure traffic does not exacerbate existing highway problems.*
- *WLP Policy WCS11 requires that all waste management facilities should maximise the use of alternatives to road transport, which the BEC fails to achieve.*
- *The traffic impacts result in the development being contrary to WLP Policy W3.14.*

j. Conflict with the priority that PPS10 gives to the re-use of previously developed land.

- *The application site is not previously developed land under the terms of definition provided in Annex 2 of the NPPF because the site comprises of former mineral workings with restoration controls imposed on it.*
- *The BEC therefore does not benefit from the support for development on previously developed land afforded through NSCS Core Policy 9.*

k. Conflict with the locational policies of the Waste Core Strategy relating to the provision of large-scale waste management facilities.

- *WLP Policy WCS4 sets out the broad locations for the development of waste treatment facilities. For the purposes of this policy the BEC is a large-scale waste management facility and therefore should be sited within or close to the Nottingham and Mansfield/Ashfield major populated areas. Bilsthorpe lies outside the geographical areas identified within this policy and therefore the location is not appropriate under WCS 4 policy criteria.*
- *Furthermore WLP Policy WCS4 identifies that greenfield land within the countryside is unsuitable for the proposed BEC development.*
- *WLP Policy WCS7 does not support the development of large scale energy from waste facilities within countryside areas.*

l. Concern as to whether the proposals comprise a waste recovery facility or a waste disposal facility.

- *The technology is experimental and there is no certainty that the plant would operate at the claimed efficiency levels to ensure it meets the relevant thresholds to be classed as a recovery operation under the Environment Agency design level R1 certificate.*
- *Failure to achieve RI status would mean that the development would be classed as a disposal facility and therefore not comply with the objectives of the waste hierarchy.*

m. Concern as to whether the proposals have failed to demonstrate that the BEC development would not prejudice the movement of waste up the waste hierarchy.

- *RWLP Policy WCS3 gives priority to waste management facilities which manage waste at the highest level in the waste hierarchy. Concerns are raised that the facility will not recycle, compost or anaerobically digest waste and therefore treat such waste at a lower level in the waste hierarchy.*
- *The application does not demonstrate how the connection to the electricity grid and distribution of heat would be made which is contrary to criterion b of WLP Policy WCS3.*

n. Concern that the proposals do not achieve the best environmental option in terms of technology and location, particularly in the absence of reliable information relating to the derivation of waste, transportation and the composition of feedstock.

- *Since the applicant has not provided data on the waste composition the application does not demonstrate that the BEC would divert waste from landfill disposal (as claimed) and may actually divert waste from recycling.*
- *Whilst RWLP Policy WCS9 provides support for new or emerging waste management technologies that lead to more efficient and sustainable waste management, uncertainties concerning energy efficiency, transportation of waste arisings and feedstock composition place significant doubt on whether the policy objectives would be delivered by the BEC. The policy therefore does not lend support for the development.*
- *The policy tests set out within RWLP Policy WCS12 relating to managing waste from outside Nottinghamshire and Nottingham cannot be satisfied since it is unclear whether the BEC provides a recovery facility and the development does not generate significant wider social, economic and environmental benefits.*
- *The alternative site appraisal does not provide reliable results because the geographical area of the waste arisings is unknown and therefore it cannot be confirmed that the plant is centrally located. The Bilsthorpe site has been identified despite the lack of policy support for large scale waste treatment facilities outside the Nottingham, Mansfield and*

Ashfield preferred areas (RWLP Policy WCS4) and it having no potential for non-road access to the deliveries.

- *The need for renewable or low carbon energy does not override environment protection.*

114. A further email representation has been received from RAGE following the publication by DEFRA by of a revised version of Energy from Waste – a guide to the debate issued on the 26th February 2014, within which the group express views that

- *The revised guidance represents one of the most sceptical looks at incineration and RDF production taken by the UK Government to date, with recognition that as the electricity supply is decarbonised incineration will become increasing worse in climate change terms.*
- *Incineration should not be undertaken at the expense of recycling, composting and anaerobic digestion.*
- *Changes to waste feedstocks will affect the operation of waste incinerators.*
- *Support should only be provided to more efficient waste incinerators that meet a sufficiently high efficiency threshold to be classed as recovery operations.*
- *Waste should be steered to the most efficient incinerators*
- *Sites should be selected that have potential for heat recovery and do not limit plants to only generating electricity.*

115. *RAGE provided a further detailed letter of objection to the Regulation 22 re-consultation within which they restate the point raised above and raise the following observations:*

a. *Any harm to or degradation of species or habitats of importance would be contrary to the objectives of WLP Policies W3.22 and W3.23 which seek to protect species and habitats of importance and paragraph 118 of the NPPF. Reference is also made to Policy W3.19 which seeks to protect ancient woodlands and Policy W3.20 which seeks to protect lowland heathland.*

b. *The need to demonstrate that the BEC would operate as a recovery process is fundamental to the consideration of the acceptability (or not) of the proposed development. In circumstances when information goes to the heart of the planning considerations it is difficult to envisage how the matter can be legally controlled through planning condition. In the absence of this information the application should be treated as a disposal facility and considered against relevant policies including WCS Policies WCS3 and WCS12.*

c. *The site selection process is fundamentally flawed since it only considers potential locations within Nottinghamshire despite the fact that the BEC would treat waste originating from outside the County, the site also fails to satisfy the selection process identified in WCS Policy WCS4 which favours larger settlements for larger waste treatment facilities and does offer potential to utilise alternatives to road transport as encouraged by WCS Policy WCS11.*

d. *The development would dominate the surrounding landscape and therefore is contrary to WLP Policy W3.29, there would also be cumulative impacts with recent introductions of wind turbines, solar farms on the colliery site.*

e. *The development would be harmful to highway safety due to the amount of traffic generated and affect the capacity of traffic on Deerdale Lane and the A614 junction. The traffic would cause unacceptable disturbance to local communities and therefore is contrary to WLP Policy W3.14.*

f. *Overall the development is considered to conflict with the development plan and therefore does not benefit from the presumption in favour of sustainable development and the harmful impacts significantly and demonstrably outweigh the benefits. The recently published National Planning Practice Guide advises that the need for renewable/low carbon energy does not override environmental protection, cumulative impacts require special consideration, heritage assets should be protected and local amenity should be safeguarded.*

116. A further submission titled 'Summary of local concerns compiled by the RAGE group' has been submitted in response to the second Reg. 22 planning consultation which restates many of the concerns previously raised concerning:

a. *Wildlife on the proposed site: Residents have seen little ringed plover, kestrels, stock doves and grey partridge adjacent to the development site. On the recently constructed cycle trail linking Bilsthorpe to Sherwood Pines and Clipstone signs have been erected to advise trail users to keep to the path to avoid disturbance to nesting birds. NCC need to ensure that adequate surveys have been undertaken to ensure species are accurately recorded and impacts appropriately assessed.*

b. *Increase in HGV's: notably on the Deerdale Lane junction with potential safety and time delays for users. Potential for additional HGV's through the village.*

c. *What Waste: The developers have not said what waste would be processed or its composition. The development would treat hazardous waste. This uncertainty has potential impacts to health.*

d. *Impact on Tourism: The development would be visible from the A614 and therefore to many visitors of Centre Parcs, Rufford Park, Sherwood Pines and Sherwood Forest. People will be put off from coming to the area by the visual appearance of the plant and its effect on the rural landscape.*

e. *Jobs: Few jobs would be made for local workers during the construction and operation of the plant. Local businesses have stated they would move if the BEC was built.*

f. *Locals are fed up of being dumped on: The village has a history of landfill activities, oil recycling, recycling centre, wind turbines, and solar farm and residents feel this is enough.*

g. *Bilsthorpe Football Club: The football club consider an incinerator so close to their playing field would have a devastating impact on their numbers due to parental health concerns.*

h. *New cycle route overshadowed: The development would taint the picturesque walking and cycling trail recently built by NCC.*

117. United Kingdom without Incineration Network (UKWIN): Raise objections to the planning application within a detailed submission which raises the following key issues:

a. The proposed gasification facility would have low and uncertain efficiency.

b. The gasification facility might not work at all, or it might not remain operational.

c. The gasification facility performs poorly with respect to renewable energy.

d. Lack of need.

These issues are considered in greater detail below.

a. The proposed gasification facility would have low and uncertain efficiency.

- *The Plasma Gasification Facility is unproven for treating mixed waste at the scale proposed. Facilities using similar processes have not lived up to their anticipated stated performance.*
- *The application does not incorporate details of how the development would be linked to the electricity grid.*
- *The facility would only be 18.78% efficient, this is lower than efficiencies quoted by DEFRA for conventional waste incinerators which tend to be in the range of 18%-27% when generating electricity only and 40%+ when they also utilise heat energy. Cement kilns which use refuse derived fuel as a source of heat can be up to 90% efficient.*
- *With regard to feedstock composition, the applicant has not justified their assumptions nor provided any sensitivity analysis to allow for changing composition. UKWIN therefore question how the applicant can make exact statements about the percentage of carbon in feedstocks and predicted amount of energy from renewable sources.*
- *No allowance has been made within the applicant's calculations for a potential change in waste composition and its effect on plant performance, such as increased recycling reducing paper content.*
- *The development therefore fails to comply with Policy WCS9 which requires new or emerging waste treatment processes to provide more efficient and sustainable management of waste.*
- *The fact that the applicant states that 60% of the generated capacity would be renewable indicates that much of the anticipated feedstock would be biomass which arguably would be more sustainably managed through recycling and composting.*
- *The facility therefore does not constitute sustainable development and therefore is contrary to WCS Policy WCS1.*
- *The fact that the facility does not have a pre-identified heat market raises questions regarding the suitability of the site.*

b. The gasification facility might not work at all, or it might not remain operational.

- *It is unknown how sensitive the facility is to varying feedstock composition which could affect the reliability, viability, robustness and flexibility of the technology and the claimed benefits derived such as job creation and waste processing/energy generating capacity.*
- *The application discusses the potential to utilise energy from the process in the production of alkaline fuel cells which is also a very experimental technology and should be given no weight in the planning assessment.*
- *The uncertainty over reliability of the process raises concerns that the facility may be abandoned and become an eyesore. Other gasification companies have gone into liquidation. It is therefore requested that, if granted planning permission, a condition be imposed to require the removal of the buildings in the event that the facility stopped working.*
- *The facility should be classed as a 'disposal' facility rather than 'recovery' facility on the basis that the applicant has not provided evidence that they have been issued a Design Stage R1 classification (recovery status) by the Environment Agency. As a disposal facility the process is considered at the bottom of the waste hierarchy and fails to satisfy policy within PPS10 and Policy WCS3(c).*

c. The gasification facility performs poorly with respect to renewable energy.
- The claimed renewable energy benefits of the scheme are dependent on the nature of the feedstock, the choice of comparators and the reliability and efficiency of the facility and could equally or better be served if a different site was developed.
- If 60% of the energy created was classed as renewable this implies the feedstock is likely to be suitable for recyclable (e.g. paper and card), composting (e.g. garden waste) or anaerobic digestion (e.g. food waste), therefore flying in the face of the waste hierarchy and contrary to Policy WCS3.
- Evidence within DECC publications supports the conclusion that waste with a 60% biomass fraction is likely to incorporate high levels of potentially recyclable material.
- Alternative sites which have operational CHP facilities such as Eastcroft and Sheffield would recover more energy than the proposed BEC.

d. Lack of need.
- The facility is not needed for the treatment of waste, going against WCS3 and its objectives to achieve 70% recycling or compositing.
- The facility fails to comply with Policy WCS12 since it has not demonstrated that it would manage none local waste higher in the waste hierarchy.
- Government projections identify a potential over capacity of recovery capacity in future years, and it is argued that the use of figures from the now revoked East Midlands Region Plan exaggerate the amount of waste produced in the region. The applicant also does not take account of predicted reductions in waste in the future.
- As a regional facility the BEC could be located anywhere in the East Midlands, whilst the alternative site appraisal only considers a small area of Nottinghamshire.
- The applicant fails to take proper account of the potential that Eastcroft could provide in additional C & I treatment capacity.
- There have been downward trends since the adoption of the WCS which it is argued render the projections for future capacity needs out of date

and therefore this planning application should query the capacity needs contained in the plan.

- UKWIN argue that the MSW and C&I projections in the WCS are out of date and inaccurately over estimate waste growth therefore identifying a need for an overcapacity of facilities.
- Due to an overcapacity of facilities it could discourage businesses separately collecting waste for recycling and composting.
- It is not clear what types of C&I waste are suitable for processing in the BEC and whether the applicant would choose to source more suitable waste from outside Nottingham in preference to 'local' waste.

118. UKWIN have responded to the first Regulation 22 response maintaining the organisations objection to the development in a detailed representation raising 248 separate issues. The objection reiterates many of the original concerns regarding:

a. Compliance with chapter 5 of the Revised Energy from Waste (EfW) Guide.

- The applicant has failed to demonstrate the BEC would operate as a recovery process.
- The facility would compete with recycling, composting and anaerobic digestion.

b. R1 Recovery Status: Section 3 of the applicant's July 2014 Regulation 22 Response to NCC's Request number 8.

- The failure to demonstrate R1 compliance means the application should be treated as a disposal facility in policy terms.
- The applicant admits that they do not currently have sufficient information to demonstrate R1 compliance.
- There are no government planning policies setting out the notion that producing syngas product would result in the reclassification of a facility from disposal to recovery.

c. Operation of the Materials Recovery Facility, Waste Composition, and Compliance with the Waste Hierarchy.

- There are discrepancies in the submitted documents in terms of the composition of waste and this has implications on the applicant's data regarding renewable fractions of waste inputs. It is also contrary to the EIA Regs which require an assessment of all environmental impacts.
- The applicant fails to consider changing waste composition
- The development fails to satisfy WCS Policies WCS3 and WCS12(a).
- Controls should be incorporated within any permission to ensure that waste inputs are pre-sorted to ensure that the facility processes residual waste and not recyclable waste.
- Since a final specification of machinery to be used within the MRF plant has not been provided little weight can be given to its efficiency or performance. The plant may therefore compete with and not support recycling, re-use and prevention.
- If the waste transfer legislation referred to by the applicant to ensure compliance with the waste hierarchy is adequate there would not be any need to incorporate Policy WCS3 to ensure new facilities are compliant with the waste hierarchy.

d. Compliance with Waste Local Plan Policy WCS11 – Sustainable Transport:
- The applicant provides no justification to demonstrate why the plant could not be located in an alternative location adjacent to sustainable transport links.
- WCS11 seeks to maximise alternatives to road transport. Since the development would process non local waste alternative sites outside Nottinghamshire which offer alternatives to road transport should be investigated.
- Assessment of Alternative Technologies: Section 7 of the applicant's Regulation 22 Response to NCC's Request number 14.

e. Similar operational facilities:
- The applicant appears to be trying to hide the fact that there are no other plants of this type in the UK or Europe, or operational facility elsewhere in the world of similar capacity managing similar waste feedstocks.
- The applicant does not provide any comparison data to identify the performance of existing plasma gasification plants. This reduces the weight which the Council should give to the claimed benefits.
- Reference is made to research papers which question the safety risks of plasma gasification plants due to their high operating temperatures and levels of energy recovery.
- Reference is made to a plant at Dargavel in Scotland which failed to deliver on anticipated energy generation levels and operate within emission levels. A plant in the Isle of Wight has proved to be unreliable and failed to meet emission limits.
- It is argued that the Council should not be blind to the issues which have been encountered at other gasification plants. The plasma gasification of mixed waste feedstock is the most experimental of all gasification technologies.

f. Assessment of Alternative Technologies
- The Reg 22 response fails to compare the facility with a range of alternative technologies or the whether the facility would provide environmental benefits over the use of existing incinerators in the region.
- Policy WCS9 requires a demonstration that a proposed new technology is more efficient, this has not been demonstrated. The applicant acknowledges their plant is lower in efficiency to an incinerator of similar scale.
- The applicant argues that larger plants offer potential for greater operational efficiency, therefore building the BEC may hinder the development of a larger plant which is more efficient against the government's policy of getting more energy out of waste.
- Proposals for fuel cell technology and gas grid injection are not sought planning permission and therefore no weight should be given to any benefits that may be derived.

g. Climate Change and Low Carbon Energy Issues.
- The applicant has failed to demonstrate their proposal would generate energy with a carbon intensity lower than that generated by conventional fossil fuels.

- The applicant has not assessed their development against the carbon based modelling approach developed by DEFRA and does not take account of potential future decarbonisation of electricity supplies.
- The facility should not be treated as low carbon based on actual emissions.
- Gassifying SRF at Bilsthorpe may prevent that SRF being incinerated in a more efficient facility thus increasing the use of fossil fuels to generate electricity.

119. *UKWIN have also provided a response to the second Regulation 22 response maintaining the groups objection to the development, reiterating previous concerns regarding:*

a. *The Environmental Statement does not adequately address the implications of increased recycling rates targeted within the WCS.*

b. *The applicant has not assessed carbon emissions using DEFRA modelling approaches. If the applicant wants to demonstrate that their proposal would be good rather than bad in climate change terms a range of treatment options should be modelled.*

c. *UKWIN maintain concerns that the applicant has not satisfactorily demonstrated the facility would operate as a recovery operation and have not provided examples to show where similar facilities have been classed as recovery. A planning condition is considered inadequate to ensure the facility operates at a level to ensure it is a recovery process.*

d. *The applicant has failed to take account of waste controls to be introduced through the Circular Economy Package published by the European Commission on the 2nd July 2014, particularly how this may affect waste compositions taking account of the requirements it imposes for the separate collection of bio-waste by 2025.*

e. *UKWIN criticise the applicants waste composition data and cast doubt on the reliability of the applicant's assessments of emissions particularly with regard to climate change impacts.*

f. *UKWIN have identified a number of grounds by which planning permission could be refused, these reasons are summarised below:*
   - *The plant would have a low and uncertain efficiency.*
   - *The plant would not manage waste in accordance with the waste hierarchy, particularly if it is considered as a disposal facility.*
   - *The application is contrary to Policy WCS11 since alternative sites (potentially out of county) which provide alternatives to road based transport have not been considered.*
   - *The development is contrary to Policy WCS12 since the applicant has not demonstrated the facility would manage waste at a higher level in the waste hierarchy and has failed to consider sites outside Nottinghamshire to locate the development. The alternative site appraisal is therefore inadequate.*
   - *The plant is not needed.*
   - *The plant performs poorly with respect to renewable energy, particularly with increasing recycling rates.*
   - *The development is not considered to be sustainable development and therefore goes against the NPPF and WCS1.*
   - *There is no proven track record for gasification.*

- *The application is not complete and misses important information to assess the performance of the facility.*

g. *If granted planning permission a number of controls are suggested to be incorporated in the decision including:*
   - *the council should seek to impose a bond or financial guarantee requiring the clean-up of the site if the process fails due to the precarious nature of the technology.*
   - *The company should publish dioxin emission data on a quarterly basis.*
   - *A condition should be imposed requiring all waste to be pre-treated prior to delivery to the site similar to that used at a facility at Avonmouth.*
   - *Strict controls should be imposed into the wording of the condition to ensure the site operates as an R1 recovery process.*

h. *The BEC could struggle to find waste, this argument is emphasised by the fact that a new Biffa facility within Shepshed identifies as its fuel stock waste which originates within Nottinghamshire.*

120. UKWIN has provided a further written objection (titled 'Part 4' objection) which further supplements the concerns raised above and specifically raises comments in response to the NCC Policy consultation response. The following comments are raised:

a. The development is not 'sustainable development' and therefore would not benefit from the presumption in favour of sustainable development incorporated within the NPPF and WCS Policy WCS1.

b. The development would fail to manage waste in accordance with the waste hierarchy.

c. There is not a need for the development and the process would not be efficient.

d. The BEC would burn materials which should otherwise be recycled and therefore would fail to comply with the hierarchy. As such it is not supported by Government energy policy which only supports waste incineration when it manages residual waste and ensures that the maximum energy is recovered from the waste.

e. The development is not in accordance with the WCS (for the reasons outlined above) and therefore UKWIN are of the view that the applicant has failed to demonstrate need for the development and this should weigh heavily against the proposal.

f. WCS Policy WCS3 promotes a target of 70% recycling or composting of all waste by 2025. To determine the need of the BEC against current (lower) recycling targets is inappropriate and would not be consistent with the overall approach of the WCS.

g. The facility is disposal and not recovery.

h. UKWIN consider waste arisings will be lower than those predicted in the WCS therefore reducing the need for additional treatment facilities. The latest waste data has not been used to assess the need for the facility.

i. The need for the development should be informed by an assessment of existing and consented waste management capacity, rather than just

operational capacity. Additional capacity is available in the Sheffield Incinerator to serve Nottinghamshire's requirements. The 100,000tpa of additional recovery capacity identified to be needed in the WCS is considered too high.

j. National landfill rates provide more up to date information on landfill disposal levels and demonstrate a substantial fall in waste sent to landfill since 2012 (the date of the latest audited records for disposal rates in Nottinghamshire).

k. The facility does not maximise energy recover and the development could harm recycling rates.

l. The development is in conflict with WCS Policy WCS4 which identifies the locations where waste facilities should be sited. Furthermore, since the site is not identified as employment land in the N&SAD it should be considered as a greenfield site and therefore does not accord with Policy WCS7 and PPS10.

121. Councillor John Peck: Raises objections to the planning application on the following grounds:

a. Detrimental effect of concentration of waste facilities: Bilsthorpe has had a landfill for decades, although now full and covered the site and its contents remain. The village has recently had five wind turbines erected on the former colliery which result in flicker effect in sunlight and noise. In addition there is a household waste recycling centre and a 50 acre solar farm proposed. If granted the development would result in an unreasonable concentration of energy and recycling related developments within a small community. This would compound the views expressed by villages that Bilsthorpe is a forgotten former mining village which is now seen as a dumping ground.

b. Visual Impact: The five turbines already dominate the village. The proposed incinerator with 200feet high stacks almost adjacent to the turbines would create a concentration of high structures which would dominate the surrounding countryside and potentially impact local tourist attractions in the Sherwood Forest area.

c. Effect on Local Economy: Tourism is popular in the local area and provides significant local employment, the development would conflict with the tourist potential for the area. There is uncertainty regarding the number of jobs that would be created with initial documents identifying 27, this figure increasing to 46 within the planning submission. There is no guarantee that these jobs will be offered to local people. The development on industrial land would remove the potential for the site to be occupied by a business potentially employing significantly more people. There is no guarantee that the jobs would go to local people.

d. Nottinghamshire Waste Core Strategy: The development is a speculative commercial venture which does not seem necessary and despite the applicants claims quite possible would receive waste materials from outside Nottinghamshire.

e. The Environment: There is evidence of malfunction resulting in the release of toxic emissions. This would be unacceptable at Bilsthorpe which is within 250m of houses.

f. Highway Infrastructure: Access to the site from the north is unsuitable and the additional 50 HGV daily journeys (100 movements) would make it intolerable.

122. Mark Spencer MP objects to the planning application.

123. Councillor Roger Jackson and Councillor Bruce Laughton have been notified of the planning application.

Observations

Introduction

124. The way in which waste is managed in the UK has changed dramatically over the last twenty years. Alongside objectives to prevent and re-use waste as much as possible there has been a major increase in recycling and composting. The waste remaining following recycling is commonly referred to as residual waste and this has historically been sent to landfill for disposal. Waste policy seeks to minimise the use of landfill for residual waste disposal and encourage the use of this waste within recovery facilities where it is capable of being processed into useable forms of energy.

125. National waste policy reflects the wider context of European law on waste management. Pivotal to this legal framework is the revised EU Waste Framework Directive (2008/98/EC) which sets out legislative for the collection, transport, recovery and disposal of waste. The directive requires all Member States to take the necessary measures to ensure waste is recovered or disposed of without endangering human health or causing harm to the environment.

126. The European Directive was transposed into English legislation through the Waste (England and Wales) Regulations 2011 (SI 2011/988). Directive aspirations for waste management which can be delivered through planning are enshrined in existing Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10) which was updated in March 2011. Government waste policy is also clearly stated within DEFRA's Waste Management Plan for England (WMfPE) (July 2013).

127. PPS10 establishes the national planning policy for land use matters relevant to waste management. It recognises that positive planning has an important role to play in delivering sustainable waste management, in part by providing sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time. The Government views the planning system as pivotal to the adequate and timely provision of the new facilities that will be needed to bring forward the required number and range of waste treatment facilities to manage waste in the future to ensure that targets set out in the national waste strategy are achieved.

128. PPS10 states that the overall objective of Government policy on waste is to protect human health and the environment by reducing the amount of waste

produced, taking opportunities to recycle waste and using waste as a resource wherever possible.

129. Paragraph 3 of PPS10 sets key planning objectives which planning strategies and waste development decisions should meet. These objectives are listed below:

- help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option;
- provide a framework in which communities take more responsibility for their own waste, and enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- help implement the national waste strategy, and supporting targets, which are consistent with obligations required under European legislation and support and complement other guidance and legal controls such as those set out in the Waste Management Licensing Regulations;
- help secure the recovery or disposal of waste without endangering human health and without harming the environment, and enable waste to be disposed of in one of the nearest appropriate installations;
- reflect the concerns and interests of communities, the needs of waste collection authorities, waste disposal authorities and business, and encourage competitiveness;
- protect green belts;
- ensure the design and layout of new development supports sustainable waste management.

130. The Landfill Directive, (European Council Directive 1999/31/EC of 26th April 1999) aims to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste through the introduction of stringent technical requirements for waste and landfills and setting targets for the reduction of biodegradable municipal waste going to landfill. The directive was implemented in UK law by the Landfill (England and Wales) Regulations 2002. The Landfill Tax regime introduced in the March 2010 budget increases the cost of disposing of waste within landfills thereby making them less economically attractive to use.

131. Waste Policy Review (WPR) June 2011 announced the Government's aim for a zero waste economy in which material resources are re-used, recycled or recovered wherever possible and only disposed of as the option of very last resort. Zero waste does not mean that no waste is produced. Rather it means that only the minimal amount of waste possible is sent to landfill such that it is truly a last resort and sending any waste to landfill which could have been recovered is "clearly wrong". WPR Paragraph 207 makes it clear that *'the government supports energy from waste as a waste recovery method through a range of technologies, and believes there is potential for the sector to grow further*', noting the carbon savings and potential energy benefits from the process. The WPR overarching goals for energy recovery are that the:

- Recovery of energy from waste and its place in the waste hierarchy is understood and valued by households, businesses and the public sector in the same way as re-use and recycling.
- Energy is recovered in a variety of ways, using the best technology available for the circumstances. The resulting electricity, heat, fuel or other products are seen as commodities with real economic value. Where necessary incentives and regulation are aligned to reflect this value.
- Recovery of energy from waste makes an important contribution to the UK's renewable energy targets, minimising waste to landfill and helping to meet UK carbon budgets.
- With increased trust in energy from waste and innovative incentives, recovery infrastructure is generally accepted, and industry and communities make use of energy from waste to routinely meet a proportion of their energy and waste management needs.

132. WPR introduces an additional emphasis encouraging the use of more efficient recovery facilities, identifying that particular attention should be given to the location of the plant to maximise opportunities for heat use, on the basis that energy from waste facilities which have a local market for the heat they produce tend to deliver higher overall efficiency and therefore deliver the Government's aim of recovering more energy from less waste. The WPR clearly indicates that waste management falls within the wider energy policy context, this matter is considered in greater detail later within the report.

133. In December 2013 the Government issued an updated Waste Management Plan for England (WMPfE), replacing the Waste Strategy for England 2007. The document is informed by the WPR and fulfils the England's requirement to comply with Article 28 of the EU Waste Framework Directive (2008/98/EC) in terms of ensuring the country has a waste management plan covering its territory. Since the plan draws on the WPR it is generally consistent with this document, lending support to efficient energy recovery from residual waste, referencing the DEFRA publication Energy from Waste – A guide to the debate (February 2014) for more detailed government guidance. The WMPfE states that landfill or incineration without energy recovery should usually be the last resort for waste, and for those wastes where it represents the best or least worst option.

134. The Government has undertaken a consultation on an updated national waste planning policy: Planning for sustainable waste management. The consultation document was published in July 2013 with the consultation period finishing on 23rd September 2013. The consultation will lead to updated national waste policy which will replace PPS10, but to date this has not been published. The consultation document generally carries forward current Government waste planning policies within a more streamlined document, placing the local plan as the keystone of the planning system and against which individual planning applications should be judged. The document emphasises the need to increase the use of waste as a resource, placing greater emphasis on the prevention and recycling of waste, while protecting human health and the environment, as well as reflecting the principles of proximity and self-sufficiency.

The Waste Hierarchy

135. WMPfE identifies the importance of applying the waste hierarchy (see Table 1 below). The waste hierarchy is both a guide to sustainable waste management and a legal requirement of the revised EU Waste Framework Directive. It is enshrined in law through the Waste (England and Wales) Regulations 2011 and lays down a priority order of what constitutes the best overall environmental option for managing waste. The hierarchy is applied in the planning system through national waste planning policy within PPS10 and is identified within Table 1 below.

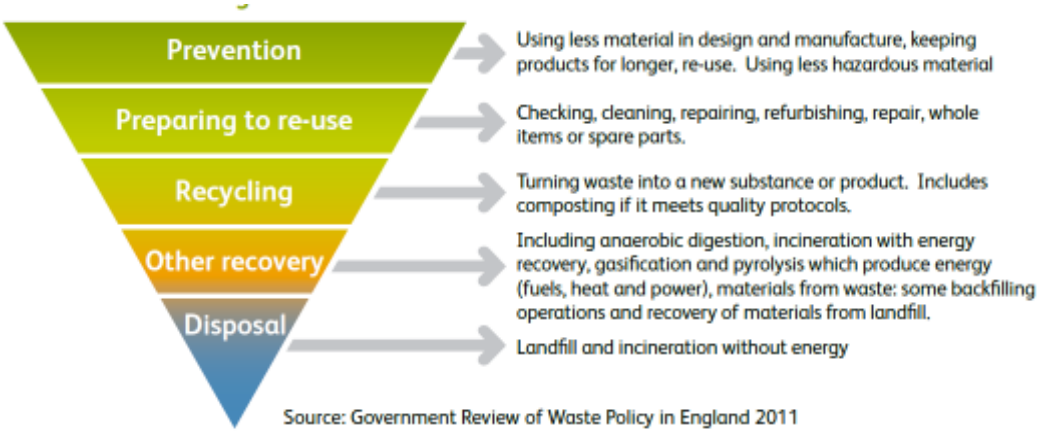

Table 1: The Waste Hierarchy

136. The waste hierarchy does not say everything should be recycled regardless of cost or practicality, if material is so contaminated that the resources required to clean and process it for recycling would outweigh the benefits of recycling then the government acknowledge that it is often better to recover energy from the waste stream rather than process it further to extract these materials. Such waste is referred to as residual waste and defined within government policy documents as:

> *'Residual waste is mixed waste that cannot be usefully reused or recycled. It may contain materials that could theoretically be recycled, if they were perfectly separated and clean, but these materials are currently too contaminated for recycling to be economically or practically feasible. It may also be that there is currently no market for the material or it is uneconomic to take to market. An alternative way of describing residual waste is 'mixed waste which at that point in time would otherwise go to landfill'.'*

137. The Waste (England and Wales) Regulations 2011 requires everyone involved in waste management to take on the transfer of waste all reasonable measures to apply the waste hierarchy (except where, for specific waste streams, departing from the hierarchy is justified in lifecycle thinking on the overall effects of generating and managing the waste). This legal obligation on waste producers and transferors provides over-arching controls over the industry and assists in ensuring that waste that should be recycled is not sent to an EfW facility/landfill for treatment, thereby imposing controls to ensure that the BEC would manage residual waste streams. The system is regulated through the Environmental Permitting (England and Wales) Regulations 2010 enforced by the Environment Agency.

138. What constitutes residual waste is likely to change over the lifetime of the proposed BEC in accordance with a wide range of determining factors including legislative and collection arrangements. However, this planning application should be determined on the basis that regulatory provisions for the collection and treatment of waste will be properly applied and enforced including those exercised through waste legislation. On this basis it is unlikely that the BEC would manage significant volumes of waste could otherwise be viably reused, recycled or composted.

139. The WPR expressly envisages significant growth in EfW including C&I waste and anticipates a threefold growth in waste derived renewable energy by as early as 2020, explaining that it makes no economic sense for businesses to forgo revenue from selling recyclables and, instead, to pay for the same material to be burnt. There is therefore a real incentive to recycle and sell waste into the market. In a situation where at present, by extracting recyclates, producers can benefit from financial returns, such financial incentives to pre-treat waste tend to mean that a significant proportion of the C&I waste market self regulates.

140. Objections have raised concerns that energy from waste has potential to consume materials which could otherwise be managed higher up in the waste hierarchy, particularly at the expense of recycling. These concerns can be justified when opportunities are not taken to separate and remove recyclable materials from waste. However, it is not incumbent on individual waste recovery facilities to also provide treatment facilities at higher levels. Compliance with the waste hierarchy is achieved across the waste industry and not singularly within individual management facilities.

141. Higher rates of recycling can and do co-exist with higher levels of recovery as in the case within Europe. Energy from Waste – A guide to the debate acknowledges this fact, identifying that in 2010 Austria achieved 70% recycling (including composting) alongside 30% waste which was incinerated; Germany achieved 62% recycling alongside 38 % incineration. This compares to the UK with 39% recycling and 12% incineration. This guide states that '*at present 50% of commercial and industrial waste goes to landfill presenting a significant opportunity for those authorities and plants to exploit it'*.

142. The BEC facility incorporates a Materials Recycling Facility (MRF) to pre-treat incoming waste. This pre-treatment facility utilises mechanical sorting and processing techniques to prepare the incoming waste for treatment within the gasification facility. The Regulation 22 response makes it clear that primary purpose of this MRF is to prepare the incoming residual waste for gasification rather than operate as a recycling facility. This is on the basis that the incoming waste would have undergone some pre-treatment to remove recyclables. The MRF process within the BEC will recover further recyclable material from the residual waste including ferrous metals, PVC and other plastics as required, potentially removing up to a further 23,000tpa of material from the incoming waste (117,310tpa) for recycling which would otherwise not be recovered if the material was directed to a landfill facility.

143. Moreover, as well as a front end MRF plant, the BEC benefits from the back recycling of 23,000tpa of the 'slag' by product which is collected in containers in the form of vitreous granules and re-used as an inert aggregate fill material

within the construction industry. There are significant benefits brought about by this aspect of the proposal, namely the provision of a sustainable source of competitively-priced aggregate; the diversion of the aggregate from landfill; a reduction in the need to quarry primary aggregates; additional tonnages of both ferrous and non-ferrous metals are recovered for recycling during the process; and there are significant carbon savings compared with primary aggregates.

144. Representations raised by UKWIN request the WPA impose a planning condition (in the event that permission is granted) to regulate the composition of waste received at the site and control the receipt of potentially recyclable materials within the BEC facility. The appropriateness of a waste management plan condition to control the receipt of materials within an EfW plant has been considered within planning caselaw. Whilst there are examples where such controls have been voluntarily entered into such as the Shropshire EFW plant, there are many more examples where these controls have been considered to be inappropriate.

145. Negotiations undertaken as part agreeing the planning conditions identified that the applicant was unwilling to accept a waste acceptance condition. The operator was concerned that such controls would duplicate regulations already exercised within the waste permitting process and the wider waste industry which regulate the application of the waste hierarchy, and these controls would constrain the commercial flexibility of the plant and its ability to compete on a level playing field with similar facilities.

146. In considering whether it is appropriate to impose a planning condition it is important to have regard to government policy set out within paragraph 206 of the NPPF. This advises that '*planning conditions should only be imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects*.'

147. The imposition of a waste acceptance condition is considered to fail these tests for the following reasons:

- Necessity and Relevance to Planning: The test here effectively is whether the development would have to be refused if a condition was not imposed. Since there is a legal requirement upon anybody that produces, collects, transports, recovers or disposes of waste to take all reasonable measures to apply the waste hierarchy, any condition would effectively duplicate controls that are already a legal requirement under Regulation 12 of the Waste (England and Wales) Regulations 2011. The Governments Planning Practice Guidance on the use of planning conditions clearly advises that the planning system should not duplicate controls imposed under other legislation. Since the suggested condition would effectively duplicate the legislative controls it would fail these tests.

- Enforceability and precision: Since the application of the waste hierarchy is incumbent on third parties who produce and transport waste it is difficult to see how the operator of the BEC can control these activities. Clearly since residual waste is likely to incorporate fractions of potentially recyclable materials which are no longer viable for recycling, the control could not simply restrict certain materials from being processed in the

facility. It is therefore difficult to see how a condition could be worded to be sufficiently precise to enable it to be enforced.

- Reasonableness: Since a waste acceptance condition would generally seek to control waste management practices prior to the waste being delivered to the site, the reasonableness of imposing a planning condition delivered to the BEC for management, the reasonableness of controlling activities which are effectively outside the direct control of the applicant is questioned.

148. For the above reasons it is deemed not to be appropriate to impose a waste acceptance planning condition on this development.

149. The use of residual waste as a fuel to generate energy within the BEC assists in its diversion from landfill disposal, thereby delivering waste management at a higher level in the waste hierarchy in compliance with Nottinghamshire and Nottingham Waste Core Strategy (WCS) Policy WCS3: Future Waste Management Provision, PPS10 and WMPfE policy.

150. Gasification fuel stock may also be sourced from pre-treated solid recovered fuel (SRF) delivered direct to the plant. SRF is manufactured from waste materials and is regulated at the supply side through the Environmental Permitting (England and Wales) Regulations 2010 by the Environment Agency to ensure that the requirements of the waste hierarchy are complied with in the production of this fuel. These controls ensure that any SRF used to power the BEC is sourced from residual waste.

151. Representations have been raised that argue the waste entering the BEC development should be managed through an anaerobic digestion process. WMPfE specifically supports the development of anaerobic digestion for dealing with organic waste, acknowledging that the process is only suitable for biological waste which normally requires separation from the waste stream by the producer. The BEC would take a wider mixed residual waste stream which is not suitable for anaerobic digestion. For more mixed residual waste the WMPfE is supportive of the management of this waste within efficient energy recovery facilities, the aim being to get ‘the most energy out of waste’ as opposed to ‘the most waste into energy recovery’

152. Representations have been raised that the design of the BEC facility does not achieve the highest levels of energy recovery from the incoming waste stream and potentially greater benefit may be derived if the waste was directed towards a convention mass burn incineration facility. The applicant has addressed this matter as part of their Regulation 22 response wherein it is acknowledged that the gasification process operated within the BEC facility potentially recovers less energy in comparison to some incineration facilities. However, in general terms these more efficient incinerators generally have a larger operating capacity to the BEC and therefore achieve greater efficiency due to efficiencies of scale.

153. The Government sees a long term role for energy from waste. To be consistent with the EU Directive and the waste hierarchy this long term role needs to be based on energy from waste that at least constitutes recovery not disposal. The status of the plant is therefore a key consideration for the planning assessment of new energy from waste projects.

154. To be classed as recovery, energy from waste facilities must meet the requirements set out in the Waste Framework Directive which incorporates an efficiency calculation (known as the R1 formula) which effectively sets a threshold by which to determine whether the operation of an incineration plant can be considered as a more efficient recovery operation or lower efficient disposal facility. Demonstration that a plant satisfies the R1 efficiency criteria is normally carried out as part of the Environmental Permitting process administrated by the Environmental Agency and thereafter monitored on an annual basis. Since an environment permit has not been sought for the BEC, R1 certification of recovery efficiency has not been confirmed by the EA. Nevertheless the Environment Statement incorporates a calculation using the R1 formula to theoretically demonstrate that the design of the BEC is capable of achieving the R1 efficiency benchmark, achieving a predicted 'R1' efficiency score (0.66) which is above the threshold set out within the WFD (0.65).

155. As part of the Regulation 22 request the applicant was asked to submit an application to the Environment Agency with a view to obtaining independent certification that the BEC is provisionally capable of operating at an efficiency level that would qualify for R1 status and therefore ensure the process is recovery by definition. The applicant has been unable to obtain this confirmation of R1 status at the present time since any submission to the Environment Agency would need to incorporate a detailed engineered design specification of the process and this information is not available at the planning application stage.

156. Notwithstanding the above, the applicant is confident that the plant would be defined as a recovery process upon commissioning and would agree to this being regulated through a planning condition so as to only allow the plant to operate when recovery certification is confirmed. The imposition of such a condition does not leave this important test to assessment through a submission under planning condition (calculations to demonstrate the efficiently of the plant have been provided as part of the planning submission), however a planning condition would provide the WPA legislative control to ensure that the BEC operates as a recovery installation and thus ensure the assessment of the planning application against policies relevant to waste recovery installations is appropriate.

157. The applicant has identified that recovery status could be achieved by one of two routes, either through R1 certification or through a process which requires the syngas to be defined as a product. Since European law and the Governments Energy from Waste guide make reference to R1 certification to define recovery, it is recommended the planning condition be worded to reflect this emphasis.

<u>Waste planning policy relating to the provision additional recovery capacity.</u>

158. Local waste planning policy is incorporated within the WCS and is the key development plan document for testing the acceptability of the BEC. The WCS was adopted on the 10th December 2013, its content has been guided by PPS10 Policy and is therefore consistent with national planning policy.

159. The WCS sets out the overall approach for future waste management in Nottinghamshire and Nottingham including estimates of how much waste capacity needs to be provided over the next 20 years, what types of sites are

suitable and where in broad terms new or extended waste management sites should be located. The WCS replaces many of the policies contained within the former Nottinghamshire and Nottingham Waste Local Plan 2002 (WLP).

160. The WCS establishes a presumption in favour of sustainable development, identifying the importance of the waste hierarchy in meeting this objective including the appropriate use of energy recovery to minimise future disposal needs. The underlying aim of the plan is to move waste up the waste hierarchy, identifying that where it is not possible to recycle waste the next most sustainable option is to recover energy from it so as to divert waste from landfill disposal. Specifically WCS paragraph 7.14 states:

> *'National and local studies suggest that much of the waste that is currently sent for disposal could be recovered for energy. We therefore think the Waste Core Strategy should support the development of appropriate energy recovery facilities where these help to reduce the amount of residual waste going for disposal. This needs to be balanced carefully so that the scale of any proposed energy recovery facilities does not preclude future increases in recycling. We also want to see a reduction in the amount of waste going for disposal to 10% or below so that this becomes a last resort.'*

There is also a strong commitment within the plan to ensure adequate provision to meet the County's own waste infrastructure needs and to encourage an innovative and ambitious waste industry that values waste as a resource.

161. This approach is consistent with national planning policy as set out in the Government's Waste Management Plan, and accompanying Waste Prevention Programme for England (December 2013), PPS10 and the emerging updated national waste planning policy published for consultation in July 2013. These all underline the importance of preventing waste, re-using or recycling as much as possible then recovering energy from what is left rather than disposing of this to landfill which is considered the least sustainable option.

162. Central Government provides clear advice on the weight that should be attached to the policies of the WCS in planning decisions. PPS10 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.' Paragraph 12 of the National Planning Policy Framework (NPPF) emphasises that development which accords with an up to date Local Plan should be approved and proposed development that conflicts should be refused unless other material considerations indicate otherwise. The WCS therefore forms the core development plan document for testing the acceptability or otherwise of the BEC.

163. WCS Policy WCS3 supports the provision of waste management facilities in accordance with the waste hierarchy to ensure that waste is diverted out of landfill disposal. The objective of the policy is to increase recycling and composting to a level of 70% by 2025 and also reduce the current reliance on landfill. Achieving these aims will require the provision of new waste

infrastructure to dramatically increase recycling levels as well as additional recovery capacity to divert waste from landfill. The policy is listed below:

> Policy WCS3: Future waste management provision
>
> The Waste Core Strategy will aim to provide sufficient waste management capacity for its needs; to manage a broadly equivalent amount of waste to that produced within Nottinghamshire and Nottingham. Future waste management proposals should accord with our aim to achieve 70% recycling or composting of all waste by 2025. Proposals will therefore be assessed as follows:
>
> a. priority will be given to the development of new or extended waste recycling, composting and anaerobic digestion facilities;
>
> b. new or extended energy recovery facilities will be permitted only where it can be shown that this would divert waste that would otherwise need to be disposed of and the heat and/or power generated can be used locally or fed into the national grid;
>
> c. new or extended disposal capacity will be permitted only where it can be shown that this is necessary to manage residual waste that cannot economically be recycled or recovered.

164. The use of energy recovery as proposed in this application is therefore supported by the policy where it is shown that it would divert waste that would otherwise be disposed to landfill and the heat and/or electricity can be used locally or fed into the national grid (Policy WCS3(b)).

165. To help inform the allocation of sufficient capacity to meet future requirements Chapter 4 of the WCS includes estimates of anticipated future waste arisings and an illustrative assessment of the minimum requirements for additional recycling, recovery and disposal capacity required to support the goal of reaching 70% recycling/compositing and 10% or less of landfill by 2025.

166. The WCS identifies that achieving 70% recycling is a 'goal'. Progress towards this goal is subject to ongoing monitoring and review using interim monitoring indicators of 50% recycling by 2015 and 60% by 2020. Paragraph 7.16 recognises that there is a risk that targets for recycling, energy recovery and disposal may not be met and therefore identifies a need for some flexibility in applying the targets, particularly if annual monitoring evidence shows that recycling targets are not being achieved. However, since the WCS is a new document and currently there is no evidence of its targets not being achieved the need for the BEC development should be assessed on the basis that 70% of waste arisings will be recycled or composted. This approach ensures that decisions that are taken now in terms of providing additional recovery capacity will not look the County into an over-capacity of recovery facilities if/when recycling rates increase.

167. Assuming that future recycling rates do reach 70% by 2025, the WCS estimates that the county needs to provide a minimum of 194,000 tonnes per annum of additional energy recovery capacity to manage residual commercial and industrial waste.

168. It must also be stressed that in line with national policy, the baseline of existing recovery capacity identified in the WCS is calculated from totalling the capacity

that is provided within both operational waste treatment facilities and facilities which have the benefit of planning permission but have not been constructed/brought on line. In the case of figures incorporated within the WCS, the baseline capacity includes cica 100,000tpa processing capacity which would be provided by a third line at Eascroft Incinerator, notwithstanding the fact that there are no immediate plans to construct this extension.

169. Potential additional recovery capacity could also be provided within a 160,000tpa gasification plant at Bleinheim Industrial Estate, near Bulwell in Nottingham, which has been granted planning permission after the adoption of the WCS. However, since this facility has only recently been granted planning permission and there has not been a commencement of construction there is no certainty that the plant will become operational. Eastcroft Incinerator (lines 1 & 2) in Nottingham is permitted and licensed to accept commercial and industrial waste but is understood to be primarily utilised for municipal waste. Its future availability for any commercial and industrial waste is not therefore guaranteed.

170. Outside of Nottinghamshire, the North Hykenham EfW facility near Lincoln does not appear to have any spare capacity and the Sheffield Incinerator, whilst potentially able to accept some additional municipal waste in the short term, does not have any guaranteed long term capacity.

171. Government recognises that commercial influences often jeopardise the implementation/construction of waste infrastructure and therefore it cannot be assumed that facilities with the benefit of planning permission would necessary be constructed, or their construction may be delayed. The lead in time for major plant is significant and existing waste needs to be managed either via disposal or at other, presumably more distant facilities in the meantime. Government policy therefore makes an important distinction that the determination of planning applications should be based solely upon a consideration of need against actual operational capacity rather than potential consented capacity that has not yet been developed. This point has been reinforced in recent planning appeal decisions by the Secretary of State (e.g. Middlewich 2012).

172. The applicants have stated the BEC would be a merchant facility, primarily intended to manage residual commercial and industrial waste although it could take municipal waste if available. The applicants suggest that there is approximately 4.07 million tonnes per annum of residual municipal, commercial and industrial waste requiring treatment within the East Midlands region for which there is currently only 1.25 million tonnes of operational treatment capacity thus pointing to a substantial wider need.

173. In terms of municipal waste, the WCS does not identify that there is a specific need for additional recovery capacity to manage residual municipal waste arisings originating from Nottinghamshire and Nottingham. This conclusion is reached on the assumption that this sector of the industry will reach a 70% recycling target, however, this target is higher than both the 50% national target and a 52% target by 2019/20 stipulated in the County's municipal waste contract. In practice current recycling rates for local authority collected municipal waste within the County Council area have remained static since 2010/11 at around 43%. Within the City Council area recycling has fallen by 4% over the same period to 32%. If municipal waste recycling does not hit

the 70£ WCS target greater proportions of this waste will require treatment by either recovery or landfill than predicted in the plan. The additional recovery capacity provided within the BEC provides a local recovery facility that has potential to assist with meeting any residual municipal waste management shortfalls within a facility that would divert the waste from landfill disposal.

174. The Council's original municipal waste contract envisaged that around 180,000 tonnes of recovery capacity to manage residual waste would have been provided within a waste incinerator on former colliery land near Rainworth. Following the refusal of planning permission for this facility by the Secretary of State in 2011, the waste management arrangements have now been revised. The revised waste contract proposes to utilise capacity within both the Eastcroft and Sheffield Incinerators as well as a waste transfer station in Alfreton for circa 59,000 tonnes of residual waste arising from the Mansfield and Ashfield areas. The Alfreton waste transfer station would process this waste into a refuse derived fuel (RDF) for use within energy recovery. RDF produced at Alfreton is currently exported to Holland for Energy Recovery due to a shortage of recovery capacity in the UK. The BEC has potential to assist in meeting these shortfalls in recovery capacity in closer proximity to the waste arisings.

175. Nottinghamshire continues to dispose of significant quantities of waste to landfill, this is demonstrated by the latest Environment Agency data that shows that 330,000 tonnes of municipal, commercial and industrial waste was disposed to landfill in Nottinghamshire in 2012. Remaining landfill capacity within the County is already limited and in recent years many landfills have been filled and are now closed. Recent announcements concerning the closure of Dorket Head (the main landfill site to serve Greater Nottingham) and Carlton Forest mean that future disposal capacity will be significantly restricted within the County and limited to two remaining operational non-hazardous facilities (at Staple near Newark and Daneshill to the north of Worksop), both sites being geographically remote from the main population centres.

176. Whilst a reduction in landfill capacity is not necessarily bad in the context of the waste hierarchy and is likely to result in less waste being sent to landfill within the County, it does re-enforce the need to develop additional waste treatment/recovery capacity to ensure waste is satisfactorily managed. A reliance on out-of-county facilities for waste management would go against the vision and objectives set out within the WCS, particularly Strategic Objective 6 and Policy WCS3 that set out the counties commitment to ensure that Nottinghamshire is able to provide sufficient waste management capacity for its needs, to manage a broadly equivalent amount of waste to that produced within the plan area.

177. It is therefore concluded that the local and regional assessment of waste arisings and management facilities demonstrates that there is a need for additional waste recovery capacity to deliver more sustainable waste management in compliance with the waste hierarchy by diverting waste from landfill disposal and using it within a recovery facility. The development would not result in an overcapacity of recovery facilities in the future which could affect recycling and composting performances and the development would assist with delivering the new waste infrastructure required to achieve the objectives set out within WLP Policy WCS3.

178. Both PPS10 and WPR recognise that the planning system is pivotal to the adequate and timely provision of the new facilities that will be needed to bring forward the required number and range of facilities to manage waste in the future to ensure that targets set out in WPR are achieved. If such facilities are ever to be delivered, having regard to the long lead time for these types of facilities, planning permissions need to be granted and now. The UK Renewable Energy Roadmap sets outs a series of actions, timetables and targets for the renewable energy generation. It deals at length with Energy from Waste (EfW) and explains that the explicit statement of the Government's commitment to EfW in the WPR is as a result of the difficulties that industry has experienced in gaining permissions. PPS10 (paragraph 2) therefore promotes 'positive planning' to secure the delivery of sustainable waste management facilities to ensure that new waste facilities of the right type, in the right place and at the right time are granted planning permission.

179. The Government is currently undertaking a consultation on an updated national waste planning policy: Planning for sustainable waste management. The consultation document was published in July 2013 with the consultation period finishing on 23rd September 2013. The consultation will lead to updated national waste policy which will replace PPS10.

180. The document generally carries forward current Government waste planning policies within a more streamlined document, placing the local plan as the keystone of the planning system and against which individual planning applications should be judged. The document emphasises the need to increase the use of waste as a resource, placing greater emphasis on the prevention and recycling of waste, while protecting human health and the environment, as well as reflecting the principles of proximity and self-sufficiency. The draft policy introduces additional text encouraging the use of heat as an energy source where energy from waste development is being considered. This reflects in planning policy the wider approach promoted through the Government's Waste Review 2011 and 'Energy from Waste - A guide to the debate' published in February. Both publications advise on how energy from waste, and the effective use of heat derived, have the potential to deliver higher overall efficiency and to deliver the Government's goal of more energy from less waste. These matters are considered in greater detail within the carbon emissions and energy efficiency section of the report wherein it is noted that the BEC does not incorporate specific proposals for the recovery of heat, a fact that is likely to compromise the overall efficiency of the plant.

<u>Location of BEC in proximity to waste arisings</u>

181. The BEC would be developed on a merchant basis with the applicant currently unable to point to any waste contract to provide certainty over the origin of the waste inputs. This has resulted in concerns being raised by the local community that the facility would manage waste from a wide geographic area utilising 'non-local' waste.

182. To understand why the applicant cannot identify specific waste streams to serve the plant it is important to have an understanding of the different characteristics of the waste markets for municipal and commercial and industrial waste streams. For municipal waste it is common practice for local authorities to enter long term contracts (often 20-30 years) which enable investment decisions to be secured on the basis that there is a guaranteed

waste feedstock thereby providing a clear understanding of its origins. Within Nottinghamshire there is a contract with Veolia Environmental Services which provides for the management of much of Nottinghamshire's municipal waste arisings. This situation is quite different in terms of the commercial and industrial waste sector wherein shorter term contracts (often extending just a few months) are entered into. It is also common practice that such contracts can only the secured once a facility is available and 'on-stream' within a competitive waste market. It is therefore understandable that the applicant cannot readily identify the specific origins of the waste feedstock at the planning application stage for a facility which would predominantly deal with commercial and industrial waste. To refuse planning permission on this ground would in effect prohibit any merchant facility being developed because all developers would be in the same position as Peel Environmental are with the BEC, and therefore shortfalls in commercial and industrial waste recovery capacities would never get addressed.

183. WCS Policy WCS3 aims to provide sufficient waste management capacity to manage a broadly equivalent amount of waste to that produced within Nottinghamshire. WCS policy WCS12 acknowledges that waste movements do not necessarily stop at local authority boundaries, this policy therefore takes a pragmatic approach towards dealing with 'non-local waste', establishing a criteria based policy by which developments which take waste from a wider catchment area should be assessed. The policy is printed below.

> Policy WCS12: Managing non-local waste
>
> Waste management proposals which are likely to treat or dispose of waste from areas outside Nottinghamshire and Nottingham will be permitted where they demonstrate that:
>
> a. the envisaged facility makes a significant contribution to the movement of waste up the waste hierarchy, or
> b. there are no facilities or potential sites in more sustainable locations in relation to the anticipated source of the identified waste stream, or
> c. there are wider social, economic or environmental sustainability benefits that clearly support the proposal.

184. The operation of the BEC on a merchant basis, seeking waste from predominantly commercial and industrial waste sources over a potentially wider regional catchment area is not fundamentally unacceptable in the context of Policy WCS12 on the basis that the facility provides additional recovery capacity thus diverting the waste from disposal at landfill and satisfying criteria (a) of the policy by making a significant contribution to the movement of waste up the hierarchy. .

185. The DEFRA publication Energy from Waste: A guide to the debate incorporates specific advice within paragraphs 152-154 in respect of the proximity principle and the approach planning authorities should take when considering new infrastructure which may serve a wider area than the administrative boundary within which it is located. The document advises that…

'The proximity principle arises from Article 16, "Principles of self-sufficiency and proximity", of the revised Waste Framework Directive (2008/98/EC), the EU legislation that governs waste management. The principle is often over-interpreted to mean that all waste has to be managed as close to its source as possible to the exclusion of other considerations, and that local authorities individually need the infrastructure required to do so. This is not the case. Indeed the final part of the Article itself states, "The principles of proximity and self-sufficiency shall not mean that each Member State has to possess the full range of final recovery facilities within that Member State". Clearly if not even the entire country needs to have the full range of facilities, a specific local authority does not have to. While there is an underlying principle of waste being managed close to its source, there is no implication of local authorities needing to be self-sufficient in handling waste from their own area'

The proximity principle itself requires mixed municipal waste "...to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health". This has a number of implications:

- *"one of the nearest" means it doesn't have to be the absolute closest facility to the exclusion of all other considerations, including cost.*
- *It may be justified to use a more distant solution if it provides a more appropriate method or technology to ensure overall a higher level of protection of the environment and public health.*
- *It applies to the network of facilities in the EU – it doesn't mean a new facility has to be constructed if capacity doesn't exist in that country. Equally the presence of capacity elsewhere does not preclude the development of a more proximate solution, especially as there is an aim of moving towards self-sufficiency within individual countries. We can export waste for energy recovery where it provides a better solution, but the availability of excess capacity elsewhere in Europe does not preclude us from developing capacity domestically.*
- *It says nothing about administrative boundaries (except the overall EU border). As such the nearest solutions may all be in administrative areas that are different from those in which the waste arises. Equally it does not imply a facility can only process 'local' waste.*

It is these final points that raise the other issue of accepting "other people's waste". There is nothing in the legislation or the proximity principle that says accepting waste from another council, city, region or country is a bad thing and indeed in many cases it may be the best economic and environmental solution and/or be the outcome most consistent with the proximity principle. There is an expectation on local authorities to work together (re-enforced by the need to demonstrate that they have done so through the Duty to Co-operate provisions of the Localism Act 2011) to ensure that waste needs across their respective areas are handled properly and appropriately. However, it is recognised that to many, accepting waste from elsewhere does appear wrong and it is often cited in objections to a planning proposal or to demonstrate that a plan is flawed.'

186. The WCS identifies that there are shortfalls in recovery capacity within Nottinghamshire, particularly in terms of commercial and industrial waste which the BEC would assist in addressing. The additional recovery capacity provided by the BEC would satisfy the test of being 'one of the nearest' facilities for Nottinghamshire's and surrounding authorities commercial and industrial waste. The DEFRA guidance does not require the facility to be the absolute closest facility neither does it stipulate that the waste has to originate in the same administrative area.

187. It is noted that the DEFRA guidance reflects European law incorporated within the WFD. The references to waste being recovered within 'one of the nearest appropriate installations' is referenced to municipal waste rather than commercial and industrial waste. This distinction between municipal solid waste/co-collected waste and commercial and industrial waste may be because it is recognised that cost principally determines where commercial and industrial waste is managed and this usually means close to where it arises. The DEFRA guidance does not require the facility to be the absolute closest facility neither does it stipulate that the waste has to originate in the same administrative area. The development satisfies the test within WCS Policy 12 in terms of managing non-local waste on the basis that the facility would move waste management up the waste hierarchy. If controls were imposed that restricted waste inputs into the facility to only permit waste from a given catchment area this control may actually prejudice waste management at the highest level in the waste hierarchy as well as unreasonably restrict the commercial flexibility of the operator. Given these facts a planning condition which imposes controls over the radius that waste is sourced from is not considered appropriate.

188. In conclusion the WCS identifies that there are shortfalls in recovery capacity within Nottinghamshire, particularly in terms of commercial and industrial waste which the BEC would assist in addressing and the additional recovery capacity provided by the BEC would satisfy the legislative test of being 'one of the nearest' facilities for Nottinghamshire's and surrounding authorities commercial and industrial waste.

<u>Government Energy Policy</u>

189. By its nature energy from waste bridges two sectors both of which are evolving. It has its roots firmly in waste management but energy from waste is also important in terms of its energy and carbon emissions. Waste management is changing to be much less about how materials are disposed and more about managing discarded resources back into the economy. Likewise energy generation is evolving to make best use of renewables and low carbon fuel sources including novel fuels and different energy outputs always with an eye to energy security.

190. Paragraph 208 of the WPR sets out the reasons for the Government's support for EfW stating that:

> *"The benefits of recovery include preventing some of the negative greenhouse gas impacts of waste in landfill. Preventing these emissions offers a considerable climate change benefit, with the energy generated from the biodegradable fraction of this waste also offsetting fossil fuel power generation, and contributing towards our renewable energy*

targets….providing comparative fuel security, provided it can be recovered efficiently."

191. The WPR therefore makes it plain that waste management falls within the wider energy policy context insofar that recovering energy from waste which cannot be sensibly reused or recycled is an essential component of a well-balanced energy policy and underlines the importance of maximising energy recovery from the portion of waste which cannot be recycled. Given that climate change is the Government's principal concern for sustainable development this issue is considered to be of fundamental importance within the assessment of this planning application.

192. The DEFRA publication 'Energy from Waste: A guide to the debate' (revised edition February 2014) advises that residual waste incorporates a mixture of different materials part of which originate from recently grown materials that would be biodegradable (such as food, paper, wood), whilst other fractions would be produced from oil/fossil sources (such as plastics). Only the energy generated from the recently grown biodegradable materials in the mixture is considered renewable. Energy from residual waste is therefore a partially renewable energy source, sometimes referred to as a low carbon energy source. The ES identifies that the waste fuel used to power the BEC development would incorporate a mix of materials, up to 60% of which would be renewable. Therefore, of 13.6MW total electrical output of the BEC, the renewable proportion would be circa 8.16MW.

193. The UK is legally required by the EU Renewable Energy Directive to source 15% of its total energy from renewable sources by 2020. This will require an annual output of around 227 terawatt hours of renewable energy by 2020. Energy from the biogenic part of mixed residual waste is seen as one of a number of technologies that have the greatest potential to help the UK meet the 2020 target in a cost effective and sustainable way.

194. The overarching National Policy Statement for Energy (NPS EN-1), published in July 2011 sets out the Government planning policy relating to energy development and provides the primary basis for planning decisions on large scale energy developments determined by the Infrastructure Planning Unit, but is also a material consideration in all planning decisions relating to energy development.

195. The overall objective of NPS EN-1 is to achieve carbon emission reductions, energy security and affordability. Key to delivering these objectives is a transition to a low carbon economy to reduce greenhouse gas emissions, and to improve the security, availability and affordability of energy through diversification. Paragraph 3.3.10 outlines the Government's commitment to dramatically increasing the amount of renewable energy generation, particularly identifying the role that the combustion of waste will play in providing this energy. The target is to source 15% of total energy (across the sectors of transport, electricity and heat) from renewable sources by 2020 (paragraph 3.4.1). Paragraph 3.4.5 outlines the urgency of need to achieve this target and states that:

"To hit this target, and to largely decarbonise the power sector by 2030, it is necessary to bring forward new renewable electricity generating projects as

soon as possible. The need for new renewable electricity generation projects is therefore urgent"

196. As an energy source, energy from waste has a number of potential advantages beyond its renewable content including:

a. Energy Security: The UK faces a growing dependency on imported fossil fuels. In 2011, 41% of oil supplies and 26% of gas supplies came from imports, and by 2020, the UK could be importing nearly 50% of its oil and 55% or more of its gas. During 2011, household electricity prices increased by around 16% and household gas prices by 25%, mostly due to global fossil fuel prices. Generating energy from waste rather than from these fossil fuels, as with other renewables, provides a domestically-derived energy source and gives the UK greater fuel security, greater energy independence and protection from fossil fuel price fluctuations.

b. Non-intermittent Nature: One of the issues with many sources of renewable energy such as wind or solar is their intermittent nature, if the wind is not blowing or the sun is not shining, they are not generating. Energy from waste can be used to generate constant planned amounts of energy 'base load'.

c. Variety of potential energy outputs: The guide identifies that gasification produces a syngas which has potential to be used for a number of purposes. Within the BEC the syngas is proposed to be used as a substitute for natural gas in power generation with potential for heat export. However the fuel could readily be utilised for other alternative fuel sources including transport and therefore does offer some flexibility of use. Whilst the applicant discusses the potential to develop a hydrogen fuel cell facility alongside the BEC this does not form part of the current planning application and therefore any benefits it may derive cannot be given weight within this decision. However the process demonstrates the greater flexibility that gasification offers over conventional incineration in providing an alternative fuel source which is supported by government policy.

197. The unremitting message of Government policy relating to energy policy is one of urgency: the Energy White Paper seeks to provide a positive policy framework to facilitate and support investment in renewable energy; the aim of the UK Renewable Energy Strategy is to radically increase the use of renewable energy and the UK Low Carbon Transition Plan records that the scale of change needed in its energy system is unparalleled. In short, the expectation to industry is to provide as much renewable energy capacity as swiftly as possible.

198. It is absolutely clear that Government policy requires that significant weight should be given to a proposal's provision of renewable energy and the Energy White Paper (2007) makes it clear that local authorities should look favourably upon planning applications for renewable energy developments. It states within box 5.3.3: Renewables Statement of Need (page 157) that:

'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.

"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."

199. The BEC facility would assist in providing security of electrical supply utilising UK sourced, dependable residual waste and lessening dependence on insecure foreign imports of fuels for energy. The facility would also provide diversified energy in accordance with Government policy to have a wide range of different energy generators and move away from the concentration on coal, gas and nuclear energy. The facility would assist in providing a dispersal of generating stations in accordance with Government policy to achieve a greater distributed energy network, and lessen the dependence on a small number of very large centralised plants. The energy produced within the BEC facility would not be intermittent in nature or subject to the vagaries of the weather like most other renewable energy, and the electrical energy is readily dispatchable to the grid system.

200. In summary, the BEC facility would provide energy that meets what can be described as the four 'D's': that is such energy would be dependable, diversified, distributed and dispatchable and therefore would fully contribute to meeting the objectives of NPS EN1, providing a very neat fit with Government energy policy, a fact that has significant weight within the overall assessment of the planning application.

<u>Carbon emissions, climate change and energy efficiency.</u>

201. Government planning policy relating to meeting the challenges of climate change are set out within Chapter 10 of the NPPF. Paragraph 93 identifies that planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions and supporting the delivery of renewable and low carbon energy and associated infrastructure and identifies that this is central to the economic, social and environmental dimensions of sustainable development. The NPPF provides positive support for renewable energy schemes, encouraging the co-location of potential heat customers and suppliers and seeking to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed.

202. NPPF paragraph 97 provides support for increasing the use and supply of renewable and low carbon energy recognising the responsibility that planning

authorities have in ensuring that schemes come forward for energy generation from renewable or low carbon sources. The NPPF identifies that planning authorities should:

- have a positive strategy to promote energy from renewable and low carbon sources;
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
- consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources;
- support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
- identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

203. NPPF Paragraph 98 provides specific guidance to planning authorities when determining planning applications for renewable and low carbon development to:

a. not require applicants for energy development to demonstrate the overall need for renewable or low carbon energy and also recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and

b. approve the application (unless material considerations indicate otherwise) if its impacts are (or can be made) acceptable.

204. Climate change needs to be approached in tandem with waste and energy policy since tackling climate change is a golden thread which runs through all Government documents relating to waste management and energy developments.

205. Compliance with the waste hierarchy contributes to reducing greenhouse gases, in particular a reduction in the use of landfill and increased energy recovery from waste has been identified as providing notable reductions in carbon emissions. This is due to the character of the gases which are released when waste decomposes in landfills. Such waste produces carbon dioxide and methane in roughly equal proportions, whereas energy from waste produces carbon dioxide only. Since methane is around 25 times more damaging to the climate than carbon dioxide the equivalent carbon impact to the atmosphere is significantly reduced by eliminating the production of methane gas which would be collected through the gasification process. Energy from waste technologies also offset the use of fossil fuels which would otherwise be used to generate electricity, therefore effectively achieving further carbon savings.

206. The Environmental Statement identifies that the BEC development would deliver a reduction in emissions of greenhouse gases when compared to

landfill disposal, generating an estimated saving of 2,100 tonnes carbon dioxide equivalent if all waste is delivered to the site as SRF and circa 7,900 tonnes carbon dioxide equivalent if the waste is delivered for treatment through the MRF.

207. Newark and Sherwood Core Strategy (N&SCS) Core Policy 10: Climate Change seeks to tackle the causes and effects of climate change to deliver a reduction in the Districts overall CO2 emissions. The policy provides support to the BEC development insofar that the facility would deliver additional renewable and low-carbon energy generation capacity that assisting in reducing the Districts CO2 emissions. Although the policy specifically promotes community led renewable projects, which the BEC is not, this does not mean that there is policy conflict with N&SCS Core Policy 10.

208. The WMPfE encourages the use of more efficient energy recovery facilities, the aim being to get 'the most energy out of waste' as opposed to 'the most waste into energy recovery'.

209. Chapter 5 of DEFRA's Energy from Waste – A guide to the debate stresses that once it is established that energy recovery is the best solution for the residual waste going to it, then it is of importance to maximise the amount of energy generation from waste recovery. The guide encourages planning authorities to select sites that do not limit plants to only generating electricity. Paragraph 255 seeks to drive waste towards those plants and processes which deliver the most efficient conversion of waste from energy. Paragraph 256 notes that the capture and use of heat in the combustion process inevitably leads to more efficient use of the energy from waste fuel, and therefore paragraph 257 encourages the selection of sites that allow potential connection to heat customers. The updated national waste policy to replace PPS10 is expected to reflect this approach by encouraging local planning authorities to consider siting energy from waste plants in areas which allow them to use heat. Paragraph 258 therefore advises that to ensure new energy from waste plants maximise energy benefits key considerations are:

- Steering waste towards the most efficient plants/outputs on a lifecycle basis and away from less efficient solutions.
- Selecting sites that do not limit plants to only generating electricity i.e. sites in urban centres and/or close to heat users should be preferred to remote rural locations where opportunities to utilise heat may be more limited.
- Delivery of wider energy policy goals and regulation.

210. Controls are in place to ensure the BEC would operate as a recovery facility making use of the waste feedstock as a fuel source and therefore by EU definition the process would be classified as a recovery process rather than a less efficient disposal installation.

211. The guide identifies that conventional waste incinerators have efficiencies in a range of 18% - 27% when generating electricity only. The efficiency of the BEC would be circa 18.78% and therefore at the lower end of this efficiency range. The applicant reports that plants which operate at the higher efficiency levels are generally larger plants due to their scale. The capacity of the BEC has been designed to reflect local residual waste arisings and a need for a larger plant has not been demonstrated.

212. The BEC development includes the potential to capture heat but does not incorporate specific proposals of how the heat would be distributed nor does it identify any confirmation that customers would take up options to be supplied with heat. The Environmental Statement however identifies that the BEC has potential to distribute heat energy in the local area, this is demonstrated through a heat plan study which considers the theoretical potential to implement a district heating network using heat from the BEC. The heat study explores three options for supplying heat comprising:

Option 1 – 45 potential customers within the 10km radius limit of heat transfer;

Option 2 – Centre Parcs facility approximately 3.5km from the BEC; and

Option 3 – 14 consumers in Bilsthorpe and to the southwest of Bilsthorpe.

For Option 1 and Option 2 it is possible that, during periods of cold weather, the peak heat demand from all consumers may exceed the supply available from the BEC. For Option 3 the BEC would have the capacity to supply heat to all customers throughout the year. When the R1 calculation is extended to include 1.4MW of heat export the R1 efficiency score for the plant operation would be 0.68.

213. The applicant explains that no agreements have yet been reached with heat customers since without the necessary planning consent and environmental permit heat users remain unable to take commercial contracts about the availability of heat and enter formal commercial contracts. This position is quite common with Energy from Waste developments and considered to realistically reflect commercial reality. To ensure that potential for heat recovery is not lost, the applicant supports the imposition of a planning condition requiring the development of a strategy to further investigate potential heat markets and enter negotiations with potential energy users and energy supply companies.

214. For the purposes of considering the merits of this planning application, the uncertainty as to whether heat users will come forward means that the BEC development must be considered on the basis that it is an electricity only recovery facility, since this is the only part of the recovery process that can be guaranteed at this stage.

215. The test within paragraph 258 of the DEFRA guidance document requires sites to be selected which do not limit markets for heat recovery. The applicant has demonstrated that there is some potential for Bilsthorpe to market its heat and therefore the BEC development would not be contrary to this guidance. However it is acknowledged that location of the development within the Bilsthorpe Business Park may restrict the opportunities for recovering heat due to the predominantly rural character of the surrounding area, although there may be scope to maximise efficiency outputs further through the development of alternative uses of syngas within transport.

216. Local waste policy relating to the development of new energy recovery facilities is incorporated within WCS Policy WCS3. This policy imposes a less demanding test than the DEFRA guide insofar that it requires facilities to produce heat and/or generate power which can be used locally or fed into the national grid. The BEC development would divert waste from landfill and

generate electricity to be fed into the national grid thus ensuring compliance with this policy.

217. The DEFRA guide discusses potential changes to waste composition in future years brought about by increased separation and recycling resulting in waste feedstocks becoming less biogenic. Objectors (notably UKWIN) have identified that these changes have potential to affect the comparative performance of the BEC in terms of its climate change benefits, raising questions that in the longer term some less efficient recovery processes may not outperform landfill in terms of environment benefit. These uncertainties have been used to argue that the BEC should be refused planning permission.

218. The guide identifies that maintaining the environment benefits of recovery over disposal would be achieved by maximising the efficiency of energy recovery from waste. It acknowledges that some less efficient plants may cease to have environmental benefit during their operational life. Electricity only energy from waste schemes, particularly those utilising mass burn incineration are likely to show the greatest deterioration in environmental performance and therefore the guide encourages these facilities to operate using combined heat and power to ensure their performance remains superior to landfill.

219. In identifying that energy outputs from heat and transport fuels are expected to decarbonise much more slowly than energy used to generate electricity the guide acknowledges that advanced thermal treatments of waste (such as gasification) have the potential to deliver heat or less direct outputs such as transport fuels including hydrogen, ethanol, synthetic diesel or jet fuel. Transport fuels derived from waste are potentially a more efficient use of the energy within the waste, having potential to ensure that the recovery process continues to significantly outperform landfill disposal options in terms of environmental performance.

220. The ability for energy from waste plants to at least qualify as recovery in the waste hierarchy is identified as being a key consideration. The Environmental Statement incorporates evidence to demonstrate that the BEC would satisfy the thresholds to qualify as a recovery facility and controls can be imposed within any planning permission to regulate this and ensure the plant recovers sufficient quantities of electricity to enable it to be considered as a recovery process rather than a disposal facility and in so doing satisfies the requirements of WCS Policy WCS3.

221. It is acknowledged that the BEC would potentially operate at a lower efficiency in comparison to some convention mass burn incinerators, creating some tension in the context of government policy. However, the longer term performance of gasification potentially offers greater flexibility in recovering energy from waste due to the wider options for the application of syngas as well as potential for heat loads to be taken from the process.

222. Although Chapter 5 of the DEFRA guide identifies some questions regarding the longer term environment performance of less efficient EFW processes in light of changing waste composition, this needs to be considered in the context of the current shortage of waste management capacity within the County. To refuse planning permission for this development at this time because of the uncertain changes to waste composition would result in a continuation of residual waste being put to landfill or treated out of County

which is proven to be less sustainable, It is notable that the BEC offers potential to enhance its operational efficiencies through use of residual heat or alternative applications for the syngas, thereby providing an element of future proofing the efficiency of the plant.

223. It is thus concluded that the BEC would contribute to delivering the Government's climate change programme and energy policies and, in so doing so, contributes to global sustainability. NPPF paragraph 14 sets out that there is a presumption in favour of sustainable development, describing this as a 'golden thread' in all planning decisions. Decision takers are required to approve sustainable development proposals that accord with the development plan without delay unless any adverse impacts would significantly and demonstrably outweigh the benefits. A presumption in favour of sustainable development is also reflected within Policy WCS1 of the WCS.

224. Newark and Sherwood Allocations and Development Management Document Policy DM4 states that planning permission will be granted for renewable and low carbon energy generation development, subject to their being acceptable environmental impacts. Whilst representations have been received that the development would fail to comply with this policy due to various environmental impacts (including landscape, heritage, amenity, highway and ecological effects), these matters are assessed later in the report where it is concluded that significant adverse environmental impacts would not occur. The development is therefore supported by this policy which lends strong support to granting the development planning permission.

<u>Overall conclusions relating to the assessment of the extent to which the development complies with waste, energy and climate change policies relating to the provision of Energy Recovery Facilities.</u>

225. The BEC facility would positively address the three aims of waste, energy and climate change policy including the urgent need for infrastructure to achieve these aims, as summarised below:

- Firstly, the provision of additional waste recovery capacity which would assist with the diversion of residual waste from landfill;
- secondly, providing much needed renewable and low carbon energy to generate electrical energy thereby increasing energy security and contributing to renewable energy targets;
- and, thirdly, delivering the Government's climate change programme and contributing to global sustainability thereby reducing the carbon dioxide that would otherwise be emitted to generate energy and displacing the harmful methane emissions that arise from landfilling.

226. The BEC development would comply with waste policy relating to the management of residual waste contained in PPS10, the WPR and the WMPfE; energy policy incentivising renewable energy schemes set out within the Energy White Paper and NPS-EN1; and the climate change policies set out within the NPPF.

227. Policy support is embedded within planning policies, notably:

- PPS10 which views the planning system as being pivotal to the adequate and timely provision of new waste management facilities and therefore promotes the concept of 'positive planning' to bring forward new development to address critical shortfalls in capacity.
- The emphasis set out within the Energy White Paper which makes it clear that local authorities should attach significant weight to the benefits derived by new renewable energy projects and therefore NPS EN-1 has an expectation to provide as much renewable energy capacity as swiftly as possible. An approach which is consistent with local policy set out within N&SCS Core Policy 10.
- The underpinning presumption in favour of sustainable development contained within the NPPF which seeks to ensure that such development goes ahead without delay and the default position for new renewable energy capacity is to grant them planning permission, unless there are irresolvable material considerations which indicate otherwise.

182. It is therefore concluded that the BEC development is compliant with the most recent statements of national waste, energy and climate change policy set out at national and local policy incorporated within the WCS notably Policy WCS3 and WCS12 and Newark and Sherwood Core Strategy Policy Core Policy 10 which supports development deliver additional low carbon sources of energy. These matters carry significant weight within the overall planning decision.

Assessment of the extent that the development complies with locational planning policies.

228. The development plan incorporates locational policies against which the appropriateness of the Bilsthorpe Business Park for the BEC development can be assessed against. National policy is also a material consideration.

229. The WCS does not allocate specific sites for waste development, however, Policy WCS7 (General Site Criteria) sets out the broad principles that are used to narrow down future site choices using a criteria-based approach to show the types of locations that are likely to be suitable for different types of waste management facility. For waste recovery facilities that require a building and generate significant vehicle movements, such as the BEC, the WCS encourages the use of employment land which may either be allocated within district plans, or already used for employment uses. There is also a priority to the re-use of previously developed land in preference to other greenfield sites.

230. The Newark and Sherwood Allocations Development Plan Document (N&SADP) comprises a written document and Proposals Map which designate land use within the district. The Proposals Map identifies the development site and the wider Bilsthorpe Business Park/Former Bilsthorpe Colliery Pit Head area as being located outside the Bilsthorpe village envelope within land designated as countryside. The site is also identified as a Local Wildlife Site (LWS). The proposals map of the development plan therefore makes no provision for either the existing development in the Bilsthorpe Business Park or any future expansion and does not appear to reflect the position 'on the ground'. This policy position is in stark contrast to the aspirations of the landowner who is actively marketing the land as a business park and there is clearly some tension with the development plan allocation.

231. This apparent anomaly between the development plan policy and the landowner's aspirations has been discussed within the Newark and Sherwood planning officers report which states:

The proposals map for the N&SADP identifies that the application site and the wider Bilsthorpe Business Park is located outside any defined settlement boundary and within the open countryside. The land which previously incorporated the pit head area of the former Bilsthorpe Colliery and the planning history for the site includes redevelopment of former colliery for industrial uses. However, the lapse of the earlier planning permission means the site does not appear on the policies map for the N&SAD).

Given the nature of employment development, unlike residential development, large sites carry permissions for some time and therefore it is not always possible to accommodate this within the confines of the formal development plan process if status's change. This was the case during the development of the Local Development Framework when the planning status of a number of employment sites changed as permissions lapsed. However, 4 areas which previously had planning permissions which have lapsed are still included within the employment land supply for the District (included within Appendix C of the N&SADP). Bilsthorpe Business Park is one of these sites and is included recorded as 'available employment land in a designated employment area'.

It is clear when examining the usual hierarchy of policy in the Development Plan that Spatial Policy 3 Rural Areas discourages uses within the countryside which do not require a rural location. Policy DM8 Development in the Open Countryside provides the context for the consideration for employment development proposals away from the main built up areas of settlements at point 8 it states;

"Small scale employment development will only be supported where it can demonstrate the need for a particular rural location and a contribution to providing or sustaining rural employment to meet local needs in accordance with the aims of Core Policy 6. Proposals for the proportionate expansion of existing businesses will be supported where they can demonstrate an ongoing contribution to local employment. Such proposals will not require justification through a sequential test."

This proposal clearly does not fit within those categories because it does not require a rural location nor does it relate to the expansion of an existing business.

However it is important to understand the context of the production of the development plan and the approach taken to employment land. The LPA has not specifically identified every employment site and industrial estate in the District, only those which require allocation or further policy direction. For those sites which require neither, or in the this instance had the benefit of planning permission when the plan was prepared, Core Policy 6 – Shaping our Employment Profile provides the context for consideration of employment land and sites. It sets out that to strengthen and broaden the economy of the district that;

Retention and safeguarding of employment land and sites that can meet

the needs of modern businesses, to ensure their continued use for employment purposes. Land and premises in the existing industrial estates and employment areas, and those areas allocated for employment development, will normally be safeguarded and continue to be developed for business purposes. Where proposals are submitted for economic development uses (as described in PPS4), wider than the B Use Classes, regard will be had to the following:

- *The extent to which the proposals are responding to local needs for such development;*
- *The lack of suitable, alternative sites being available to meet the demand that exists;*
- *The need to safeguard the integrity of neighbouring uses, including their continued use for employment purposes;*
- *The need to protect and enhance the vitality and viability of town centres;*
- *The potential impact on the strategic role and function of the remaining employment land, in meeting the future needs of the District*

Any proposal on the employment land identified by the Council as part of our supply should be considered against this policy. The proposal for a waste management facility falls under a sui generis use class and is clearly therefore an economic development use wider than the B use classes. It is therefore necessary to address the 5 criterion above in coming to a decision on the application, which NCC as decision-makers in this case will need to do.

With respect to need I concur with Waste Management colleagues in considering that NCC remain best placed to do this in their role as waste Authority. However I feel that NSDC must make clear that such need must be robustly established and understood, as too must a sequential approach to site selection across Nottinghamshire.

Turning to criterion 3 and 5 I feel that as an employment generating use it would be difficult to resist the principle of its acceptance in purely land use planning terms. There is no evidence that a use of this nature will prejudice the remainder of the employment delivery in terms of neighbouring uses or the strategic role and function of the wider site. I am equally satisfied that the development will not impact upon nearby Town or District Centres as required by criterion 4.

232. It is therefore concluded that the development plan designation of the site indicates that the siting of the BEC would not accord with NSCS Spatial Policy 2 which seeks to concentrate new development within defined villages and Spatial Policy 3 which seeks to control development in countryside areas.

233. However the District clearly views the site as available industrial land and routinely monitors the take up of employment development on this site as part of their employment land availability register. It is notable that the District Council's committee report acknowledges that the site is located on 'available employment land in a designated employment area'.

234. Clearly a judgement needs to be taken regarding the future designated land use of the BEC development site in the context of this apparent policy inconsistency. In this instance the judgement made within the Newark Committee report insofar that the application site should be viewed as a committed industrial development site on the basis of its inclusion in the annual Employment Land Availability Study is considered appropriate and correct.

235. Whilst PPS10 does not form part of the Statutory Development plan it is an important material consideration in determining the planning application since it provides the clearest statement of Central Government planning policy regarding waste planning. In relation to searching for suitable sites and land for new waste development, paragraph 20 of PPS10 lends support for waste development on industrial land and paragraph 21 gives priority to the use of previously developed land.

236. NPPF Annex 2 incorporates a glossary including a definition of 'previously developed land', this states that previously development land is:

> *'Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that…has been developed for minerals extraction…where provision for restoration has been made through development control procedures…..and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.'*

237. The site of the former Bilsthorpe Colliery was subject to restoration provisions with a restoration scheme for the wider colliery site including the colliery tip and the pit head area being formally approved by Nottinghamshire County Council in September 1996. This approved restoration scheme provided for the creation of a woodland and grassland habitat with wetland habitats on the former colliery tip and these restoration works have been undertaken. With regard to the former pit head area the restoration plan detailed this to be redeveloped for employment purposes, as a result no restoration works were undertaken within this part of the site except for the clearance of the former colliery buildings and structures to facilitate this employment development. Whilst contingency provisions were incorporated within the restoration plan in the event that an industrial re-development of the area was not agreed comprising the treatment of the underlying ground to provide 200-300mm soil depth and seeding to create a low nutrient wildflower grassland area, these works were not undertaken on the basis that the land obtained outline planning permission for redevelopment and that this redevelopment was progressing. Since the former pit-head area has undergone no formal restoration since the colliery closure the planning status of this land is considered to remain as 'previously developed land'.

238. The land-use classification of the site as available employment land and the previously developed land status of the application site are significant in the context of WCS Policy WCS7 on the basis that this policy lends support to gasification facilities being developed on employment and derelict/previously developed land.

239. Newark and Sherwood District Council correctly identify the BEC development as a use that is 'sui generis' and thus not falling within a business or 'B' use class, on this basis they recommend that a sequential test is undertaken across alternative sites within Nottinghamshire to ensure that other sites are not available for development that would not prejudice the availability of employment land in the district to ensure that the requirements of Core Policy 6 are satisfied. However, when the development is judged against the development plan in its entirety including the policies of the WCS (which NSDC officers have not undertaken), the choice of an industrial site for the development is fully justified in the context of WCS Policy WCS4 - General Site Criteria on the basis that the policy supports the use of employment and/or derelict/previously developed land for the development of gasification facilities. A sequential test is therefore not considered necessary.

240. WCS Policy WCS4 promotes a pattern of locating waste facilities in areas where they are most needed through a broadly hierarchical approach of locating the largest capacity facilities in areas of major population and employment. Within smaller centres of population and employment the policy envisages smaller scale treatment facilities would be appropriate. The objective of the policy is to link the scale of waste facilities to the quantity of waste arisings in the area they are sited. The policy is listed below:

> Policy WCS4: Broad locations for waste treatment facilities
>
> The development of small-scale waste treatment facilities will be supported in all locations where these will help to meet local needs and fit in with the local character.
>
> Smaller/medium sized waste treatment facilities will be supported in, or close to, the built up areas of Nottingham, Mansfield/Ashfield, Newark, Retford and Worksop.
>
> Large-scale waste treatment facilities will be supported in, or close to, the built up areas of Nottingham and Mansfield/Ashfield.
>
> Development of facilities within the open countryside will be supported only where such locations are justified by a clear local need, particularly where this would provide enhanced employment opportunities and/or would enable the re-use of existing buildings.
>
> In the Green Belt proposals for built waste management facilities would constitute inappropriate development and will be permitted only where need and other material considerations amount to very special circumstances sufficient to outweigh harm to the Green Belt and any other harm identified.

241. The site selection hierarchy incorporated within WCS Policy WCS4 favours medium/large scale waste treatment facilities like the BEC to be located in the larger built up areas of Nottinghamshire. In smaller settlements such as Bilsthorpe the policy favours small-scale waste treatment facilities where they help to meet local needs and fit in with local character. If the site was considered as an 'open countryside' location (using the proposals map designation of the NSCS) the BEC would be considered contrary to the policy on the basis that it does not serve only local needs. However, an assessment

of the development against a countryside designation is not considered appropriate for the reasons stated earlier.

242. The hierarchy approach to site selection incorporated within Policy WCS4 assumes benefits are derived by locating waste facilities adjacent to the main larger areas of population/waste arisings with the aim of making communities more responsible for their own waste management and reducing transport distances of waste. It is therefore evident that there is policy tension in the context of WCS Policy WCS 4 in terms of siting a large waste treatment facility such as the BEC within a smaller settlement such as Bilsthorpe since the development would serve a far greater need than the local area it is sited within.

243. Notwithstanding this fact, the BEC would serve a wider County/Regional need for waste treatment. If the facility was sited in or close to the main built up areas of Nottingham and Mansfield/Ashfield as encouraged by the policy it would still take waste from other areas therefore significantly diminishing many of the assumed benefits that would be derived by following the spatial approach advocated by the policy.

244. Overall, it is evident that there is tension between the siting of the BEC at Bilsthorpe Business Park and the spatial approach set out within WCS Policy WCS4. Nevertheless, whilst WCS Policy WCS4 seeks to positively steer development to locations based on the size of facility and scale of development, the policy does not go as far to explicitly prohibit the construction of large scale waste treatment facilities in smaller settlements. The development therefore is considered not to be in conflict with WCS Policy WCS4.

Assessment of Potential Environmental Impacts

245. WCS Policy WCS13 supports new or extended waste treatment facilities where it can be demonstrated that there would be no unacceptable impact on any element of environmental quality or the quality of life of those living or working nearby and where this would not result in unacceptable environmental impacts. Environment protection is also provided through Newark and Sherwood Allocations and Development Plan DPD Policy DM5 Policy DM5.

246. Annex E of PPS10 provides more detailed guidance on the potential environmental issues associated with waste development, advising that particular consideration should be given to protection of groundwater, land instability, visual intrusion, nature conservation, historic environment and built heritage, traffic and access, air emissions including dust, odours, vermin and birds, noise and vibration, litter and potential land use conflict. These matters are considered within the assessment of environmental impacts section of this report.

Traffic, Access and Parking

247. Traffic objections are one of several fundamental issues which have been raised by the local community. The concerns primarily relate to the increase of traffic within the Bilsthorpe area, particularly the suitability of Eakring Road and the Deerdale Lane/A614 (Old Rufford Road) junction to accommodate this traffic. Objections have also been received regarding potential

disturbances from large delivery vehicles creating noise and disturbance and affecting residential amenity.

248. The key policy for assessing the traffic impact of the development against is WLP Policy W3.14 which states:

> Policy W3.14: Road Traffic
>
> Planning permission will not be granted for a waste management facility where the vehicle movements likely to be generated cannot be satisfactorily accommodated by the highway network or cause unacceptable disturbance to local communities.

249. The planning application is supported by a Traffic Assessment (TA) document which incorporates a quantified assessment of the traffic generated by the development, reviews the existing road network capacity, safety and general site accessibility and the networks suitability to accommodate the projected traffic levels. The TA considers both construction and operation traffic.

250. The TA identifies that access to and from the application site to the wider highway network would be taken via the existing internal road within Bilsthorpe Business Park, linking to an industrial standard site access road connection to the local road route of Eakring Road and Deerdale Lane which in turn provides access to the A614 (Old Rufford Road) which forms part of the County's strategic highway network. The industrial access route between the business park and the A614 is supported by established road signage, furthermore a weight restriction to the south of the business park is in place. These controls effectively prohibit HGV traffic associated with the development from travelling through the main settlement of Bilsthorpe village.

251. The use of the Deerdale Lane/A614 junction to serve Bilsthorpe Business Park has been approved within a number of recent planning permissions involving development at the business park, and recorded in the following decisions:

- In 2004 NSDC granted outline planning permission for the re-development of the main Bilsthorpe Colliery site for circa 45,000sqm of B2 'General Industrial' and B8 'Storage and Distribution' land uses. Based on the results of the supporting TA analysis at that time, NCC highways identified that the full development of the 2004 outline scheme would require future local highway improvements at the A614/Deerdale Lane junction (anticipated at that time to be a roundabout improvement). The delivery mechanism for such improvement works was secured via a Section 106 legal agreement. A threshold of a minimum of 16,000sqm of B2/B8 development at the site prior to any supporting highway works needing to be considered was identified. Historically this level of development at the Bilsthorpe Business Park site has not been reached.
- Subsequently, planning consent for the NCC Northern Area Highways Depot at Bilsthorpe Business Park was granted in 2010. As part of this planning permission the original terms of the Section 106 legal agreement were altered with new thresholds imposed before triggering

the need for improvements at the A614/Deerdale Lane junction. The revised Section 106 legal agreement identifies that junction improvements would be necessary upon the completion of construction of:

- Completion of UK Coal 'Phase 1' units (understood to be partially completed, with 2,880sqm still to be delivered);
- NCC Northern Area Highways Depot (completed); and
- Additional development totalling 10,000sqm B2/B8 in any combination, save that no more than 6,000sqm shall be B2 land use.

252. These previously agreed lorry numbers to the Bilsthorpe Business Park are a material consideration in the assessment of future traffic conditions on the local network to the application site. The controlling legal agreement effectively permits up to 10,000 sqm of B2 and B8 industrial/warehousing development without a need to improve the A614/Deerdale Lane junction.

253. Notably the proposed development would result in an overall lower level of traffic generation (both in terms of HGV movements and total traffic movements) when compared to that level of development identified within the Section 106 legal agreement as being acceptable to proceed without triggering off-site highway works therefore suggesting the development could be operated without the need for improvements to the A614/Deerdale Lane Junction.

254. WLP Policy W3.15 encourages the use of controls within planning permissions to ensure that delivery traffic associated with waste development follow acceptable routes. Whilst the existing Bilsthorpe traffic regulation order would prohibit delivery HGV's associated with the development from travelling through Bilsthorpe village centre to the south of the site, the applicant has offered to enter into a Section 106 legal agreement to ensure supplementary control of routeing including a restriction of vehicles travelling through Eakring village. If members are minded to support a grant of planning permission it is recommended that lorry routeing should be controlled by legal agreement to ensure that vehicles enter the site from Deerdale Lane and the A614, thus providing this additional level of control over and above the controls currently in place under the traffic regulation order.

255. Traffic surveys have been undertaken to determine existing traffic flows on the highway network. These identify a two-way AM peak flow on the western section of Deerdale Lane (on the approach to the A614) of 280 vehicles an hour, and a 1,670 two-way AM peak flow on the A614. A review of the accident records identifies that there is some history of accidents on the A614 generally caused by poor driver judgements, particularly misjudged overtaking events. None of these accidents were associated with HGVs.

256. The TA identifies that the maximum construction HGV demand is anticipated to take place during the initial earthworks/building construction phases with up to 80-100 two-way HGV movements per day, notably this figure does not exceed operational levels, and therefore impacts from HGVs during construction would be no greater than those identified during the operational phase of the development. Management practices would be put in place to control abnormal load deliveries which would also be regulated by highway legislation.

257. Staff levels during construction would be higher than during operational periods, peaking at 300 during the fit out/installation phase of the building. The core of the vehicle movements associated with these staff movements would be between 08:00 – 18:00. It is anticipated that staff vehicles can adequately be parked on the business park without significant harmful impacts to surrounding land users.

258. It is recognised that the proposed BEC development would represent a major construction project in the local area and that it is essential that any disturbance to neighbours and the local community be minimised during the construction period. To this end it is suggested that a planning condition could be imposed requiring the preparation and implementation of a Construction Traffic Management Plan (CTMP) to ensure that the best available techniques necessary to minimise / mitigate adverse effects would be adopted. It is anticipated that the Construction Traffic Management Plan would encompass:

- Agreed construction operating hours and vehicle delivery hours;
- On-site construction vehicle parking and manoeuvring;
- Off-site construction vehicle routing;
- Staff parking arrangements and details of supporting staff / operative travel management initiatives;
- Management and procedures for access by abnormal loads;
- Local signage strategy;
- Storage of materials;
- Construction noise management; and
- Construction dust management.

259. Anticipated traffic demand estimates for the day to day operation of the proposed BEC development have been calculated using a 'first principles' approach, based upon main site operating assumptions such as anticipated site processing capacity, site operating / delivery hours and anticipated input / export vehicle tonnages. This calculation identifies a total of 112 two way HGV movements a day (in + out), of these 46 would be waste delivery movements. It is anticipated that these HGV movements would be comparatively evenly spread throughout the core weekday day-time period (08:00 – 16:00). It is anticipated that the BEC facility would employ a total of 46 staff members generating around 80 two-way car trip movements a day, the vehicle movements would be concentrated on shift patters with the maximum hourly staff/visitor car trip demand anticipated to take place between 14:00-15:00 when 19 two-way vehicle trips are predicted.

260. The impact of these traffic movements has been assessed within the TA using established environment management guidelines to quantify the significance of impact from vehicles by comparing the increased traffic over existing flows during a 12-hour weekday period. The results for the anticipated 2016 opening year for all vehicles are set out within table 2 below:

	Development Trips	Baseline Flows	% increase

Eakring Road (S of Business Pk)	36	2527	1.4%
Eakring Road (N of Business Pk)	156	2519	6.2%
Deerdale Lane	156	2568	6.1%
A614 South	84	15,631	0.5%
A614 North	72	15,804	0.5%

Table 2: Predicted change in 12hr (07:00 – 19:00) general traffic demand with typical day to day operation of proposed BEC Development.

261. The operation of the BEC development is not predicted to generate an increase in total traffic demand on the A614 of in excess of 1% of baseline flows, this level of traffic change would not have any material traffic related environmental effects. Slightly higher levels of percentage change are predicted for the section of the local road network (Eakring Road and Deerdale Lane) due to the low levels of existing vehicles on these routes, however impacts are still considered slight and thus no significant adverse impacts are anticipated.

262. Using the same methodology the impact of change in HGV movements has also been assessed. The results of the assessment are set out within table 3 below:

	Development Trips	Baseline Flows	% increase
Eakring Road (S of Business Pk)	0	310	0.0%
Eakring Road (N of Business Pk)	112	396	28.3%
Deerdale Lane	112	340	32.9%
A614 South	58	1,348	4.3%
A614 North	54	1,287	4.2%

Table 3: Predicted change in 12hr (07:00 – 19:00) HGV traffic demand with typical day to day operation of proposed BEC Development.

263. A review of the above table demonstrates that predicted percentage changes in HGV levels on all links would be higher than those changes in overall traffic flow. This is mainly as a result of the generally low baseline HGV demand experienced on Eakring Road and Deerdale Lane. The maximum percentage change in HGVs is predicted to take place on Deerdale Lane with an increase of circa 33%. This level is in excess of normal screening thresholds for quantifying significant impacts (30%), however in practice the actual numbers of HGVs on an hourly basis is comparatively low and would result in only limited impacts along a section of road which is predominantly rural, except for four residential properties which front the road. This route is identified as the advisory HGV corridor for the Bilsthorpe Business Park and the levels of predicted HGVs are comparable to those which would have occurred if the

business park was developed for light/general industrial purposes as previously consented planning permission.

264. The most notable impact of using the Eakring Road/Deerdale Lane route arises from the fact that neither of these roads incorporates dedicated footway provision and therefore pedestrians are required to walk within the carriageway or utilise adjacent grass verges. Although pedestrian numbers on these roads are extremely low, the increase in vehicle movements as a result of the development would have noticeable impacts on their enjoyment of the route.

265. The proposed routeing of HGV traffic along Eakring Road and Deerdale Lane to the A614 ensures that HGVs would not travel through the main built up residential areas of Bilsthorpe therefore minimising the level of disturbance to the occupants of residential properties within Bilsthorpe village. Whilst it is acknowledged that there are four residential properties which front Deerdale Lane, these are set back from the road and the noise and vibration assessment undertaken by the developer identifies that impacts to these properties would be minor adverse in magnitude. The Eakring Road and Deerdale Lane access route therefore is considered to represent the best available access route into the site from the strategic highway network.

266. To ensure compliance with WLP Policy W3.14 planning conditions are suggested to control the numbers and hours of HGVs entering the site.

a. With regard to the numbers of HGVs entering the site it is recommended that a maximum limit of 112 movements (in and out) is imposed. To allow a degree of smoothing between busier and quieter periods during the working week it is recommended that the limit on deliveries be imposed on a weekly basis equating to 616 movements (in and out) based on a 5.5 day working week.

b. With regard to the delivery hours, a planning condition is recommended to ensure that the proposed BEC development is only open for the import / export of materials from Monday to Friday (07:00hrs to 19:00hrs) and Saturday (07:00hrs to 13:00hrs) with no HGV deliveries / collections taking place on Sundays or Bank Holidays.

c. It is further suggested that a requirement be imposed to require the operator enter into a travel plan aimed at promoting more sustainable patters of transport by workers at the site.

267. Overall it is concluded that the roads serving the development are of an appropriate standard and their use would not result in any significantly adverse road safety or traffic amenity impacts. Subject to lorry routeing controls regulated by legal agreement and limits on the numbers and hours of delivery movements controlled by planning condition the development satisfies the requirements of WLP Policies W3.14 and W3.15.

268. WCS Policy WCS11 seeks to maximise the use of alternatives to road transport such as rail, water, pipeline or conveyor in order to minimise the impacts of the use of less sustainable forms of transport. This approach is generally consistent with NSCS Spatial Policy 7. Since the BEC is dependent on road transport there is potential tension in terms of its compliance with these policies.

269. As part of the Regulation 22 submission the applicant was requested to provide further justification for their choice of Bilsthorpe for the development of the BEC in the context that the site does not offer any real potential for non-road haulage of waste. In response the applicant states that the Bilsthorpe site was identified from a long list of 483 possible sites which was short listed to eight and subsequently two. Neither of these final shortlisted sites offers potential for transport other than road haulage. The applicant reasonably states that in practice it is unlikely that waste delivery to any waste treatment serving a Nottinghamshire based catchment area could be effectively served by alternative transport options to road haulage, that no waste transfer stations within the County are currently served or have potential to be served by rail and it is doubtful that rail or water transport could be developed as an economically viable transport solution for short distance local waste transport involving multiple waste collection points, as is the case at Bilsthorpe. The applicant's conclusion therefore that road transport is likely in the immediate to medium term at least to represent the only efficient and practical option to catering for local waste demand is considered a reasonable conclusion.

270. Whilst this conclusion may create some tension with the overall objective of WCS Policy WCS11 and NSCS Spatial Policy 7, the fact that the BEC does not offer alternatives to road transport does not make the development contrary to these policies. It is notable that the Bilsthorpe site is centrally located within the County and therefore has potential to minimise vehicle mileage for transport of waste arisings in the County catchment.

Landscape Assessment

271. The NPPF requires the planning system to protect and enhance valued landscapes, providing the highest status of protection to designated landscapes including National Parks, the Broads and Areas of Outstanding Natural Beauty and seeking to avoid major development within these designated landscapes. The BEC development is not located within a nationally designated landscape area.

272. The landscape of Nottinghamshire has been assessed and categorised as part of a Landscape Character Assessment Process carried out by Nottinghamshire County Council. The assessment process identifies landscape character zones within the county, setting out priorities for each landscape zone by their condition and sensitivity to change. The N&SCS Core Policy 13: Landscape Character makes reference to these landscape character areas, requiring development proposals to positively address the implications of the policy zone and contribute to meeting the landscape conservation and enhancement aims for the area within which it is sited.

273. The site of the proposed BEC development is located in the Mid Nottinghamshire Farmlands landscape character area and in landscape type 3: Estate Farmlands with Plantations. The southern part of the site crosses the boundary with landscape type 4: Village Farmlands. The key characteristics of both landscape zones references lakes, country houses and unenclosed heaths, these characteristics have little relation to the despoiled landscape appearance of the former Bilsthorpe Colliery and therefore do not provide a realistic reference point for undertaken detailed consideration of the BEC.

274. The landscape types are further sub-divided into a series of landscape policy zones, the proposed development would be located within MN PZ24: Rufford Park Estate Farmlands. The key landscape characteristics of this policy zone are gently undulating rounded topography, connecting belts of mixed woodland and plantations, highly intensive arable land, numerous agricultural buildings and industrial units, sewage works and electricity sub-station. A specific landscape action from the area is to '*create new industry economy within the area, such as creation of a wind farm*'.

275. The applicant's landscape assessment considers the characteristics of the development against the landscape character appraisal and its policy zones. The appraisal identifies that the BEC development would introduce two large scale industrial buildings and chimneys into a landscape where such features are presently absent, except for the five wind turbines nearby which are 100m high and exhibit an influence on the surrounding landscape.

276. The BEC development would result in a significant change in landscape character in the local area of the colliery pit head area, changing the landscape from one of largely vacant undeveloped land to one where large scale built development is the predominant feature. This change is considered locally significant, but it does accord with the landscape actions identified within the landscape policy zone which is to create new industrial economy in the area. The applicants therefore view the nature of change at a local level as beneficial.

277. Within the wider landscape beyond the Bilsthorpe Business Park and restored colliery there would be some adverse impacts to adjacent neighbouring landscape zones which are predominant rural/agricultural in character. The presence of the BEC as a new industrial feature in the visual context of these landscape types would have an effect the landscape character, however the development would not affect the underlying character of these adjoining landscape zones and therefore the change is not considered to be significant in magnitude. Significant cumulative landscape impacts due to the proximity of wind turbines and a future solar farm are also not anticipated.

278. It is therefore concluded that the development satisfies the requirements of NSDC Core Policy 13: Landscape Character insofar that the development proposals positively address the implications of the Policy Zone in which the proposal lies in and contributes to the landscape policy aims which seek to create new industrial economy, amongst other actions, although in the wider landscape setting there would be some negative impacts to the rural character of neighbouring landscape zones.

Visual Assessment

279. The overall objective of WLP Policy W3.3: Visual Impact is to minimise the visual effects of new waste developments. The policy seeks to achieve this objective through careful site design, particularly by consideration of the effect of the development on the skyline. The policy identifies a number of actions to reduce visual impacts from waste developments, these measures include the appropriate siting of facilities to avoid impacts to adjacent land, the grouping together of buildings on waste sites, keeping buildings as low as possible and the use of appropriate cladding and colours to minimise visual impacts.

280. WLP Policy W3.4 seeks to ensure that waste developments are appropriately screened and landscaped so as to ensure visual impacts are minimised. The development site incorporates limited landscaping comprising a new hedgerow and trees along the site boundary and the provision of grassland within the site including the perimeters of the attenuation pond. This landscaping would assist with softening the visual appearance of the site when viewed from the immediately adjacent industrial land. Visual impacts from more distant locations would be partly screened by the existing structural landscaping which exists around the former colliery pit head and comprises a landscaped bund to the west boundary facing Eakring Road, the topography of the former colliery tip being significantly higher in level also assists with reducing visual impacts from the north and east.

281. The applicant has sought to address the objectives of WLP Policy W3.3 as far as practicable by selecting a location within a consented industrial area and benefitting from a location comparatively remote from residential property with intervening screening. A number of alternative site layouts and building designs have been considered by the developer, the applicant reporting that the rectangular shape of the application site and process flows of the operation have dictated a linear design with the effluent treatment tanks sited between the buildings to benefit from screening. The height and mass of the building has been informed by the size of the processing plant it accommodates. A multi–height flat roofed design has been utilised to avoid the extra bulk/height that a curved roof design would entail. Earlier design concepts of the development envisaged roof heights of up to 42m, however these have been reduced to 31.8m as part of the final design. The buildings would be grouped to provide enclosure for much of the plant and machinery and a silver/grey clad construction has been utilised within the building to reduce the developments visual prominence. The applicant has therefore sought to ensure the objectives of WLP Policy W3.3 are incorporated within the design although the size/mass of the buildings means that visual impacts from the development are unavoidable.

282. The height of the main building at 31.8m is significantly taller than the roof heights of buildings on the adjoining sites which are circa 13m in height. The stacks would be even taller at 60m. Structures of this size invariably have a visual impact, the magnitude of this impact has been assessed within the applicants' visual appraisal.

283. The visual assessment is informed by a study of the zone of theoretical visibility (by topography) to determine the extent that the development is potentially visible. This identifies that the potential most prominent views of the development would be from the west, as a result of local topography, screening provided by the colliery spoil tips to the east assist in screening visibility in this direction. This study has informed the identification of eleven viewpoints surrounding the site where detailed visual assessments have been undertaken. The results of the visual impact appraisal conclude that the visual effects of the development are reduced by the existing landform and vegetation on the periphery of the former colliery site and also in the wider landscape. Nevertheless the development would be visible from surrounding land, particularly when viewed from the west towards the A614 in the direction of the Limes Café. These visual impacts are considered to be harmful although the magnitude of impact is not considered to be significant.

284. The landscape and visual appraisal has been reviewed through the planning consultation process by the County Landscape Officer. This has identified some disagreement in the detailed interpretation of visual impacts at individual locations. Such differences in assessing the significance of visual impact are not uncommon and are normally attributable to individual judgements of impact magnitude. In this case the minor differences in the judgement of magnitudes of impact do not affect the overall reliability of the visual assessment process which demonstrates that there would be a visual impact as a result of the development, although the magnitude of this impact is not considered significant.

285. The landscape and visual impacts of the development are considered in greater detail in the overall assessment of the planning application. As part of this overall assessment, government guidance contained within the Overarching National Policy Statement for Energy (EN-1) is relevant, this advises that '*all proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The Infrastructure Planning Commission will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project.*'

Air Quality, Pollution and Health Issues

286. Concerns relating to deterioration in air quality, pollution and associated health impacts are one of the main areas of concern raised through the planning consultation responses from the local community.

287. In considering these concerns it is important to have regard to the purpose of the waste planning system which is to assess whether proposals accord with the land-use and environmental policies set out in the relevant Development Plan and to address other material planning considerations. Separately, and independently, the facility is also subject to Pollution Prevention and Control legislation (PPC) which is administered by the appropriate regulatory Authority, in this instance the Environment Agency. This position is most clearly stated within PPS10 paragraphs 30 & 31 which states:

> '30. Modern, appropriately located, well-run and well-regulated, waste management facilities operated in line with current pollution control techniques and standards should pose little risk to human health. The detailed consideration of a waste management process and the implications, if any, for human health is the responsibility of the pollution control authorities. However, planning operates in the public interest to ensure that the location of proposed development is acceptable and health can be material to such decisions.'
>
> '31. Where concerns about health are raised, waste planning authorities should avoid carrying out their own detailed assessment of epidemiological and other health studies. Rather, they should ensure, through drawing from Government advice and research and consultation with the relevant health authorities and agencies, that they have advice on the implications for health, if any, and when determining planning applications consider the locational implications of such advice.'

288. The design and operation of the BEC facility is governed by the Waste Incineration Directive (WID). WID requires adherence to specific emission limits for a range of pollutants, and assessment criteria are set out in national Air Quality Standards which set the objectives to be achieved.

289. The regulatory system for ensuring compliance with the WID is the Environment Permitting system. The operator would be required to apply for and obtain an Environmental Permit from the Environment Agency prior to commissioning the plant. The purpose of the Environmental Permit is to ensure that the plant is designed and can operate without damage to the environment or harm to human health resulting from pollution such as airborne particles and direct run-off from the facility. In reaching their decision to issue an Environmental Permit for the operation of the CHP facility the EA use a precautionary approach to ensure that:

- the applicant has demonstrated that the proposed facility meets the requirements of the Environmental Permitting Regulations and uses Best Available Techniques in its design and operation;
- the criteria set out in other relevant directives on Air Quality, Urban Waste Water and Dangerous Substances have been met;
- the standards proposed for the design, construction and operation of the facility meet or exceed the Environment Agency's guidance, national legislation and relevant directives;
- the comments received from the public and statutory consultees have been taken into account;
- as far as practicable, the energy generated by the CHP plant will be recovered for use;
- the amount of residues and their harmfulness will be minimised and recycled where appropriate; and
- the proposed measurement techniques for emissions are in line with those specified in national legislation and relevant directives.

290. As well as satisfying itself that plant design and operation minimises or eliminates key pollutants from the incineration process, the Environment Agency must also ensure that emissions from the proposed stack meet set standards. In order to do this, a range of data including the chemical content of the emissions, local topography and climate are applied to a dispersion model to ensure that emissions disperse in all conditions taking account of local environmental conditions without any potential threat to health. The possible effects on sensitive vegetation and ecosystems and on the safety of surrounding farmland have also been examined.

291. It is acknowledged that the potential health impact of the proposal is a material planning consideration. The Government's position is clear that planning authorities should call on the advice of the relevant health authorities, agencies and pollution control bodies and work on the assumption that the relevant pollution control regime will be properly applied and enforced.

292. This approach would be consistent with the position set out in the National Policy Statement for Energy EN-1 that states that generally, those aspects of energy infrastructure which are most likely to have a significantly detrimental

impact on health are subject to separate regulation (for example for air pollution) which will constitute effective mitigation, so that it is unlikely that health concerns will either constitute a reason to refuse permission or require specific mitigation.

293. The public's concerns or perceptions in relation to health and air quality are also capable of being material considerations. The significant number of objections received from the community concerning health and air quality demonstrates that these concerns are genuine. However, in order for them to carry significant weight within the planning decision there would need to be reliable evidence to suggest that perceptions of risk are objectively justified, i.e. that the operation of the plant actually does pose an actual risk. This approach is evidenced by planning case law (in Gateshead MBC v Secretary of State for the Environment) which indicates that if public concern could not be objectively justified then it could not constitute a material grounds for a refusal of planning permission.

294. The applicants ES incorporates an assessment of potential health impacts of the development. This assessment identifies that the operation of the proposed BEC development would give rise to a number of substances that would be emitted to the atmosphere. The potential environmental effects of these emissions have been assessed using detailed dispersion modelling using a 'worst case' scenario. The results of the modelling have indicated that the proposed stack would provide appropriate levels of dispersion to the atmosphere and that the operation of the proposed BEC development is not predicted to have a significant impact on local air quality and health.

295. The assessment of operational phase process emissions has demonstrated that providing measures required by legislation are adhered to (i.e. compliance with the Environmental Permit) the significance of any impacts is considered to be 'negligible'. Since the BEC facility would be operated under an Environmental Permit, the planning authority can be satisfied in this instance that its operation would be appropriately regulated to ensure that it meets air quality, pollution and health controls. The monitoring intervals of emissions is a pollution control issue and not a material planning consideration.

296. Newark and Sherwood's Environmental Health Officer has undertaken a review of the air quality effects and effects on human exposure wherein it is noted that the air quality assessment has been undertaken on a 'worst-case' scenario with the proposed facility operating for the whole year releasing emissions at the emission limit at all times. The Environment Health Officer raises no objections to the development, drawing the following conclusions:

- The operation of the proposed exhaust stacks would provide more than adequate dispersion to the atmosphere and the operation of the proposed facility is predicted to have a negligible impact on local air quality.

- The health assessment shows that the effect of the accumulation of pollutants released from the proposed development within the food chain would be negligible.

297. Furthermore no objection has been received from the Environment Agency, Public Health England and Public Health Nottinghamshire County on air quality or health grounds.

298. Taking into account the advice in the NPPF that planning authorities should assume that the pollution control regime will operate effectively, as well as the advice in PPS10, a refusal of planning permission on grounds of impact on air quality or health, or the perception of risk relating to such impacts, could not be substantiated.

299. It is therefore concluded that, in accordance with PPS10 advice, the waste planning authority has taken appropriate technical advice to satisfy itself that the operation of the facility would not result in any significant air quality, pollution or health impacts, and there would be no significant impact to crop production on surrounding agricultural land.

Safety and Reliability

300. A significant number of local representations have been raised regarding potential safety and reliability issues connected to the operation of the plant, identifying concerns that the use of gasification to manage mixed waste streams is an experimental process that has not been satisfactorily tested, Objectors have identified gasification processes within the UK and abroad which have incurred operational shutdowns due to process malfunction to support their concerns.

301. As part of the Regulation 22 process the applicant has been given an opportunity to address these concerns. The applicant's response confirms that currently no other waste processing plants are operational which utilise the same configuration of plant and technology as the BEC in the UK and Europe. However, a similar plant is currently being constructed in Teeside and is due to be commissioned in 2014 with a second plant due to be commissioned in 2016. The Teeside plant has an Environmental Permit. Furthermore the applicant identifies that the Westinghouse plasma gasification technology that is proposed to be utilised within the BEC is being used successfully and reliably in a number of plants around the world.

302. Gasification in its own right is not a new technology, notably it was extensively used for the production of 'town gas' from coal prior to the switch to natural gas. However, gasification has not extensively been used to recover gas from mixed waste streams.

303. The use of gasification techniques to manage waste is recognised within the waste hierarchy as a recovery process. Although the government express support for the development of additional recovery facilities to satisfy shortfalls in capacity, they do not express a preference between the various energy from waste options available (except for the use of AD to manage segregated food wastes). The Government acknowledges that new or innovative waste management technologies are coming forward and decision makers should not assume that established technologies are the only possible solution. Both the WMPfE and Energy from Waste A guide to the debate identify that gasification has a role to play within UK waste management as a recovery process. In particular the guide document identifies that gasification plants have potential to:

- Operate economically over a wider range of scales and are therefore potentially more flexible,
- Have potential to generate much greater efficiencies through a range of outputs,
- Are much newer technologies for waste with very little currently operating at a commercial scale in the UK, although there are currently several larger scale plants in the planning pipeline and under construction.

304. PPS10 paragraph 18 specifically states that waste planning authorities should '*take care to avoid stifling innovation (of new waste technologies) in line with the waste hierarchy'.* Furthermore it is not the role of the planning system to stifle competition (in this case through the introduction of emerging waste management technologies), a fact identified in the key objectives of the PPS10.

305. The purpose of the planning system is to control land use issues and not to control operational safety which is function of the Environmental Permit issued and regulated by the Environment Agency. The permit would control the waste processes undertaken within the facility to ensure safety and protection of the environment and therefore safeguarding the reliable operation of the plant within agreed limits. It is therefore concluded that there is not any planning merit in the argument that planning permission should be refused on these grounds. Notably the development plan within WCS Policy WCS9 provides support for new and emerging waste technologies, especially where this contributes towards objectives to promote a modern, efficient and sustainable waste industry. The Environment Agency have not raised any objections to the proposed gasification process.

306. Planning permission has been sought for the BEC on the basis that the facility would manage non-hazardous waste streams. A requirement to manage non-hazardous waste would also be imposed under the waste permit issued by the Environment Agency. Nevertheless concerns have been raised by local residents as well as RAGE and UKWIN that non-hazardous waste delivered to the site has potential to incorporate fractions of waste that would be classified as 'hazardous'. Residents are concerned that the management of these wastes within the BEC could create harmful emissions, the argument being if you do not know exactly what goes into a process how do you know what the emissions would be released. Whilst residents are correct in their observations that it cannot be guaranteed that the incoming non-hazardous waste stream would not incorporate small amounts of materials which are classed as hazardous waste by definition (such as materials like used batteries or small electrical equipment etc), the quantity of these materials would be very small and their inclusion within the incoming waste steams would not affect the overall classification of the incoming waste as non-hazardous.

307. Safety of the BEC is regulated through its inputs and also its emissions, these emissions are continual monitoring under the environment permit to ensure that safe limits are not exceeded and therefore ensure the safe operation of the plant. Thus even if small quantities of waste not fitting a non-hazardous classification was in-overtly processed in the BEC, the facility would still be required to ensure compliance with permit controls regarding emissions.

308. Specific advice has been taken from the Environment Agency on this matter who confirm that

> *'The Waste Incineration Directive (WID) imposed common emission limits on the incineration of hazardous and non-hazardous waste. It explained this by saying "The distinction between hazardous and non-hazardous waste is based principally on the properties of waste prior to incineration or co-incineration but not on differences in emissions. The same emission limit values should apply to the incineration or co-incineration of hazardous and non-hazardous waste. Emissions are controlled by abatement techniques which are capable of handling any variations in pollutant levels.'*

309. These emission limits are imposed on all energy recovery facilities throughout the UK and these facilities are likely to face similar issues regarding the incorporation of small fractions of hazardous waste within an overall non-hazardous waste stream. Notwithstanding this fact these facilities routinely comply with the emission limits imposed on their waste permits. There is no evidence to suggest this would not be the case with the BEC thus ensuring the safe operation of the plant.

Noise & Vibration

310. WLP Policy W3.9 seeks to control noise emissions arising from waste management facilities. The policy encourages the siting of facilities in locations which are less sensitive to noise emissions, imposing limits and controls on operating practices to minimise noise emissions and setting maximum noise levels at sensitive locations to ensure noise emissions from operations do not become intrusive.

311. To assist with the assessment of the significance of construction and operational noise emissions the planning application is supported by a noise assessment report. This report incorporates surveys of the existing noise environment, an assessment of the noise generated during the construction and the operation of the BEC including a calculation of the magnitude of change in noise at four locations surrounding the development comprising:

a. The nearest residential receptor on Eakring Road, 420m to west of proposed development.
b. Land allocated for residential development 260m to south west of proposed development. It should be noted that whilst there is an allocation, it is not currently the subject of an application, nor does it benefit from planning permission.
c. A residential receptor 640m to north west ~ 180m from Eakring Road.
d. Western edge of Eakring Village ~ 1.8km to northeast of proposed development.

312. During construction operations the assessment identifies that a *slight* to *moderate* adverse noise impact is predicted with the highest impact occurring at the permitted development southwest of the proposed development site. When incorporating noise mitigation measures in accordance with BS5228:2009, the impact is predicted to be reduced to a *negligible* to *minor* adverse effect at the closest receptor. Such impacts would be temporary in nature and only occur for short-term periods. An assessment of traffic noise

levels during the construction phase of the development predicts a minor adverse effect with a maximum noise increase of +1.3dB at sensitive receptors. In summary, due to the large separation distances and short term duration, the construction phase is not expected to give rise to unacceptable noise levels at sensitive receptors. The assessment of vibration from construction operations demonstrates that levels are unlikely to give rise to an *'adverse comment'* from a nuisance aspect. Construction noise would be limited through the use of good management practices.

313. The BEC design incorporates a number of design controls to limit the breakout of noise including the use of insulated cladding, minimising openings in the buildings and the use of fast acting door closures, use of silencers, avoidance of speed humps on roads and limits on vehicle speeds/reversing movements.

314. Noise from the operational activities has been assessed for the daytime/evening periods when both the MRF and Gasification processes would be in operation, and separately for the night time period when the MRF building would not be in operation. An assessment has also been made of noise from deliveries and the use of the flare.

    a. The daytime/evening assessment predicts a *slight adverse* impact, with no increase in noise levels predicted at existing receptors and a maximum of a 1dB increase predicted at the land allocated for future development. When assessed in accordance with BS4142, the greatest impact occurs at the nearest receptor just off Eakring Road to the North West of the development (Position a). Here the Rating Level is L90 +4dB (Worst Case) and is considered to be of marginal significance and complies with NCC usual noise limits.

    b. The night time assessment which does not include the MRF operations predicts that the noise impact will be *slight adverse*, with only slight increases of up to 0.2dB predicted at existing receptors (Position c) and a maximum of +0.5dB at the land allocated for development (Position b). When assessed in accordance with BS4142, the greatest impact is expected to occur at Position b with a Rating Level of L90 + 3dB (Worst Case). The highest impact at existing receptors occurred at Position c with a Rating Level of L90 + 1dB (Worst Case), however the actual level at this location is only predicted to be 31dB and is therefore within acceptable NCC noise limits.

    c. The flare unit would operate occasionally during periods of emergency shutdown, system start-up / shut-down or failure in the gas engines. The predicted noise level at receptors is between 43-57dB(A) L_{Aeq}, which is said to be lower than or similar to existing daytime noise levels. Based on emergency / occasional use the applicant does not consider this noise source would be significant.

    d. With regard to operational traffic noise the maximum increase in road traffic noise is expected to be ~ 1.1dB on Eakring Road (north of access). As such the increase in noise level is classified as *minor adverse* in the short term and *negligible* in the long term according to standards set out within the Design Manual for Roads and Bridges.

315. HGV vibration levels are expected to be below or similar to the threshold of perceptibility (i.e<0.3mm/sec) and therefore any additional vehicle movements from site is unlikely to be significant and the impact magnitude *negligible.* In

terms of vibration from operational activities, the vibration survey identifies that impacts would have a *negligible adverse* impact and therefore would be imperceptible at the nearest receptors.

316. Construction noise and vibration impacts have not been identified for the nearest receptor, the NCC highways depot. However, since this land is used for industrial activities it is not considered to be particularly sensitive to noise and vibration emissions. Potential for some construction noise exists, but a planning condition limiting the noise level to an upper limit of 65dB $L_{Aeq, 1hour}$ external of any officers would provide acceptable control in the context of BS5288-1:2009 *Code of Practice for noise and vibration control on Construction and Open Sites – Part 1:Noise,* Annex E. Vibration issues could be controlled through the use of a construction environmental management plan.

317. Operational noise impacts at the highways depot have been assessed, predicted internal noise levels are identified to remain within acceptable limits for an office environment even with the windows open. To ensure noise levels can be controlled in the future to within acceptable limits, a planning condition will be required.

318. WLP Policy W3.9 encourages the use of planning conditions to ensure that noise impacts are controlled to an acceptable level. With regard to construction activities the applicant identifies that a construction noise management plan would be prepared, the precise detail of which could be controlled by planning condition. This plan would incorporate specific actions to minimise the disturbance of any construction activities which exceed a threshold of 65dB Laeq at any residential property. Controls are suggested to limit the hours of construction including specific controls over the noisiest construction activities.

319. In terms of operational activities it is recommended that planning conditions be imposed to:

- Controlling the hours of operation including deliveries,
- The preparation of a construction management plan;
- The incorporation of the measures set out within the planning application into the final design to minimise noise emissions;
- Use of appropriate silencing and reversing alarms on mobile plant and restricting the use of mobile plant external of the building at night-time;
- Ensuring doors within the building are closed at night-time and restricting their opening during the day;
- Controlling and monitoring noise from any vents or valves and ensuring the flare is only operated as an emergency measure;
- Limiting operational noise emissions to 55dB $L_{Aeq, 1hour}$, and 65dB $L_{Aeq, 1 hour}$ for construction activities when measured at the Highways Depot;
- Limiting the maximum waste inputs into the site;
- Limiting lorry numbers and controlling lorry routing.

320. Subject to the imposition of the above controls, justified complaints regarding noise emissions associated with the construction and operation of the

development are not anticipated and therefore the development would comply with the requirements of WLP Policy W3.9.

Ecology

321. Section 11 of the NPPF sets out Government's planning policy in relation to the conservation and enhancement of biodiversity. Paragraph 118 of the NPPF seeks to avoid significant ecological harm through locating developments to an alternative site of lower ecological value. Where this is not possible, the NPPF requires that impacts should be adequately mitigated, or as a last result compensated, and that if this is not possible, then planning permission should be refused. The approach is consistent with N&SCS Core Policy 12: Biodiversity and Green Infrastructure and WLP Policies W3.22 & W3.23: Biodiversity.

322. The application site forms part a larger, locally designated Local Wildlife Site (LWS) site known as Bilsthorpe Colliery LWS. Several other LWSs occur within the vicinity of the development site. The nearest Site of Special Scientific Interest (SSSI), Redgate Woods and Mansey Common, is approximately 2.3km to the south-east, whilst Nottinghamshire's only Special Area of Conservation (SAC), Birklands and Bilhaugh, is approximately 6.25km to the north-north-west. In addition, the site lies within the 5km buffer zone around the 'prospective' Sherwood Special Protection Area (SPA), and the nearest part of the 'Indicative Core Area' (habitat which may form any future SPA designation) lies approximately 1.97km to the west.

323. The planning application has been supported by a range of ecological surveys mostly carried out during 2013, augmented with results from surveys undertaken in connection with nearby development and supplemented with additional data regarding nightjars and woodlarks, assessments of nitrogen deposition to surrounding sensitive habitats and modifications to the wader mitigation plan supplied under the Regulation 22 submission. This data provides an up-to-date assessment of the ecological value of the site and has been used to make an assessment of the significance of impact resulting from the development along with the need for any mitigation of impact.

324. Although designated as a LWS, at the time of the habitat survey the development site was noted to comprise of generally bare, un-vegetated colliery spoil and earth, subsequently there has been some natural regeneration of the site, however it is considered to be of limited ecological value as a habitat. The site is used as a breeding habitat for wading birds (little ringed plover and oystercatcher (one pair each)) and foraging habitat for one further wading bird species (lapwing). The site is also designated for its interest for dingy skipper butterflies. There was no evidence of any other protected species within the development site.

325. The development of the BEC would result in the permanent loss of 4.35ha of land from the Bilsthorpe Colliery LWS (accounting for 18.8% of the larger LWS), directly displacing a pair each of little ringed plover and oystercatcher, as well as potentially cumulatively increasing impacts which would occur from the development of the nearby solar farm. The planning application incorporates mitigation measures for these adverse impacts which include landscape planting to create replacement habitat within the developed site (to include new habitat for dingy skipper butterflies) and the provision of a wader

mitigation plan which comprises of the provision of new habitat for breeding wading birds on land immediately north of the development upon the nearby Bilsthorpe Colliery tip. Supplementary details of the compensatory habitat have been provided in response to the Regulation 22 response to improve the desirability of the compensatory habitat for wading birds displaced by the development. The provision of this replacement habitat requires land outside the boundaries of the current planning application site and therefore it would be necessary to impose a Section 106 legal agreement to ensure the provision and long term management of this habitat.

326. Planning controls are recommended to ensure that initial groundworks and any vegetation clearance works are undertaken outside the bird nesting season.

327. The gasification process utilised within the BEC and associated increase in transport would result in the release of chemicals to the atmosphere including oxides of nitrogen and ammonia . The airborne deposition of these chemicals to the land has potential to impact soil chemistry by acting as fertiliser and increasing the growth of vegetation (particularly invasive plants) with detrimental impacts to fauna and flora if significantly large enough quantities are deposited on ecologically sensitive sites. The Environmental Statement and Reg. 22 submissions incorporate a detailed assessment of airborne deposition rates to surrounding habitats including the Birklands and Bilhaugh Special Area of Conservation (SAC), various SSSIs and LWSs. These assessments demonstrate that the deposition levels from the BEC development would not have a significant adverse effect on surrounding sensitive habitats including ancient woodlands which are protected through WLP Policy W3.19 or areas of heathland which are protected through WLP Policy W3.20.

328. Natural England has issued a guidance note to assist planning authorities deal with the possible future classification of a Sherwood Forest SPA when making planning decisions. The guidance requires planning authorities to adopt a 'risk based approach', effectively requiring them to assume that there is an approved SPA in the area and to consider impacts against the requirements statutorily set out within the habitats regulations. As part of the ES the applicant has provided the required level of information to enable the Council to undertake this assessment and conclude that the BEC development would not result in significant impacts to any future Sherwood Forest SPA designation.

329. Planning conditions are suggested to ensure that the design of the site drainage avoids pollution of local watercourses, appropriate controls are imposed so that adverse impacts to bats from lighting in the surrounding area are avoided and the use of appropriate landscaping within the site to ensure the use of native plants species and that habitat for dingy skipper butterflies is provided.

330. Chapter 16 of the ES gives consideration to energy export connections (although these are not explicitly sought planning permission within this application). The connections are anticipated to be by underground cables and pipework buried within the existing highway or colliery access tracks to the Bilsthorpe electrical sub-station and the mains drainage system. These connections would result in minimal/negligible loss of habitat and therefore

significant ecological impacts would not occur. Heat export is also considered, again noting that this would be facilitated through a separate planning application or permitted development rights. Potential networks have been indicated in the planning application, the installation of these networks could affect ecological features. However, since the connections are not currently sought planning permission there is no imperative on the planning authority to assess the magnitude of potential ecological impact at this stage.

331. The planning consultation process has identified a significant number of objections based on potential negative ecological impacts as a result of the BEC development. Notably Nottinghamshire Wildlife Trust has raised detailed objections to the planning application concerning both direct and indirect effects from the development and questioning the adequacy of the compensatory habitat that is proposed. Technical advice has been taken from the Council's Ecological Officer regarding the matters that have been raised and this has resulted in the developer supplying further survey work, altering planting proposals and making enhancements to the wader mitigation plan in response to formal requests made by the Council under the Regulation 22 process. Whilst Nottinghamshire Wildlife Trust and the community maintain their ecological concerns, the professional advice from NCC's Ecological Officer is that the ecological effect of the development has been appropriately investigated, mitigated and compensated and significant adverse ecological impacts would not result from the development of the BEC. In particular the wader mitigation plan that would be secured through the Section 106 legal agreement provides satisfactory compensatory habitat for affected species and would be provided in addition to anything that has previously been secured through the planning process thus ensuring there is not potential double-counting of mitigation for waders relating to other consented developments within the wider colliery site.

332. Overall it is concluded that policy tests relating to ecology within the NPPF, N&SCS Core Policy 12: Biodiversity and Green Infrastructure and WLP Policies W3.22 &W3.23: Biodiversity have been satisfied and subject to the imposition of appropriate mitigation measures, significant adverse ecological impacts would not result from the development.

Public Rights of Way

333. WLP Policy W3.26 seeks to ensure that the existing network of public rights of way are maintained and not adversely affected by waste development proposals. Since the proposed development would not affect any public right of way, the requirements of WLP Policy W3.26 are satisfied.

Odour

334. The residual waste processed by the BEC has potential to generate odour releases and affect the amenity of surrounding land and property if effective controls are not put in place.

335. Odour controls are primarily controlled through the Environmental Permit issued by the Environment Agency. As part of obtaining an Environmental Permit the applicant is required to prepare an Odour Management Plan, this plan would regulate the process to ensure 'best available technique' is used thereby avoiding/minimising odour release. Monitoring of odour releases

throughout the operational life of the plant is also likely to be controlled through the PPC permit.

336. Notwithstanding the above, WLP Policy W3.7 identifies that odour emissions have potential to affect amenity, particularly where facilities are sited in close proximity to sensitive receptors or odour management arrangements are not satisfactory. Whilst WLP Policy W3.7 primarily concerns itself with odour impacts from landfill sites, the policy is relevant to all waste management facilities and seeks to ensure the appropriate siting of waste management facilities and impose controls over operating practices through the imposition of planning conditions where necessary.

337. With regard to the siting of the facility, the closest residential receptor is located circa 400m to the west of the site up wind of the prevailing wind direction. The closest commercial/industrial properties are located within the business park adjacent to the site. With regard to site operations, the main potential source of odour emissions from the process would arise within the tipping hall where waste is unloaded from collection vehicles and stored prior to treatment within the incinerator.

338. All operations associated with the proposed development would be conducted within enclosed buildings equipped with fast acting roller shutter doors. The gasification facility would be continuously operated whilst delivery of material would be restricted to the hours of 07:00 to 19:00 Monday to Friday and 07:00 to 13:00 Saturday. As such some storage of waste on site would be required to ensure continuous operation of the proposed development. Measures would be implemented to ensure storage of fuel is limited thereby minimising the potential for odours to develop.

339. It is proposed to draw air from the processing hall to hold the building under a slight negative pressure. No air is fed into the gasifier and as such, the air from the waste hall and MRF would have to be collected before being discharged to atmosphere via a carbon filter, a technique successfully used to control odours within waste management facilities elsewhere in this country. A planning condition is suggested to ensure that negative air pressure is maintained within this building and all emissions to the atmosphere are discharged through an air filtration system thereby ensuring odour emissions from the facility are satisfactorily controlled.

340. The Environmental Permit would include conditions which mean that fugitive emissions of odour would need to be contained within the permitted site boundary.

341. Based on the distance to the nearest sensitive receptor and the mechanisms to be in place to control odorous releases, the Environment Statement concludes that impacts from the operational phase odour emissions would be negligible and therefore ensure compliance with WLP Policy W3.7.

342. Concerns have been raised that delivering vehicles bringing waste to the site for processing would be odorous. Whilst it is noted that the waste delivery vehicles are already on the public highway, the BEC would result in a greater concentration of the vehicles in the Bilsthorpe area. Although risks of odour releases from delivery vehicles cannot be ruled out, any releases would be transient in nature and pass comparatively quickly. Lorry routeing would be

controlled as part of any planning permission ensuring that delivery vehicles do not pass through Bilsthorpe village centre. Whilst there are a small number of properties along the proposed delivery route on Deerdale Lane, these are set back from the road sufficiently to allow any odour release to disperse. Significant odour nuisance from deliver vehicles is therefore not anticipated.

Litter and Dust

343. WLP Policies W3.8 & W3.10 seek to control litter and dust generation on waste management facilities by the imposition of planning conditions and controls over operating practices. To ensure compliance with these policies waste imported to the site would be handled within the tipping hall and transported within enclosed/sheeted vehicles and therefore the potential for litter around the site is small.

344. There is the potential for dust to arise around the site from the movement of lorries particularly during the site construction works although the significance of such impacts is considered to be low, primarily because of the remote location of the site and metalled construction of the existing haul road.

345. Nevertheless during any construction works it would be necessary to secure controls through planning conditions and these appropriately could include the provision of a site wheel wash to ensure lorries do not carry dust or mud onto the local roads and the use of water bowsers when necessary to dampen down potential sources of dust. Subject to these controls the development would not give rise to significant dust or litter concerns and therefore ensure compliance with WLP Policies W3.8 & W3.10.

Geology, Ground Contamination and Ground Stability

346. The NPPF strongly supports the re-use of land that has been previously developed and of low environmental value. It identifies that when re-development proposals come forward for previously developed land opportunities should be taken to remediate and mitigate the despoiled, degraded, derelict condition of the land, address any contamination issues and ensure the land is suitably stable. Specifically paragraph 121 of the NPPF states that '*planning decisions should ensure that…. the site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation.'*

347. The Environmental Statement incorporates an assessment of the potential effects from the BEC development upon geology and ground conditions. The assessment is informed by a site investigation report.

348. The colliery history of the site is likely to have resulted in some low levels of ground contaminants which appear readily capable of remediation and can be controlled through planning condition. The historical mining use of the site presents limited risks. Two capped shafts adjacent to the western boundary have been filled and capped to modern standards. All buildings and structures of the BEC would be a suitable distance from the shafts and no issues of stability have been identified. The previous colliery history therefore poses a

negligible risk to the BEC development a fact supported by the Coal Authority who raise no objections to the development. The building design would be informed by the findings of the ground survey report to ensure that any risks from coal bed methane underlying the site accumulating within the buildings and creating an explosive risk are designed out.

Drainage and Flood Risk

349. WLP Policies W3.5 & W3.6 seek to ensure that waste management facilities do not result in unacceptable pollution of ground or surface waters or unacceptable flood risks.

350. Potential impacts to water pollution have been assessed as part of the Environment Statement. The document identifies that standard best practice construction methods would be implemented to ensure that adverse water quality impacts do not result from the construction works. Construction practices can be regulated by planning condition to require the developer to prepare a construction environmental management plan that would control surface water drainage and pollution during construction works.

351. Once built the facility would operate on sealed concrete areas ensuring any pollutants would not be able to percolate into the underlying ground. Surface water and foul/process water would be separately collected and managed appropriately. Surface water run-off would pass through oil interceptors to remove hydrocarbon pollutants prior to draining to the attenuation pond and discharging to the wider environment at a greenfield rate.

352. Appropriately designed storage areas for potentially contaminated liquids are provided within the design incorporating water treatment facilities to manage these discharges and make them suitable for discharge to the nearby Severn Trent waste water treatment works in Bilsthorpe.

353. The applicant has identified a potential need to make improvements to the nearby Bilthorpe sewage treatment works so that it has sufficient capacity to handle the additional flows from the proposed development. As part of the draft Section 106 legal agreement the developer makes a provision for payments to be made to Severn Trent for these works to be undertaken. It is unfortunate that the planning authority have not been able to obtain a planning consultation response from Severn Trent despite a number of requests for a response to be made. Nevertheless, the arrangements secured through the Section 106 agreement provide an appropriate mechanism to make any required improvements and therefore ensure that the local sewage works have adequate capacity to manage the increased flows from the development.

354. The Environment Agency raises no objections to the proposed concept drainage systems being proposed but request its detailed design be regulated through planning condition to ensure it is appropriately designed and engineered. It is noted that the drainage systems would also be regulated through the environment permit.

355. The development site does not lie within an area at risk from flooding. The flood risk assessment demonstrates that the development would not result in flood risk to surrounding areas. To ensure that this is regulated the Environment Agency request the drainage scheme demonstrates that surface

water run-off does not exceed a 1:100 year run-off rate plus an appropriate allowance for climate change.

356. Subject to the imposition of appropriate planning conditions, it is concluded that satisfactory measures are incorporated within the design of the facility and therefore the requirements of WLP Policies W3.5 and W3.6 are satisfied.

Heritage

357. WLP Policy W3.28 seeks to protect the character, appearance, condition and setting of conservation areas, listed buildings and historic parks and gardens. This policy is consistent with Section 66 and 72 of the Planning (Listed Buildings and Conservation Areas) Act 1990 which requires the Council to have special regard to desirability of preserving the setting of any building or conservation area of special architectural or historic interest, these regulations also seek to preserve the setting of Registered Parks and Gardens. A requirement for heritage impact assessments to be undertaken by developers as part of the planning submissions is imposed through the NPPF.

358. The Environmental Statement incorporates a cultural heritage chapter which identifies that the application site itself is not of any heritage interest. The assessment identifies that there are heritage assets within the surrounding area and therefore a need to have special regard to the setting of these heritage assets to ensure compliance with the legislative requirements. The assessment identifies that within a 5km radius of the site there are features of heritage interest including two Grade 1 listed buildings, three Grade II* listed buildings and four Grade II listed buildings. Within a 2km radius there is one scheduled ancient monument and one Grade II registered park and garden as well as 29 non-designated heritage assets and two conservation areas (Bilsthorpe and Eakring). The original assessments have been supplemented through the Regulation 22 submission to substantiate the conclusions reached in terms of impacts to the setting of the Grade 1 listed Church of St Margaret at Bilsthorpe and an assessment of impacts to viewpoints within the Rufford Abbey Historic Park.

359. The information incorporated within the Environmental Statement including the supplementary assessments supplied through the Reg. 22 process fulfils the requirements of paragraph 128 of the NPPF and enables a full assessment of the effect of the proposals on heritage assets to be made, including Eakring Conservation Area and Eakring Church which have been specifically recognised by Newark and Sherwood's Conservation Officer. This assessment identifies that the effects of the construction and operation of the proposed BEC development upon the setting of heritage assets (both designated and non-designated) would be very limited and less than substantial. Some cumulative impacts may result from the development in conjunction with the nearby wind turbines, notably in terms of vistas across the 18th century historic parkland setting of Rufford Abbey. In essence the turbines have the main harmful impact in so far as they are a very significant distraction that deflects attention from the surrounding subtle landscape views, however, the proposed chimney and the main building of the BEC are not insubstantial in their own right and together with the turbines would combine to create cumulative impact by further introducing industrial elements into the existing rural views.

360. Overall, the proposals are considered to have some harmful impacts to the heritage asset of the area but the magnitude of this impact is considered to be less than substantial. The Planning (Listed Buildings and Conservation Areas) Act 1990 requires the planning authority to have special regard to any heritage impacts. Paragraph 134 of the NPPF provides scope to balance impacts to the historic environment which are less than substantial against any benefits provided by the development. Consideration of this balance is provided within the conclusions section of the report.

361. NCC's Heritage Officer has identified that there is potential to compensate for the minor adverse impacts that have been identified to the identified vistoes across the 18th century historic parkland setting of Rufford Abbey by undertaking an interpretation scheme of this heritage asset, such as erecting interpretation boards or a web based information documents. The applicant is agreeable to meeting the costs of the provision of a heritage interpretation scheme through a financial contribution secured through a Section 106 agreement.

362. The application site has previously been developed meaning that any buried archaeological features within the ground would have been disturbed. Archaeology therefore does not impose any constraints over the development.

Socio-economic and employment implications.

363. The NPPF incorporates planning policy concerned with socio-economic impacts that need to be considered with regard to this application, particularly those which expect planning decisions to proactively drive and support sustainable economic development and assist the expansion of business. Through the implementation of the NPPF, the Government expects that significant weight should be placed on the need to support economic growth through the planning system.

364. The Environmental Statement incorporates an assessment of socio-economic effects of the proposal including impacts on local populations and reaches the following conclusions:

- The construction phase has the potential to deliver 180 on-site temporary employment jobs per annum (over 2 years). Taking account of supply chain jobs, this total could be in the region of 330 FTE jobs. Of those on-site jobs, it is estimated that 45 – 60 FTE jobs could be secured during the construction period by local contractors and workers. There could be further benefits locally for some businesses (food and drink, accommodation providers) that may ultimately benefit as a result of any temporary visiting workforce.
- Once fully operational the BEC is anticipated to directly support some 46 permanent FTE jobs, around one third of all jobs would be skilled trades' occupations and around 60% of all jobs would be process plant, machine operatives or elementary roles with potential to recruit from Bilsthorpe and the Nottinghamshire labour market.
- The applicant has identified potential to make available a number of local apprenticeships to young workers;
- Once indirect and induced employment impacts are also considered, it is estimated that the energy centre could support 57 permanent FTE jobs

within the impact area. This has the potential to lead to an annual input of £4.3 m to the local economy and throughout its life to have potential to provide a £70m capital investment in the local area plus subsequent investment though the life of the plant.

365. The overall conclusion is that the BEC development would have an overall moderately beneficial effect on the local economy.

366. Public consultation responses to the development proposals have identified significant local objections concerning possible adverse socio-economic impacts including those on the local economy (due to blight), the potential for closure of local businesses, impacts to house prices, health; employment opportunities and lack of planning gain to mitigate social impacts.

367. Comments that there would be detrimental impacts on the local economy are not supported by any evidence. These concerns are not uncommon when waste facilities are proposed, however in practice waste facilities are successfully integrated in communities with no apparent detrimental impact. Based on evidence submitted with the application this proposal has potential to enhance the economic performance of the local area through the provision of additional employment and opportunities to local businesses to provide materials and support services associated with the operations and maintenance of the facility together with the development of skills within the workforce and is therefore consistent with NPPF policy which requires the planning system to promote economic growth.

368. Concerns have been raised that the development would have a detrimental impact on local house prices. Consideration of impacts on house prices from development lies outside the remit of the planning system and accordingly Members are advised not to attach weight to the point.

369. Concerns are raised that the proposal would result in some adverse impacts to the local community during the construction and operation phase. The magnitude of these impacts is assessed in later sections of the report but include noise, visual disruptions and traffic. Best practice measures, controlled through planning conditions requiring specific mitigation would be applied where appropriate to minimise the magnitude of any impact.

370. Overall, it is assessed that there is some potential for social impacts from the development, however the application incorporates mitigation measures to ensure that impacts are generally of minor/moderate magnitude. On the other hand there is evidence that the proposal is likely to enhance local employment opportunities as well as the economic performance of the wider area through the provision of additional employment and opportunities to local businesses to provide materials and services associated with the operation and maintenance of the facility together with the development of skills within the workforce. The development is supported by the emphasis provided in the NPPF which encourages the planning system to be supportive of development which encourages economic growth.

371. A wide range of general and specific design and mitigation measures would be implemented as part of the development to ensure that the impact on the amenity of local residents and tourists as users of local recreation and community facilities and open spaces would be minimised and acceptable.

Other Issues

372. Concerns that the facility would have a detrimental impact on surrounding property values are not considered to be material planning considerations. Neither is the level of business rates generated by the development a material planning consideration nor is there any scope to require the developer to pay a higher parish precept on their business rates.

373. The distance of the BEC from areas of tourist interest within Nottinghamshire and in particular Sherwood Forest means that impacts are likely to be limited thus no significant impact on tourist facilities is anticipated.

374. The planning system requires the BEC planning application to be assessed against current planning policies and on its own merits. The development plan gives consideration to cumulative impacts from waste facilities under WLP Policy W3.29, noting that concentrations of waste operations close to communities can be especially damaging to the general quality of life. The environmental assessment has not identified significant cumulative impacts with other waste activities in the surrounding area, notably the former Bilsthorpe landfill site is no longer receiving waste and now substantially restored. The fact that some residents consider Bilsthorpe has historically had a number of 'bad neighbour' developments or the fact that a power station development was previously refused planning permission on the colliery site are not grounds to refuse the BEC planning permission. The BEC development would not result in any significant cumulative adverse impacts on existing landscape character and/or amenity of nearby settlements and therefore does not conflict with WLP Policy W3.29.

375. Concerns that the BEC development would increase local fly tipping are unjustified since the additional waste treatment capacity provided within the BEC is more likely to decrease the potential for fly tipping rather than add to the problem.

Other Options Considered

376. The report relates to the determination of a planning application. The County Council is under a duty to consider the planning application as submitted.

377. The Environment Statement incorporates an assessment of the alternatives which have been considered. These are set out below:

- The need for the development and the benefits derived over the 'do nothing scenario: The applicant has argued that there is a need for the BEC based on changes in waste planning policy requiring a shift from landfill and additional waste recovery, a shortage of waste recovery capacity within Nottinghamshire and the East Midlands region, a need for additional renewable/low carbon energy generation capacity and the associated climate change benefits and the economic benefits derived from the project.

- Potential for exporting heat: The applicant has identified potential customers for residual heat from the process, although the development does not identify any certainty in delivering a heat network.

- Alternative Sites/Locations: The applicant has given consideration to a total of 483 potential sites, shortlisting these through a site investigation process based on their availability and suitability for the development. The process has identified that the Bilsthorpe site has potentially less significant environmental and technical constraints to its development than these alternative sites.

- Alternative Technologies: The applicant has not undertaken a detailed assessment of alternative technologies since the development is put forward on behalf of a specific waste technology provider.

- Alternative Site Layout and Design: The application discusses the design options that have been considered by the developer.

378. The applicant concludes that the BEC development provides the most viable and credible solution.

Statutory and Policy Implications

379. This report has been compiled after consideration of implications in respect of finance, the public sector equality duty, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment, and those using the service and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

380. Implications for Service Users: The BEC would not be open to members of the public. As a trade facility the BEC would provide additional waste management capacity to serve the local waste industry with additional choice for waste producers and transferors to manage their waste at a local facility thereby providing benefit from reduced mileage of delivery vehicles.

381. Financial Implications: The BEC is a privately funded development and the authority has no financial interest in its construction. The applicant would meet any cost associated with the preparation of the Section 106 legal agreement.

382. Crime and Disorder Implications: The proposed BEC would be developed within a secure compound by means of perimeter fencing, external lighting and remotely monitored CCTV. The facility would be staffed on a 24 hour basis with controlled access at the gateway.

383. Human Rights Implications: The relevant issues arising out of consideration of the Human Rights Act have been assessed in accordance with the Council's adopted protocol. Rights under Article 8 and Article 1 of the First Protocol may be affected.

384. The main Convention rights relevant when considering planning proposals are Article 1 of the First Protocol, which guarantees the right of peaceful enjoyment of possessions, and Article 8 which guarantees a right to respect for private and family life. Article 8 also provides that there shall be no interference by a public authority with the exercise of this right except in the interests of national security, public safety, or the economic well-being of the

country, for the prevention of disorder or crime, for the protection of health or morals, or the protection of the freedom of others.

385. A grant of planning permission has potential to affect these rights, but they are qualified rights as noted above. In assessing that balance when making a decision, the WPA may also take into account that the amenity of local residents could be adequately safeguarded by planning conditions. Indeed, depending on the conclusion reached as to the level of efficacy of the safeguards, it may be concluded that there is a minimal interference with Convention rights in any event.

386. In this instance it is not considered that there would be any disproportionate interference with the human rights of nearby residents. On that basis it is considered that the wider benefits of the development in so far that is provides a modern waste management facility which generates low-carbon energy with associated benefits should take precedence over the limited impacts (which are limited and mitigated through the planning conditions) on the Convention rights of private individuals.

387. Accordingly the grant of planning permission for this development would be in accordance with Convention rights and be entirely lawful.

388. Implications for Sustainability and the Environment: Implications to sustainability and the environment are considered within he report. Notably the development would positively assist with the sustainable management of waste by diverting residual waste from landfill disposal and managing it within a recovery facility and generating low carbon energy which would have a positive impact in terms of climate change effects. Balanced against this are the limited impact to the environment, notably in terms of the visual effects. The report considers these issues, balancing their merits as part of the recommendation to support a grant of planning permission.

389. The development does not raise any significant issues regarding equalities, safeguarding of children or human resource implications.

Statement of Positive and Proactive Engagement

390. In determining the application the County Council has worked in accordance with the approach set out in the National Planning Policy Framework by assisting with pre-application discussions; encouraging pre-application community engagement and carrying out Environmental Impact Assessment screening and scoping of the application.

391. The proposals and the content of the Environmental Statement have been assessed against relevant Development Plan policies, the National Planning Policy Framework, relevant Government Policy and European Regulations. The County Waste Planning Authority has identified all material considerations, forwarded consultation responses that may have been received in a timely manner, considered any valid representations received and provided opportunities for the applicant to resolve issues and progress towards a positive determination of the application. Issues of concern have been addressed through negotiation and further environmental information to assist with the determination of the planning application requested through the Regulation 22 submissions.

392. The applicant has been given advance sight of the draft planning conditions and the planning authority has worked closely with the applicant in terms of drafting the Section 106 agreement.

Conclusions

393. This is a complex planning application which has attracted very considerable interest. The report identifies that there are objections to the development from Bilsthorpe, Rufford, Eakring and Kirklington Parish Council's, Nottinghamshire Wildlife Trust, RAGE, UKWIN, local residents and County Councillor John Peck. 629 local residents have responded to surveys undertaken by Mark Spencer MP, of these respondents 511 where opposed to the development, 71 were in support and 47 had mixed views.

394. In formulating the recommendation, all of the evidence and the potential impacts of the development that are considered to be material to determining this application have been carefully examined. This has included analysing the applicant's planning application and Environmental Statement including the additional information supplied under regulation 22 and other supporting documentation, and the representations and comments from consultees and members of the public. All material issues have been addressed in the Environmental Statement (including the additional information) and it is considered to be comprehensive and adequate. The fact that some of those making representations to the County Council do not agree with it, or with some aspects of it, is not unexpected and this does not prevent it from being a proper Environment Statement.

395. In accordance with section 38 of the Planning and Compulsory Purchase Act 2004, the decision on this application should be taken in accordance with the Development Plan unless material considerations indicate otherwise. There are a large number of relevant development plan policies and the question of whether the proposals accord with the development plan should be considered overall. The application should not be refused planning permission simply because it fails to satisfy an individual policy, however any breach of planning policy needs to be carefully balanced against the benefits which may be derived from the development.

396. Key issues identified in the report are set out below:

- The BEC facility would provide additional waste recovery capacity, assisting with the diversion of waste from landfill disposal thereby delivering waste management at a higher level in the waste hierarchy in compliance with WCS Policy WCS3, PPS10 and WMPfE policy.
- The WCS identifies a need for additional recovery capacity to address capacity shortfalls. The BEC would assist in addressing these shortfalls and therefore complies with WCS Policy WCS3.
- The BEC is likely to manage waste from Nottinghamshire and surrounding areas thus satisfying the requirements of European law in terms of being one of the nearest appropriate installations for managing waste. Since the facility would manage any 'non-local' residual waste at

a higher level in the waste hierarchy the development is considered to be compliant with WCS Policy WCS12.

- The BEC would generate dependable low carbon electrical energy which is not intermittent in nature or subject to the vagaries of weather like most other renewable energy and readily dispatchable to the grid. Government energy policy identifies that the renewable energy from the biogenic part of the mixed residual waste is one of a number of technologies that has the greatest potential to increase energy generation from renewable sources. The energy produced by the BEC therefore fully contributes to meeting the objectives of NPS EN-1, a factor that is of fundamental importance in the balance of assessment of the planning application.
- The NPPF requires planning authorities to maximise low carbon energy development and plan positively for such development. Local policy within the N&SCS Core Policy 10 and Policy DM4 of the NSDC Allocations and Development Management Document are also supportive of low carbon energy developments. Whilst the report acknowledges that alternative energy recovery technologies have potential to operate at higher efficiency levels, the BEC still operates at a level of efficiency to be classed under European law as a more efficient recovery process rather than less efficient disposal facility.
- Whilst the former Bilsthorpe Colliery site is identified on the NSDC site as being within a countryside location and not allocated for industrial development the land has been previously developed and is currently brownfield in character. The district council considers the site as available industrial land and routinely monitor the take up of employment land in the area as part of their employment land review. The report acknowledges the policy tension that these competing visions for the future of the former Bilsthorpe Colliery create within the assessment of this application. For the purposes of considering this application it is concluded that the site occupies land that will come forward for development as a business park.
- PPS10 and WCS Policy WCS7 support the development of gasification facilities on employment land and derelict/previously developed land. There is policy tension between the siting of the BEC at Bilsthorpe Business Park and the spatial approach set out within WCS Policy WCS4. Nevertheless, whilst WCS Policy WCS4 seeks to positively steer development to locations based on the size of facility and scale of development, the policy does not go as far to explicitly prohibit the construction of large scale waste treatment facilities in smaller settlements. The development therefore is considered not to be contrary to WCS Policy WCS4.

397. WCS Policy WCS13 supports the development of new or extended waste management facilities where it can be demonstrated that there would not be unacceptable impacts on any element of environmental quality or the quality of life of those living or working nearby and where this would not result in unacceptable environmental impacts.

398. The most notable environmental effect relates to the visual impact, particularly from the west towards the A614 where impacts are considered to be harmful. These impacts need to be considered in the context of government energy

policy incorporated within NPS EN-1 which acknowledges that many renewable/low carbon energy schemes will be visible within many miles of the site. NPS-EN1 identifies an urgent need to bring forward additional low carbon energy generation capacity requiring Planning authorities to consider this need and judge whether the adverse impact are so damaging that it is not offset by the benefits of the development. Planning authorities are required to pro-actively support energy developments by attaching significant weight to the benefits the energy generation, and support such development despite them having a visual impact. In this context it is concluded that the benefits derived from the additional low-carbon energy generation provided within the BEC outweigh the level of visual impact that has been identified.

399. Other environmental impacts are generally considered to be of minor significance. The local highway network is considered to be adequate to accommodate the traffic movements and subject to controls over routeing, delivery vehicles would avoid trafficking through Bilsthorpe village centre. Significant impacts to landscape character, air quality and public health, noise and vibration, dust, litter, ecology, odour, ground contamination, drainage and flood risk, socio-economic effects or the historic environment are not anticipated.

400. In applications of this scale a judgement is required taking account of the pressing need for modern waste management facilities, additional renewable energy capacity and the presumption in favour of sustainable and economic benefits which would be derived from this development. These need to be considered in the context of the relevant planning policies which attach significant weight to these benefits.

401. While it is appreciated that there are tensions between individual policies within the development plan, the overall balance of Development Plan policy imperatives and other material planning considerations, in this case, is in favour of the development. Accordingly it is considered that the proposals do accord with the development plan taken as a whole but that, in any event, material considerations outweigh the identified tensions in policy that exist and support the grant of planning permission.

402. Best practice measures, controlled through planning conditions requiring specific mitigation could be applied where appropriate to reduce potential environmental impacts.

403. Subject to the imposition of appropriate conditions and a Section 106 legal agreement to satisfactorily control lorry routeing and an expansion of the villages weight restriction order, ecological mitigation and improvements to the local sewage treatment works, the overall balanced conclusion is to support a grant of planning permission.

RECOMMENDATION

404. It is RECOMMENDED that the Corporate Director for Policy, Planning and Corporate Services be instructed to enter into a legal agreement under section 106 of the Town and Country Planning Act to secure lorry routeing controls, off-site ecological mitigation works through the implementation of a wader

mitigation plan, improvements to the local sewage treatment works, and a financial contribution to a heritage interpretation scheme.

405. It is FURTHER RECOMMENDED that subject to the completion of the legal agreement before the 31st October 2014, or another date which may be agreed by the Team Manager Development Management, the Corporate Director for Policy, Planning and Corporate Services be authorised to grant planning permission for the above development subject to the conditions set out in Appendix 2 of this report. In the event that the legal agreement is not signed by the 31st October 2014, or within any subsequent extension of decision time agreed with the Waste Planning Authority, it is RECOMMENDED that the Corporate Director for Policy, Planning and Corporate Services be authorised to refuse planning permission on the grounds that the development fails to provide for the measures identified in the Heads of Terms of the Section 106 legal agreement within a reasonable period of time.

406. Members need to consider the issues, including the Human Rights Act issues set out in the report and resolve accordingly.

JAYNE FRANCIS-WARD

Corporate Director Policy, Planning and Corporate Services

Constitutional Comments

Planning & Licensing Committee is the appropriate body to consider the content of this report.

(SLB 09/10/2014)

Comments of the Service Director - Finance

Comments will be orally reported

Background Papers Available for Inspection

The application file available for public inspection by virtue of the Local Government (Access to Information) Act 1985.

Electoral Division(s) and Member(s) Affected

Rufford: Cllr John Peck

Southwell and Caunton: Cllr Bruce Laughton

Farnsfield and Lowdham: Cllr Roger Jackson

Report Author / Case Officer
Mike Hankin
0115 9696511

For any enquiries about this report, please contact the report author.

APPENDIX 1: BILSTHORPE ENERGY RECOVERY – KEY FACTS SHEET

APPLICANT/OPERATOR	Peel Environmental
PROPOSAL	Proposed development of the Bilsthorpe Energy Centre (BEC) to manage unprocessed and pre-treated waste materials through the construction and operation of a Plasma Gasification Facility, Materials Recovery Facility and Energy Generation Infrastructure together with supporting infrastructure
TOTAL SITE AREA	4.35ha
MAIN STRUCTURES SOUGHT PLANNING PERMISSION.	There are a number of individual elements to the development comprising: • Waste reception and integrated Materials Recovery Facility (MRF) • Main building incorporating gasification facility, syngass processing area, power generation, oxygen production area & office. • Two exhaust stacks • Associated infrastructure and landscaping
SCALE OF DEVELOPMENT	• Waste Reception and MRF: 76.3m by 74.7m and 14.8m high. • Main building: 75m (extending to 99.4m including the oxygen production facility and office/control room) by 70.6m (extending to 93.6m where the power generation building extends out). The highest part of the building would house the vertical gasifier units measuring 31.8m high, the gas processing facility would be 21.8m high, the oxygen production area and power generation area would be 11.8m high and the office / control room would be 4.0m in height. • Each exhaust stack would measure 60.0m high and circa 2.3m in diameter. • Ancillary structures include processing plant measuring 3.5mx4mx18m high, cooling tower measuring 12m diameter and 10.7m high, a flare stack measuring 1m diameter and 30m high and pump house equipment. For reference the main office building on the highways depot is 36m x 19m and up to 8m high and the portal frame building is 67m x 29m and 6.2m to eaves and 7.8m to ridge. The nearby wind turbines are 100m high. .
MATERIAL INPUT	• Facility would receive a combination of solid recovered fuel (SRF) and residual waste • The MRF would have a design capacity of circa

	117,310tpa. This has been specifically set at a greater capacity than the Gasification Facility in order to take into account the proportion of material that would be recovered for recycling. • The gasification facility would have a maximum processing capacity of 95,000tpa. • Other ancillary consumables required for the process would be imported .
CHP PROCESSING CAPACITY	The facility would have an installed electricity generating capacity of circa 13.6 Megawatts (MW), a proportion of this electricity (circa 4.0MWe) would be used within the Energy Centre itself. Thus circa 9.6MWe would be available for export to the local grid. In addition to the production of electricity, the proposed BEC development would also offer the potential to capture circa 5.5MWth of heat but currently no market exists for this heat energy.
PROPOSED HOURS OF OPERATION	• Import / export of materials from Monday to Friday (07:00hrs to 19:00hrs) and Saturday (07:00hrs to 13:00hrs). No HGV deliveries / collections would take place on Sundays or Bank Holidays. • The MRF facility would operate over two shifts between 07:00hrs and 23:00hrs on weekdays and an additional shift on Saturdays (07:00hrs and 16:00hrs). No operations would take place on Sundays and Bank Holidays. • The Gasification Facility and associated energy generation would operate 24 hours per day, 7 days per week, 365 days per year except during planned maintenance shut-downs.
TRAFFIC	It is anticipated that the proposed development would generate in total 112 daily HGV two-way movements (i.e. 56 in plus 56 out). This includes all HGV movements associated with the delivery of waste, consumables and the removal of residues and recyclables from the site.
EMPLOYMENT	The proposed BEC development would provide permanent employment for 46 people.

APPENDIX 2: RECOMMENDED PLANNING CONDITIONS

Commencement

1. The development hereby permitted shall be begun within five years from the date of this permission.

   Reason: To comply with the requirements of Section 91 (as amended) of the Town and Country Planning Act 1990.

2. The operator shall notify the Waste Planning Authority (WPA) of the date of the material start of each phase of development in writing at least 7 days but not more than 14 days prior to each phase. The phases of development shall comprise:

   - the commencement of construction;
   - the commencement of commissioning trials ("commissioning trials" are defined as operations in which waste is processed under specified trials to demonstrate that the facility complies with its specified performance); and
   - the date when the development will become fully operational ("fully operational" is defined as the point from which it has been demonstrated that the facility operates in accordance with its specified performance once the commissioning trials have been successfully completed).

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

Approved Plans

3. The development hereby permitted shall only be carried out in accordance with the following documents, unless otherwise agreed in writing with the WPA, or where amendments are made pursuant to the other conditions below:

   a. Bilsthorpe Energy Centre Planning Application comprising:
      - Planning Application Document received by the WPA on 29th November 2013
      - Environment Statement Volume 1 Main Report received by the WPA on 29th November 2013.
      - Environment Statement Volume 2 Technical Appendices received by the WPA on 29th November 2013.
      - Environment Statement Transport Assessment received by the WPA on 29th November 2013.
      - Environment Statement No-Technical Summary received by the WPA on 29th November 2013.
      - Environment Statement Regulation 22 Submission including Non-technical summary received by the WPA on 15th July 2014.
      - Environment Statement Second Regulation 22 Submission including Non-technical summary received by the WPA on 26th August 2014.

   b. Plans and Drawings identifying the proposed development received by the MPA on 29th November 2013 comprising:

      - Drawing No. 13001 P001 Rev. A: Red Line Plan

- Drawing No. 13001 P002 Rev. C: Site Layout Plan
- Drawing No. 13001 P003 Rev. A: Gasification Building Floor Plan
- Drawing No. 13001 P004 Rev. A: MRF Building Floor Plan
- Drawing No. 13001 P005 Rev. A: Elevations
- Drawing No. 13001 P006 Rev. A: Elevations on A and B
- Drawing No. 13001 P007 Rev. A: Site Sections
- Drawing No. 13001 P008 Rev. A: Roof Layouts
- Drawing No. 1301 P009 Rev. A: Fencing Layout
- Drawing No. 1301 P010 Rev. A: Ancillary Buildings
- Drawing No. 13001 P011 Rev. A: ASU Compound
- Drawing No. 13001 P012: Effluent Treatment Areas
- Drawing No. 1301 P013: Vehicles Crew Building
- Drawing No. 1391-01-01: Indicative Landscape Design
- Drawing No. CL(19)01 Rev. P4: Indicative Site Drainage Strategic Layout (1 of 2)
- Drawing No. CL(19)02 Rev. P4: Indicative Site Drainage Strategic Layout (2 of 2)

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

Construction Materials

4. Notwithstanding the details shown on the approved plans, the implementation of the finishes shall not commence until details and samples of the materials to be used in the construction of the external surfaces of the buildings hereby permitted have been submitted to and approved in writing by the WPA. Development shall be carried out in accordance with the approved details.

   Reason: *In the interest of visual amenity and to minimise impact to the surrounding landscape in accordance with Policy W3.3 of the Nottinghamshire and Nottingham Waste Local Plan.*

5. Notwithstanding the details shown on the approved plans, the final specification of all ancillary structures and plant within the effluent treatment area shall be submitted to and approved in writing by the WPA prior to their siting within the development. Development shall be carried out in accordance with the approved details.

   Reason: *In the interest of visual amenity and to minimise impact to the surrounding landscape in accordance with Policy W3.3 of the Nottinghamshire and Nottingham Waste Local Plan.*

Ground Investigation

6. Unless otherwise agreed by the WPA, development other than that required to be carried out as part of an approved scheme of remediation must not commence until Parts A to D of this condition have been complied with. If unexpected contamination is found after development has begun, development must be halted on that part of the site affected by the unexpected contamination to the extent specified by the WPA in writing until Part D has been complied with in relation to that contamination.

Part A: Site Characterisation

An investigation and risk assessment, in addition to any assessment provided with the planning application, must be completed in accordance with a scheme to assess the nature and extent of any contamination on the site, whether or not it originates on the site. The contents of the scheme are subject to the approval in writing of the WPA. The investigation and risk assessment must be undertaken by competent persons and a written report of the findings must be produced. The written report is subject to the approval in writing of the WPA. The report of the findings must include:

(i) a survey of the extent, scale and nature of contamination;

(ii) an assessment of the potential risks to:

- human health,
- property (existing or proposed) including buildings, crops, livestock, pets, woodland and service lines and pipes,
- adjoining land,
- groundwaters and surface waters,
- ecological systems,
- archeological sites and ancient monuments;

(iii) an appraisal of remedial options, and proposal of the preferred option(s). This must be conducted in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'.

Part B: Submission of Remediation Scheme

A detailed remediation scheme to bring the site to a condition suitable for the intended use by removing unacceptable risks to human health, buildings and other property and the natural and historical environment must be prepared, and is subject to the approval in writing of the WPA. The scheme must include all works to be undertaken, proposed remediation objectives and remediation criteria, timetable of works and site management procedures. The scheme must ensure that the site will not qualify as contaminated land under Part 2A of the Environmental Protection Act 1990 in relation to the intended use of the land after remediation.

Part C: Implementation of Approved Remediation Scheme

The approved remediation scheme must be carried out in accordance with its terms prior to the commencement of development other than that required to carry out remediation, unless otherwise agreed in writing by the WPA. The WPA must be given two weeks written notification of commencement of the remediation scheme works. Following completion of measures identified in the approved remediation scheme, a verification report (referred to in PPS23 as a validation report) that demonstrates the effectiveness of the remediation carried out must be produced, and is subject to the approval in writing of the WPA.

Part D: Reporting of Unexpected Contamination

In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the WPA. An investigation and risk assessment must be undertaken in accordance with the requirements of Part A, and where remediation is necessary a remediation scheme must be prepared in accordance with the requirements of Part B, which is subject to the approval in writing of the WPA.

Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the WPA in accordance with Part C.

Reason: *To protect the environment and ensure that the site has appropriate remediation/mitigation measures introduced to ensure that it is suitable for the proposed use in accordance with the requirements of the National Planning Policy Framework.*

Controls relating to Construction

7. Prior to the commencement of the development hereby permitted a Construction Management Plan, shall have been submitted to and approved in writing by the WPA. The Construction Management Plan should include but not be limited to:

   i. Contractors' access arrangements for vehicles, plant and personnel; contractor's site storage area/compound;

   ii. The number, size (including height) and location of all contractors' temporary buildings;

   iii. Temporary means of enclosure and demarcation of the site operational boundaries, to be erected prior to the commencement of construction operations in any part of the site and maintained for the duration of construction operations;

   iv. The means of moving, storing and stacking all building materials, plant and equipment around the site;

   v. The arrangements for parking of contractors' vehicles and contractors' personal vehicles;

   vi. Measures to ensure that dust emissions are minimised;

   vii. Details of external floodlighting installed during the construction period including hours of operation;

   viii. A construction noise mitigation scheme to ensure that noise emissions at adjoining sites (including residential and ecological receptors) are minimised. The scheme should identify those activities that can be considered noisiest, where and when these activities are likely to occur, a threshold level that would trigger a response and what such a response will be in terms of reducing noise for each noise generating activity;

   ix. The method of controlling and discharging groundwater during construction to avoid pollution of surface water and the underlying groundwater.

   x. Details of any wheel wash facility, use of water bowsers and any other measures necessary to ensure that vehicles do not leave the site in a condition whereby mud, clay or other deleterious materials are carried onto the public highway;

   The details shall be implemented as approved throughout the construction and commissioning of the development.

   Reason: *In the interests of amenity and to minimise impacts to surrounding land users.*

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

Reason: To minimise the amount of construction waste to be removed from site for final disposal.

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

Reason: In the interests of safeguarding nesting birds and to ensure compliance with the Wildlife & Countryside Act 1981

10. Unless otherwise agreed in writing by the WPA, construction works which are audible at the site boundary shall only take place between 07.00 – 18.00 Monday to Friday, and 07.00 – 13.00 on Saturdays, and not at any time on Sundays, Public or Bank Holidays, except in cases when life, limb or property are in danger, and in such instances these shall be notified in writing to the WPA within 48 hours of their occurrence. Construction activities which are assessed as being inaudible at the site boundary (such as internal electrical work and other quiet internal fitment work) may be undertaken outside of these times. Furthermore, construction works which cannot be halted once they are commenced (such as concrete pouring etc.) may be undertaken outside these specified hours, with the prior written permission of the WPA.

Reason: To protect the amenity of the area in accordance with the requirements of Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

11. Noise levels during the construction phase of the new development shall not exceed 65dB LAeq, 1 hour at any residential property and 75dB LAeq, 1hour at the nearest façade of the main office building of the Highways Depot. The developers shall allow access to Nottinghamshire County Council staff, or representatives working on their behalf to the application site at any time, and upon their verbal request, cease all construction operations and switch off any machinery for a period up to 15 minutes to enable measurements of ambient background noise to be taken. In the event that noise levels are measured which exceed these limits, then upon the written request of the WPA the applicant shall submit a scheme within 28 days of a written request to mitigate the noise impact of the construction operations and ensure the noise limits are complied with. The noise mitigation scheme shall thereafter be implemented in full within 7 days of the written approval of the WPA.

Reason: *To protect the amenity of the area in accordance with the requirements of Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

Infrastructure Connections

12. The route of the electrical cable connection between the BEC and the local electricity transmission system and the drainage connection to the mains water and sewage system shall be by underground connection only. Prior to its installation the route and methodology for excavation shall be agreed in writing with the WPA. The connections shall thereafter be installed in accordance with the approved details.

    Reason: *In the interests of amenity.*

13. Prior to the commencement of the development hereby approved a scheme shall be submitted to and approved in writing by the WPA demonstrating that it is feasible to supply heat to the boundary of the site (being the red line shown on Drawing Number 11034_PL02 of the planning application) should viable opportunities be identified to supply heat to offsite heat users. The route of the heat connection shall thereafter be safeguarded throughout the operational life of the development.

    Reason: *To ensure that potential to recovery heat energy from the process is not prejudiced, thus satisfying the objectives of European and National Policy, notably the revised EU Waste Framework Directive the Waste (England and Wales) Regulations 2011.*

14. Prior to the commencement of the commissioning of the development hereby approved, a review of the potential to utilise the residual heat from the process shall be carried out. The review shall incorporate further evaluation of the options to export recoverable heat from the process, developing the options identified within Chapter 16 of the Environment Statement, specifically incorporating feasibility/market analysis/market testing. The conclusions/findings of this appraisal shall be submitted to the WPA for its written approval including a programme for the implementation of any potentially viable options. The developer shall thereafter undertake all reasonable endeavours to commission all viable options following their approval in writing by the WPA. In the event that the WPA conclude that that viable heat recovery options are not currently available in the local area at the time of this review, the developer shall repeat the heat investigation process every three years during the operational life of the plant.

    Reason: *To maximise the potential level of energy recovery from the process, thus satisfying the objectives of European and National Policy, notably the revised EU Waste Framework Directive the Waste (England and Wales) Regulations 2011.*

Capacity of Site

15. The maximum combined total tonnage of residual waste and solid recovered fuel imported on to the site in any calendar year shall not exceed 117,310 tonnes. For the avoidance of doubt a calendar year shall comprise the period between 1 January and 31 December. The site operator shall maintain a record of the tonnage of residual waste and solid recovered fuel delivered to the site per day, the numbers of HGVs delivering waste and the number of HGVs exporting residues and their destinations. The record shall be made available to the WPA upon prior written request. A report of the total tonnage of waste imported to the Site in each successive calendar year shall also be provided to the local planning authority in writing within one month of the year end.

Reason: *To ensure environmental impacts are no greater than identified within the Environmental Statement submitted in support of the application thereby ensuring compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.1.*

Recovery Status of Plant

16. Prior to the Energy from Waste facility being brought into use the operator shall submit, to the WPA verification that the BEC facility has achieved Stage R1 Status through Design Stage Certification from the Environment Agency.

Reason *To confirm the recovery status of the Energy from Waste facility and ensure that the development would move waste up the waste hierarchy to comply with Policy WCS3 of the Nottinghamshire and Nottingham Waste Core Strategy*

Hours of Operation

17. Except in emergencies when life, limb or property are in danger and which are to be notified to the MPA in writing within 48 hours of their occurrence, the following shall not take place except within the hours specified below:

	Mondays to Fridays	Saturdays	Sundays, Bank and Public Holidays.
Import and export of materials to the site.	07:00 – 19:00	07:00 – 13:00	Not at all
Movement of mobile plant and machinery outside of the buildings	07:00 – 23:00	07:00 – 17:00	09:00 – 16:00
Operation of Materials Recovery Facility	07:00 – 23:00	07:00 – 16:00	Not at all
Operation of Gasification	24 hours	24 hours	24 hours

Facility			

Reason: *To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby residential properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

18. The loading doors shall be fitted with a fast acting closing system that ensure they are closed immediately following the passage of a vehicle into and out of the building. During daytime hours (07:00 – 19:00hrs inclusive) loading doors may only be opened when required for HGV movement into and out of buildings. Outside these hours the loading doors shall not be opened. Doors which allow the movement of personnel into and out of the buildings shall be fitted with self-closing mechanisms that ensure closure when people are not passing through.

Reason: *To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby residential properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

Highways

19. Prior to the Commissioning Date, the access scheme shown on the approved site layout plan (Drawing No. 13001 P002 Rev. C) shall have been implemented in full. Thereafter access provisions within the site shall comply with the details identified on the drawing.

Reason: *To ensure satisfactory access arrangements within the site and to thereby ensuring compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.15.*

20. Except where otherwise agreed in writing by the WPA there shall be a maximum of 616 two way HGV movements each week (308 HGV's into the site and 308 HGVs out of the site) in any one week (Monday to Friday & half day Saturday). Written records shall be maintained of all HGV movements including the time of day such movements take place. Copies of the HGV vehicle movement records shall be made available to the WPA within 7 days of a written request being made by the WPA.

Reason: *To limit vehicle movements to a level that is deemed appropriate to the surrounding highway infrastructure in accordance with Policy W3.14 of the Nottinghamshire and Nottingham Waste Local Plan.*

21. Prior to the development first being brought into operational use the eight covered and secure bicycle stands and staff shower/changing/locker facilities shall be provided and made available for use at all times for staff members in accordance with details that shall have been agreed previously in writing by the WPA.

Reason: *To promote more sustainable means of travel.*

22. Measures shall be employed to ensure that detritus material from the Energy Centre is not deposited on the public highway. These measures shall include the

regular sweeping and cleaning of on-site vehicle circulation and manoeuvring areas during the operational phase. In the event that these measures prove inadequate, then within one month of a written request from the WPA additional steps or measures shall be taken in order to prevent the deposit of materials upon the public highway the details of which shall have previously been submitted to, and if applicable, agreed in writing by the WPA.

Reason: *To prevent mud and other deleterious material contaminating the public highway and to accord with Policy W3.11 of the Nottinghamshire and Nottingham Waste Local Plan.*

Site Drainage and protection of groundwater

23. No development shall take place until a surface water drainage scheme for the site, based on sustainable drainage principles has been submitted to and approved in writing by the WPA. The scheme to be submitted shall demonstrate:

- The utilisation of holding sustainable drainage techniques;
- The limitation of surface water run-off to equivalent greenfield rates;
- The ability to accommodate surface water run-off on-site up to the critical 1 in 100 year event plus an appropriate allowance for climate change, based upon the submission of drainage calculations; and
- Responsibility for the future maintenance of drainage features.

The approved scheme shall subsequently be implemented in accordance with the approved details.

Reason: *To prevent the increased risk of flooding; to improve and protect water quality; to improve habitat and amenity; and to ensure the future maintenance of the sustainable drainage structures.*

24. Prior to being discharged into any watercourse, surface water sewer or soakaway system, all surface water drainage from parking areas and hardstandings shall be passed through an oil interceptor designed and constructed to have a capacity and details compatible with the site being drained. Roof water shall not pass through the interceptor.

Reason: *To prevent pollution to the water environment and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5.*

25. Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The size of the bunded compound shall be at least equivalent to the capacity of the tank plus 10% or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater. All filling points, vents, and sight glasses must be located within the bund. There must be no drain through the bund floor or walls.

Reason: *To prevent pollution of the water environment and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W3.5.*

Noise

26. The applicant shall submit to the WPA for approval in writing details of noise mitigation measures to be incorporated into the final design, prior to commencement of construction. The submitted details shall incorporate:

- Details of the Weighted Sound Reduction Index (Rw) of cladding to Gasification/Plant buildings and enclosures to Gas engines/ASU Plant including any doors.
- Noise data, stated as the 'A weighted' Sound Pressure Level at 1m from plant which may include, but not be limited to:
    I. End of exhaust stacks
    II. Ventilation louvres / openings
    III. Gas Engines
    IV. ASU Plant
    V. Blower Room and pumps associated with the Tank Farm and Waste Water

The submitted information shall be accompanied by a 'Noise Statement' from a suitably qualified noise consultant detailing how the proposed scheme of noise mitigation measures will ensure compliance with the conditioned noise limits.

Reason: *To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby residential properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

27. Mobile plant machinery used on site must be fitted with broadband noise type reverse alarms at all times.

Reason: *To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby residential properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

28. Any steam vent safety valve checks and other checks / routine maintenance which is likely to give rise to noise levels exceeding 70dB(A) @ 1metre, shall be carried out during non-sensitive times of the day (08:00-17:00hrs Monday - Friday) with the exception of emergency situations.

Reason: *To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby residential properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.*

29. Site contributory noise levels throughout the operational life of the development shall not exceed an LAeq,1hr free-field level of L90+5dB or 35dB (whichever is higher) during the daytime hours of 07:00-23:00hrs including a 5dB penalty for tonal/impulsive noise if applicable; and an LAeq,5mins free-field level of L90+0dB or 35dB (whichever is higher) during the night-time hours of 23:00-07:00hrs including a 5dB penalty if applicable at any residential property. Furthermore, fixed plant site contributory noise levels measured 3.5m from the

nearest façade of the main office building of the Highways Depot shall not exceed 55dB LAeq, 1hour. In the first year following the plant becoming operational the operator shall undertake a 3 monthly noise survey to verify compliance with the approved noise limits. A noise compliance monitoring scheme should be agreed in writing with the WPA prior to commencement of the noise survey to enable site contributory noise to be determined. This may involve monitoring at a near field position and agreed calculation method to show compliance. Measurements taken to verify compliance shall have regard to the effects of extraneous noise and shall be corrected for any such effects. The results of the noise survey shall be submitted to the WPA within a written report for approval in writing. In the event that compliance with noise criteria is not achieved the report shall identify further noise attenuation measures to mitigate noise emissions. These additional noise mitigation m*easures shall be implemented following their written approval by the WPA.*

30. In the event of a justifiable noise complaint being received by the WPA, the operator shall, within a period of 30 days of a written request submit a noise assessment to the WPA to demonstrate compliance or otherwise with the noise limits that have been imposed. If the prescribed noise levels are exceeded then the operator must incorporate as part of the noise assessment report a scheme of noise mitigation for approval in writing. The noise mitigation scheme shall thereafter be undertaken in accordance with the details approved by the WPA.

Reason: To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

31. The flare shall only operate during periods of emergency shutdown, system start-up / shutdown or as a standby facility if there is failure in the gas engines.

Reason: To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

32. All plant/machinery shall be regularly maintained to ensure that noise emissions do not exceed the manufacturer's specifications. In the event that the manufacturers maximum operating noise levels are exceeded then the machinery shall be switched off and repaired/adjusted so as to ensure compliance with these operating noise levels.

Reason: To minimise noise impacts arising from the operation of the site and to protect the amenity of nearby properties in accordance with Policy W3.9 of the Nottinghamshire and Nottingham Waste Local Plan.

Litter

33. Prior to building works commencing on the site measures shall be employed to ensure that any litter arising from the operations does not leave the site. These measures shall include curtailment of litter during construction works and throughout the operational life of the site the deposit and storage of all waste materials and refuse derived fuel within the buildings and not upon the open

areas of the site and ensuring that the fast acting screen shutters of the MRF tipping bay are maintained in good operational order at all times and remain shut except to allow the passage of a vehicle into and out of the building. Regular inspections and litter picks shall be undertaken outside the buildings to remove any litter from the external areas of the site at all times when the development is in existence.

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

Dust

34. Measures shall be employed to ensure that fugitive dust emissions from the site are minimised as far as practicably possible. These measures shall include but not necessarily be limited to the following:

- The use (as appropriate) of a dust suppression system within areas likely to give rise to fugitive dust emissions;
- The use as appropriate of water bowsers and/or spray systems to dampen the road sweepings bay, vehicle circulation and manoeuvring areas;
- Ensuring that the fast acting screen shutters installed in the Energy Centre are maintained in good operational order at all times and remain shut except to allow the passage of a vehicle into and out the building;
- All vehicles transporting waste materials either to or from the site shall be fully enclosed or sheeted.

All measures integrated shall be retained for as long as the development is in existence.

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

Odour

35. Measures shall be employed to ensure that operations associated with the development hereby permitted do not give rise to any malodours. Such measures may include but not necessarily be limited to the following:

a. Regular movement of waste within the refuse bunker to ensure that material is circulated on a regular basis thus ensuring that waste is not allowed to decompose.

b. The operation of negative air pressure within the tipping hall area and an odour management system, which would draw air from the reception building (and the MRF), through a series of carbon filters (or similar).

c. The application of masking agents where necessary to neutralise any malodours.

All measures integrated shall be retained for as long as the development is in existence.

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

36. No storage container, skip, sorted or unsorted waste material or residue of recycled materials or any other items shall be stored outside the buildings or on operational vehicles.

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

External Lighting

37. All floodlighting and other external lighting units proposed including cowling enclosures for the completed buildings and site shall be developed and operated in accordance with a detailed scheme previously approved in writing by the WPA. The scheme shall incorporate a lighting contour map to identify levels of lighting within the application site and any light spillage onto adjacent land and shall ensure that the external faces of the completed buildings and chimneys are not illuminated.

Reason: To ensure landscape, visual and ecological impacts are minimised in accordance with Nottinghamshire and Nottingham Waste Local Plan Policies W3.3, W3.4 & W3.22.

Landscaping

38. Within one year of the date of commencement, as notified under Condition 2 above a landscape scheme for the site shall be submitted to and approved in writing by the WPA. The landscaping scheme shall include:

<u>Hard Landscaping</u>

a. Proposed finished levels or contours;

b. Means of enclosure;

c. Car parking surfacing;

d. Other vehicle and pedestrian access and circulation areas surfacing;

<u>Soft Landscaping</u>

a. Planting proposals which are sensitive to the habitat of adjoining sites.

b. Written specifications (including cultivation and other operations associated with plant and grass establishment), specifically with regard to grass seed mixes Emorsgate EL2 mix would appear more appropriate than the specified EM1 Mix with EM8 in the wet grassland;

c. Schedules of plants, noting species, plant sizes and proposed numbers/densities where appropriate, specifically the hedgerow mix should be amended such that hawthorn is the dominant species (50%) with reductions in blackthorn (20%), guider rose (5%) and hazel 15%)

and the tree planting mix should be amended to remove beech and make the difference up with field maple;

d. Habitat suitable for dingy skipper butterflies;

e. Proposals to incorporate tree planting along the site boundary should be reviewed to ensure that they do not offer potential 'predator perches' to the adjoining wader mitigation area.

f. Implementation programme to include timetable of landscaping/planting and arrangements for a minimum of 5 years aftercare/post planting management.

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

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

Closure of Site

39. In the event that the use of the site for the importation of waste should cease for a period in excess of one month then, within one month of a written request from the WPA, the site shall be cleared of all stored waste and processed materials.

Reason: *In the interest of amenity and to ensure compliance with Nottinghamshire and Nottingham Waste Local Plan Policy W4.1.*

Notes to Applicant

1. National Grid (Gas) advise that Low or medium pressure (below 2 bar) gas pipes and associated equipment have been identified in the vicinity of the proposed works. The developers attention is drawn to the letter from National Grid dated 16th December 2013, specifically the recommendations to the developer, before carrying out any work at the site.

2. Under the Coal Industry Act 1994 any intrusive activities, including initial site investigation boreholes, and/or any subsequent treatment of coal mine workings/coal mine entries for ground stability purposes require the prior written permission of the Coal Authority, since such activities can have serious public health and safety implications. Failure to obtain permission will result in trespass, with the potential for court action. Application forms for Coal Authority permission and further guidance can be obtained from the Coal Authority's website.

3. The outline drainage strategy includes a petrol/oil bypass separator prior to discharge into the attenuation pond. The detailed drainage strategy should ensure that the separator is suitable for the type of pollutants encountered on site as per Environment Agency Pollution Prevent Guidance 3 (PPG3). Whilst

proprietary oil/silt and debris traps are included as a SuDS treatment train in table 5.10 of Ciria C697 guidance, we would recommend that further source control SuDS features are included in the detailed drainage strategy. This will ensure that silts and other diffuse pollutions are removed prior to discharge into the attenuation pond, which ultimately after disposal to the surface water sewer connects to the Gallow Hole Dyke. The Environment Agency does not consider oversized pipes or box culverts as sustainable drainage. Should infiltration not be feasible at the site, alternative above ground sustainable drainage should be used. Surface water run-off should be controlled as near to its source as possible through a sustainable drainage approach to surface water management. Sustainable Drainage Systems (SuDS) are an approach to managing surface water run-off which seeks to mimic natural drainage systems and retain water on-site as opposed to traditional drainage approaches which involve piping water off-site as quickly as possible. Suds involve a range of techniques including methods appropriate to impermeable sites that hold water in storage areas e.g. ponds, basins, green roofs etc rather than just the use of infiltration techniques.

4. It is noted that a piled foundation solution may be implemented at the site as such the Environment Agency refer the applicant to the following guidance: - Piling into contaminated sites, Environment Agency, 2002. This guidance provides useful information on piling and penetrative ground improvement methods on land affected by contamination.

5. The proposal will require an environmental permit from the Environment Agency in order to operate as an Energy from Waste facility.

6. Excavated material arising from site remediation or land development works can sometimes be classified as waste. For further guidance on how waste is classified, and best practice for its handling, transport, treatment and disposal please see our waste pages at http://www.environment-agency.gov.uk/business/topics/waste/default.aspx

7. The Environment Agency advise the proposed use of slag in the manufacture of secondary aggregate will be subject to its analysis, in addition to complying with relevant waste legislation-Duty of Care etc..

8. Under the terms of the Salmon and Freshwater Fisheries Act 1975, it is an offence to cause or knowingly to permit to flow, or put, into any waters containing fish, any liquid or solid matter to such an extent as to cause the water to be poisonous or injurious to fish or the spawning grounds, spawn or food of fish.

9. The presence of creeping water primrose within the linear water body to the south of the site (outside the planning application site area) has been noted. Opportunities should be taken to eradicate this plant.