



**Report of the Chief Planning Officer**

**CITY PLANS PANEL**

**Date:** 7<sup>th</sup> February 2013

**Application No:** 11/03705/FU

**Subject:** ENERGY RECOVERY FACILITY (INCINERATION OF WASTE AND ENERGY GENERATION), ASSOCIATED INFRASTRUCTURE AND IMPROVEMENTS TO ACCESS AND BRIDGE ON SITE OF THE FORMER SKELTON GRANGE POWER STATION

**APPLICANT**

*Biffa Waste Services*

**DATE VALID**

*27 September 2011*

**TARGET DATE**

*17 January 2012*

**Electoral Wards Affected:**

Burmantofts & Richmond Hill  
City & Hunslet  
Beeston and Holbeck



Ward Members consulted  
(referred to in report)

**Specific Implications For:**

- Equality and Diversity
- Community Cohesion
- Narrowing the Gap

**RECOMMENDATION:**

**DEFER AND DELEGATE** to the Chief Planning Officer for approval, subject to the specified conditions outlined in Appendix 1 (which may also include other conditions as deemed necessary) and following completing of a Section 106 Agreement to cover the following matters:-

Transport

- travel plan fees & monitoring;
- routing of HGVs between Gelderd Road MRF and Skelton Grange ERF;
- routing management plan for other HGVs including Incinerator Bottom Ash (IBA) vehicles;
- contribution towards bus stop improvements on Pontefract Road, including real-time information;
- contribution towards pedestrian crossing equipment and an "all-red" phase of the signals at junction of Skelton Grange Road and Pontefract Road;

#### Public Rights of Way

- cycle path & footpath provision linking Trans Pennine Trail across bridge and along edge of access road to a point level with the site access;
- Trans Pennine Trail improvements (and maintenance) including first phase of alternative route along northern river bank and re-engineered ramp access;

#### Biodiversity

- integrated landscape and ecological management plan;
- off site ecological works at Lagoon 21 of Skelton Grange Landfill;
- off site planting & maintenance – planting between site boundary and river and within ramp loop linking Trans Pennine Trail and the bridge;

#### Closure of Skelton Landfill

- cessation of importation of waste to Skelton Grange Landfill within six months of first acceptance of waste at Skelton ERF;

#### Local Employment

- Applicants required to use best endeavours to employ people from application wards and those adjoining;

#### Community Liaison

- the formation of a community liaison group comprising representatives of the local community, local Councillors, Environment Agency and Local Planning Authority;

#### Community Fund

- a voluntary community / environmental project fund equivalent to £0.30 per tonne of waste received at the site. Submission of scheme required to detail administering of fund – to relate to Burmantofts & Richmond Hill, City & Hunslet, Beeston & Holbeck, Temple Newsam, Rothwell and Garforth & Swillington wards. Fund to be index linked.

**In the circumstances where the Section 106 has not been completed within 3 months of the resolution to grant planning permission the final determination of the application shall be delegated to the Chief Planning Officer**

**Reasons for approval:** The application is considered to comply with policies A4, BD2, BD4, BD5, BD8, BD14, E4, GP5, GP7, GP9, GP11, GP12, LD1, N9, N12, N13, N23, N24, N25, N26, N28, N49, N51, R1, T2, T2B, T2C, T5, T6, T7, T7A, T7B, T24 T30C of the UDP Review, policies MINERALS 3, WASTE 1, WASTE 3, WASTE 4, WASTE 5, WASTE 6, WASTE 9, ENERGY 3, AIR 1, WATER 1, WATER 6, WATER 7, LAND 1, LAND 2 of the Natural Resources and Waste Development Plan Document, policies ENV1, ENV3, ENV5, ENV8, ENV9, ENV10, ENV12, ENV13, ENV14, YH2, YH4, YH5, YH7, LCR1, LCR2 of the Regional Spatial Strategy, as well as guidance contained within PPS10, the NPPF and, having regard to all other material considerations, is considered acceptable.

## 1.0 INTRODUCTION:

- 1.1 This application is presented to Members of City Plans Panel as the proposed scheme is considered to be of major strategic significance in terms of investment value (between £200-£300 million); concerns a non-residential scheme having a site area of more than 2 hectares and relates to the determination of a significant major development.
- 1.2 This report is presented further to several earlier reports presented to Members of both Plans Panel (East) and City Plans Panel, including:-
- Pre-application presentation by the applicants (5<sup>th</sup> August 2010);
  - Update report presented by officers (20<sup>th</sup> January 2011);
  - Presentation by the Environment Agency (20<sup>th</sup> January 2011);
  - Position Statement presented by officers (23<sup>rd</sup> February 2012);
  - Position Statement presented by officers (9<sup>th</sup> August 2012);
  - Presentation by the Environment Agency (9<sup>th</sup> August 2012);
  - Position Statement presented by officers (22<sup>nd</sup> November 2012);
  - Presentation by the Environment Agency (22<sup>nd</sup> November 2012).
- 1.3 The proposal falls under Schedule 1 Part 10 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (the EIA Regulations) as it is a waste disposal installation for the incineration of non-hazardous waste with a capacity exceeding 100 tonnes per day. The application is therefore accompanied by an Environmental Statement.
- 1.4 The Environmental Statement comprises the following assessments:-
- Alternatives;
  - Air Quality and Health;
  - Landscape and Visual Impact;
  - Transport (including Travel Plan);
  - Noise;
  - Geology (including ground investigation);
  - Ecology;
  - Cultural Heritage;
  - Socio Economic;
  - Climate Change (including Heat Plan); and
  - Cumulative Impact.
- 1.5 The submitted application also includes a Planning & Sustainability Statement; a Design & Access Statement; Non-Technical Summary, application forms and drawings.

## 2.0 SUMMARY OF THE PROPOSAL:

- 2.1 The proposal comprises an Energy Recovery Facility (ERF) utilising incineration as the method of waste treatment, with the recovery of energy from the process in the form of electricity. This electricity would be exported to the National Grid. The plant would also have the capacity to export heat via a future local network.
- 2.2 The application area lies within part of the former Skelton Grange Power Station site. The power station and cooling towers were demolished in the early 1990s. The site has since remained in a disused state.
- 2.3 The facility has been designed to accept up to 300,000 tonnes of non-hazardous commercial and industrial residual waste per annum. This is the waste produced by businesses, offices, industry and shops and is generally pre-sorted into recyclable and residual waste fractions by individual customers. Residual waste is the waste remaining after all the reusable or recyclable materials have been extracted. Much of this waste stream is currently being tipped at the applicant's Skelton Landfill site which lies 2.5km to the east of the application site.
- 2.4 Should the need arise, the facility would also be able to accept municipal waste (i.e. waste from the bins of householders), but only in substitution for an equivalent volume of commercial and industrial residual waste. Members should be aware that there is a separate planning application by Veolia for the treatment of residual municipal waste on the site of the former wholesale market (12/02668/FU).
- 2.5 The application site extends over an area of approximately 9 hectares.
- 2.6 The proposed building form is predominantly curved in appearance and is separated into a series of volumes which each relate to specific functions e.g. tipping hall, boiler hall and turbine hall. The dimensions of the proposed ERF building are:-
- length – 175m;
  - width – between 22m and 69m;
  - height (turbine & tipping hall roofs – end sections) – between 17m and 43.6m;
  - height (apex of the boiler hall roof – central section) – 48.9m;
  - flue stack height – 90m.
- 2.7 The ERF building would comprise:-
- waste reception hall with storage bunker, shredder and a waste feed system tipping hall;
  - fuel reception bunker – waste storage;
  - boiler hall with grate, combustion chamber and a heat recovery boiler;
  - turbine hall with steam turbine for generating electricity – energy recovery;
  - transformer and substation compound to step the power up from 11kV prior to power export;
  - flue gas treatment hall with equipment to clean combustion gases;
  - facility for discharging and loading air pollution control (APC) residue silos and other ancillary equipment;

- two chimney stacks to discharge the treated flue gas into the atmosphere;
- ancillary areas, control room, Central Processing Unit (CPU) room, bulky and light storage areas and electrical room, workshops etc.;
- offices for the staff of the ERF.

2.8 In addition to the above, provision for the following elements is proposed within the site:-

- air cooled condensers (ACC) for cooling the recycled steam from the generating process;
- ancillary accommodation for staff welfare such as changing, showers etc.;
- a staff and visitors car park with space for a coach and minibus standing;
- covered cycle spaces to encourage a reduction in car use;
- weighbridges and gatehouse, to allow adequate queuing length off the public highway. These facilities would be staffed when necessary;
- storage for the collection, recycling and rainwater runoff attenuation measures;
- site access roads with lighting, footpaths and vehicle manoeuvring areas;
- site remediation, excavation, filling and profiling;
- security fencing;
- hard and soft landscape works designed to provide mitigation and enhancement of natural biodiversity within the site; and
- an education / visitor centre.

2.9 The Air Cooled Condensers (ACCs) would be located to the rear of the ERF building. They would be screened by a perforated metal mesh structure to complement the ERF building's form and would have dimensions as follows:-

- length – 37m;
- width – 36m;
- height – between 22.4m and 27.8m.

2.10 Access to the facility would be via Stourton Industrial Estate, along Skelton Grange Road to the south of the site (from Pontefract Road, Stourton), using the existing bridge over the River Aire and Aire and Calder Navigation. The applicant is proposing significant structural and carriageway improvements to the bridge including strengthening of the structure and the enabling of a two-way carriageway, along with improvements to pedestrian and cyclist access through the provision of a cantilevered structure.

2.11 The facility would generate up to 30MW of electricity and output 26MW to the national grid, equivalent to the demand of around 52,000 households. The remaining 4MW would power the plant itself. The facility would also have the capacity to provide heat to local businesses as part of a Combined Heat and Power scheme (CHP) and could produce up to 70MW of heat at the expense of electrical output (proportions of electricity and heat output can be varied according to end-user demand).

- 2.12 The plant would have two individual lines accepting waste, meaning that the facility would not need to shut down for maintenance each year. One line would be shut down at a time for maintenance.
- 2.13 The proposals also incorporate photovoltaic / solar panels on the roof of the office block, to provide power for the offices and education / visitor centre.
- 2.14 The process would generate two main solid waste residues, namely incinerator bottom ash (IBA) and air pollution control (APC) residues (including boiler ash or fly ash). IBA is generated from the grate combustion unit, and amounts to approximately 25% of the waste tonnage imported to the ERF. The ash bunker would be located inside the main building to minimise dust and odour generation. The IBA would be exported off site to a suitable re-processing facility (the nearest established facility is in Sheffield) and can be used in concrete and concrete block construction, replacing up to 50% of the aggregate traditionally used.
- 2.15 The APC residues also include boiler ash (fly ash) from combustion, together with the other contaminants, which are removed from the flue gases prior to release into the atmosphere. Boiler ash consists mostly of carbon dust, along with some pollutants, organic compounds and heavy metals. The bulk of the APC residues comprise the spent reagents. APC residues are removed from the flue gases so that the emissions from the facility are clean prior to release, preventing pollution of the environment. APC residues have a high pH due to un-reacted neutralising reagents and this causes them to be classified as a hazardous waste. They would be stored in fully enclosed silos or bags pending removal off site in enclosed tankers to a designated hazardous waste landfill unless a market can be found for their use in treating acid wastes. APC residues and boiler ash represents only about 3% by mass of the waste feedstock.
- 2.16 It is anticipated that around 40 jobs would be created from the proposed development, once operational. Around 300 jobs would be created for the duration of the construction period.
- 2.17 The proposals include the removal of the existing large piles of rubble arising from the demolition of the former power station.

### **3.0 SITE AND SURROUNDINGS:**

- 3.1 The site is part of the former Skelton Grange Power Station, built in the 1950s and since decommissioned and demolished. The former concrete floor slab remains as broken and degraded hardstanding with naturally invading vegetation. The area of the former cooling towers is mainly covered with grassland vegetation, with the bases of the cooling towers remaining as concrete hardstanding. Stockpiles of demolition materials also remain.
- 3.2 The character of the area immediately around the site is largely industrial. The site lies to the south-east of Cross Green Industrial Estate and adjacent to the Knostrop Waste Water Treatment Works (WWTW). To the east is an extensive area of open land, allocated for employment use, which extends up to the boundary with the M1 motorway (which lies 1km to the east of the site). A substantial area of this land also has outline planning permission for industrial and warehouse development. The River Aire and Aire and Calder Navigation run north-west to south-east beyond the south-western boundary of the site, with the Trans Pennine Trail running in-

between. A National Grid substation lies immediately to the west of the site boundary, with Skelton Grange Environment Centre beyond.

- 3.3 The residential areas of Halton Moor, Osmondthorpe, Richmond Hill and East End Park are located approximately 1.5km to the north of the site. Stourton lies to the south of the site and river, with Belle Isle and Middleton lying beyond to the south-west, around 2km from the site. Hunslet lies around 1.3km to the west. The northern fringes of Rothwell and the eastern fringes of Beeston lie 1.8km to the south and 3.5km to the west respectively. Newsam Green lies around 2.5km to the east.
- 3.4 The listed buildings of Thwaite Mill and Temple Newsam lie some 500m to the west and 2.5km to the north-east respectively. The Hunslet Mill and Victoria Works complex lies 2.3km to the north-west of the site.

#### **4.0 RELEVANT PLANNING HISTORY:**

- 4.1 The site was formerly part of the coal-fired Skelton Grange Power Station. The power station and its associated infrastructure has since been demolished.
- 4.2 Outline planning permission for B1(c) / B2 / B8 (General Industrial / Storage Distribution Use Classes) was granted over a 24 hectare area in 2007 (ref. 21/279/05/OT). The area covered by this permission is shown in Appendix 4. This includes the proposed ERF site, which measures 9 hectares and is situated to the north-western side of the wider site. All matters were reserved apart from access. The application currently under consideration would not conflict with the implementation of the extant permission.
- 4.3 This 2007 outline permission relates to the wider site owned by RWE, covering the entire former power station area. This permission requires improvement works to be carried out as part of the wider 24 hectare development. For example the phasing of the development, details of boundary walls and fences and construction of roads. Condition 7 of this permission specifically seeks on and off site improvements in accordance with approved plans which includes improvements to Skelton Grange Bridge; Skelton Grange Road; Junction 7 of the M621; Junction 44 of M1; and Junctions of Thwaite Gate / Pontefract Road, Skelton Grange Road / Pontefract Road, Queen Street / Pontefract Road and Queen Street / Wakefield Road. These improvements were required to be implemented prior to occupation of the site.

#### **5.0 HISTORY OF PROPOSAL:**

- 5.1 The applicants made a pre-application presentation to Plans Panel (East) on 5<sup>th</sup> August 2010. The main issues raised by Members following the presentation related to:-
- HGV movements associated with the facility;
  - where the waste would come from;
  - how the site would be regulated and controlled;
  - community consultation;

- relationship with the Council's PFI scheme;
- community benefit fund; and
- impact upon the health of surrounding communities.

- 5.2 Officers and the applicants provided responses and clarification to Members' questions.
- 5.3 Some Members also expressed a wish to visit a comparable facility to enable the process to be understood better. A visit to Sheffield's ERF took place on the 11<sup>th</sup> November 2010 and was attended by several Members and officers. The plant manager provided a comprehensive overview of the process involved and his experiences with running the site. Visitors were shown round the plant.
- 5.4 To further assist Members, at the January 2011 Panel, the Environment Agency provided Members with an overview of their role in the Permitting of such facilities. The presentation and subsequent questions and answers session was aimed at gaining an understanding of the process. {Permitting is the name given to the EA's regulatory process}.
- 5.5 In terms of community consultation, the applicants held a public exhibition at the Leeds College of Building in Stourton (18-19<sup>th</sup> June 2010). Approximately 5,000 leaflets were distributed to residents and businesses in the surrounding area in advance of the exhibition. The leaflet was also sent to Members of the Plans Panels and Members of the application wards and those adjoining.
- 5.6 Officers from the Mineral & Waste Planning, Design, Environmental Health, Policy, Highways and Landscape teams have previously held meetings with the applicants to advise on the Council's general requirements as to the scope of the Environmental Impact Assessment.
- 5.7 A meeting was held with the Environment Agency and the applicants in December 2011 to discuss the Environment Agency's objection relating to the potential for impact upon groundwater. Following the submission of further information from the applicant, the Environment Agency has withdrawn its objection.
- 5.8 Officers have also met on several occasions with the applicants to discuss the potential for refinements to the design of the proposed facility.
- 5.9 Officers presented a Position Statement to Members of Plans Panel (East) on 23<sup>rd</sup> February 2012, providing an update on the progress of the application.
- 5.10 A further Position Statement was presented to Members of Plans Panel (East) on 9<sup>th</sup> August 2012, providing an update on the progress of the application and also clarification on issues raised by Members at the meeting of 23<sup>rd</sup> February 2012. A final Position Statement was presented to City Plans Panel Members on 22<sup>nd</sup> November 2012. The minutes and officer notes from these meetings are appended to this report for ease of reference. The principal matter raised at the meetings related to need / capacity, transportation and link between the ERF and permitted MRF, emissions and the improvement of Skelton Grange Road bridge.
- 5.11 A visit to Mansfield Materials Recovery Facility (MRF) and Sheffield Energy Recovery Facility (ERF) took place on Friday 23<sup>rd</sup> November 2012 and was well attended by both Members and officers. Members of the City Plans Panel were

invited to attend, along with Members from Burmantofts & Richmond Hill, City & Hunslet; Beeston & Holbeck, Rothwell, Temple Newsam, Middleton Park and Garforth & Swillington wards. This was further to the visit to the Sheffield ERF by both officers and Members on 11<sup>th</sup> November 2010.

## **6.0 Community Consultation**

6.1 The Council's adopted Statement of Community Involvement on the Local Development Framework was published in April 2007. This gives advice on community involvement in planning applications and includes a series of appendices giving helpful information on community groups in Leeds, consultation methods and when they would be used. The applicant's submitted Statement of Community Involvement (SCI) complies with the Council's SCI requirements.

6.2 Apart from the statutory advertisements required to be implemented by the Council, the main elements of the consultation process carried out by the applicants were:-

- a presentation to the Skelton Landfill Liaison Group;
- a letter of invitation to the preview of the exhibition sent to local elected Members and other key local stakeholders;
- local distribution of approximately 5,000 descriptive invitation brochures to all households and businesses within a radius of approximately 2km of the site;
- presentations to elected Members, stakeholders and a public exhibition held at the Leeds College of Building on Friday 18th and Saturday 19th June 2010;
- presentation to representatives from 'No 2 Incineration' (N2I) group on 28 September 2010;
- presentation to Leeds East Inner Area Planning Committee on 21 October 2010;
- the creation of an information hotline for telephone, post and email contact and feedback;
- a website with an open forum page at [www.erf-skelton-grange.co.uk](http://www.erf-skelton-grange.co.uk); and
- media coverage and advertisements.

6.3 Following on from the initial consultation process, the applicants have met with the Skelton Environment Centre and have committed to work closely with them to explore the possibility of linking education facilities and learning across the ERF and the Environment Centre, establishing a cycle link, shared car parking facilities and involvement of the Centre in the ERF's landscaping and biodiversity areas.

6.4 As a result of the pre-application consultation exercise, the following changes and amendments were incorporated within the proposals:-

- an undertaking to link employment and learning opportunities associated with the construction phase of the project with Leeds College of Building's students;
- an undertaking to work closely with Skelton Grange Environment Centre;
- an undertaking to maximise the number of trees and vegetation around the site;
- a commitment to establish a Skelton Grange ERF Liaison Committee for the local community and stakeholders;

- a commitment to use best endeavours to source local people for construction and operational jobs from the locality; and
- an undertaking to look into raising further awareness of the need to recycle amongst the applicant's future commercial and industrial customers.

6.5 The applicants confirm that they are committed to maintaining contact with all those interested parties, residents, businesses and stakeholders alike as the planning application progresses. The applicants also intend to continue to encourage community involvement in relation to the development if the application is successful.

6.6 Following feedback from Members at the Plans Panel (East) meeting on 23<sup>rd</sup> February 2012, officers consulted with Ward Members and Area Committee Representatives seeking contacts for specific groups to consult on the proposals. Information and consultation sheets were subsequently dispatched to the list of contacts. All responses received are outlined in the public response section of this report.

6.7 Officers have also held several briefing sessions for Members since the application was submitted.

6.8 Overall in terms of community consultation, the proposals are considered to be in accordance with policy GP9 of the UDP and in line with the Council's Statement of Community Involvement.

## **7.0 PUBLIC / LOCAL RESPONSE:**

7.1 In summary, representations from 12 individuals and / or organisations have been received (14 representations in total).

### Advertising (October 2011)

7.2 The application was advertised in the Leeds Weekly News on 13<sup>th</sup> October 2011 and the 3<sup>rd</sup> November 2011. Site notices were posted on 7<sup>th</sup> October 2011. Four objection letters were received. Issues referred to included:-

- Principle of incineration;
- Impact upon recycling;
- Impact upon human health and air quality;
- Unpleasant aroma in Garforth;
- Cumulative effect of emissions with other industrial plants;
- Emissions from the stack should be designed to result in a total neutral discharge;
- No account taken about safeguarding health & welfare of residents should a major incident occur such as a fire breaking out or explosion taking place;
- No reference to the provision of incorporating monitoring stations to be set up in and around residential areas including Garforth;
- Public information should be available on an internet website on a daily basis to inform residents on the plant's performance in safety terms;
- Weir downstream should be removed;

- Over capacity;
- Traffic impact; and
- Visual impact.

Advertising (submission of EIA Regulation 22 Information – April 2012)

7.3 The additional information received following the Council's Regulation 22 Request was advertised in the Leeds Weekly News on 19<sup>th</sup> April 2012. Site notices were posted on 20<sup>th</sup> April and 4<sup>th</sup> May 2012. A further letter from a previous objector was received in addition to a letter from Leeds Friends of the Earth (FoE), following the advertising of the receipt of this information. Additional issues referred to include:-

- Flood risk and potential contamination;
- Facility should be sited at Skelton Landfill site;
- Development has failed to meet the challenge of climate change – all building surfaces should be covered with solar panels;
- No justification provided that incineration is Best Practical Environmental Option; and
- FoE is unconvinced that current permissible emission levels are adequate. Council should be satisfied that the plant is 'future proofed' in terms of emission levels.

7.4 Following the additional consultation undertaken by officers during August and October 2012, the following representations were received:-

- 2 representations from residents in Dawlish Mount and Vinery Avenue – concern that there are already incinerators in the immediate vicinity and the proposed incinerator will add to the poor air quality. Concern regarding the height of the flue stack and what will come out from them. If there has to be an incinerator built in the area then prefer this site and not the site of the Veolia incinerator;
- A representation from a resident in Raincliffe Street who strongly objects to the scheme. Concerns regarding impact upon health, house prices, traffic congestion, impact on recycling and climate change;
- A representation stating that residents of Richmond Hill and Halton Moor areas have been objecting for years about the proposed incinerator on the former wholesale market site and have always said that if an incinerator was to be built at all it should be at Skelton Grange which is at least 2km from housing, workplaces and leisure facilities. Now that Biffa wish to build an incinerator on this site, the residents sees no reasons why the Council cannot communicate with Biffa to sort out the burning of Leeds waste on the Skelton Grange site. Objects strongly to two incinerators being built only one mile apart and would like to see plans for the Veolia incinerator on the wholesale market site scrapped. Would also have been nice if the planning department had sent a comments form through the post to all residents for them to send in their comments about the Veolia project as has been done for Biffa to make it more of a level playing field. Strongly object to two incinerators being built, burning 500,000 tonnes of waste in one area of Leeds. Consent to one incinerator being built on the Skelton Grange former power station site. Do not consent to Veolia building on wholesale market site;

- A representation from a resident in Aysgarth Place who objects to having an incinerator on Cross Green Industrial Estate due to the alleged health implications and the breathing of toxic waste fumes. States that Skelton Grange sounds ideal as an area for an incinerator as it is not near housing and is well out of the way of everyone. Suggests that the proposal looks nice and great idea but that nobody wants cancer. Should encourage recycling;
- A further representation from a previous objector regarding health, air quality and monitoring;
- A representation from Councillor Lyons on behalf of himself and Councillors Mitchell and Cummins stating that they do not agree with building two waste treatment facilities. There should only be one and that should be sited away from housing. The Councillors call on Biffa and Veolia to work together to develop a preferable option; and
- An objection from Councillor Cummins who states that there should only be one incineration site for the disposal of rubbish, not two as planned and certainly not two in the same area.

Advertising (submission of further information – October 2012)

7.5 Additional information relating principally to the bridge improvements was received from the applicants on 24<sup>th</sup> October 2012. The receipt of this further information was advertised in the Yorkshire Evening Post on 15<sup>th</sup> November 2012. Site notices were also posted on 15<sup>th</sup> November 2012. Full copies of the application were made available at Rothwell Library and Belle Isle Family Centre. No further representations have been received.

## **8.0 CONSULTATION RESPONSES:**

### **8.1 Statutory**

#### 8.1.1 British Waterways

No objection, subject to conditions.

#### 8.1.2 Coal Authority

No objections - the application site does not fall within the defined Coal Mining Development Referral Area.

#### 8.1.3 English Heritage

Recommend that off site planting is considered to assist with preserving the setting of Thwaite Mill and that the application is assessed in accordance with national and local planning policy.

#### 8.1.4 Environment Agency

No objections raised subject to detailed conditions. Encourage the improvement of fish passage at Skelton Grange weir.

#### 8.1.5 Highways Agency

No objection subject to conditions relating to construction traffic management plan and limits to HGV numbers accessing the site during peak hours for the duration of the construction period.

8.1.6 Ministry of Defence  
No objection, as this application relates to a site outside of Ministry of Defence safeguarding areas.

8.1.7 Natural England  
No objection following receipt of additional information.

## **8.2 Non-statutory**

8.2.1 Air Ambulance and Police Air Support  
No objection.

8.2.2 Aire Valley Leeds Programme Team  
The initial application did not appear to provide details on the potential transport and other implications from the future development of surrounding sites in order that informed decisions can be made on what enhancements may be needed to the access road and bridge.

8.2.3 Argiva (TV reception)  
No objection.

8.2.4 Civil Aviation Authority  
No objection – recommend consideration of a low intensity steady red aviation warning light.

8.2.5 Civic Trust  
Support scheme as it fully utilises the site, is a reasonable design for the proposed use and the Trust are encouraged by the optimised layout, aesthetic, scale and massing of the proposal. Understand that ERF will contribute towards district heating but wonder whether there could be provisions for temporary cooling towers until provision for housing is met. Disappointed that proposal does not take advantage of potential for delivery by canal as this would significantly reduce congestion.

8.2.6 Environment Policy  
No objection, subject to conditions.

8.2.7 Health – Health Protection Agency  
No objection to the proposals. Detailed comments on the specifics of the proposed facility will be supplied to the Environment Agency, as part of the requirements of the Environment Permit regime.

8.2.8 Health – Primary Care Trust  
No objection.

8.2.9 Health – Public Health  
No objection - the NHS Leeds position on facilities of this nature is in line with that of the Health Protection Agency (HPA) as outlined in the next paragraph below. *“The Health Protection Agency has reviewed research undertaken to examine the suggested links between emissions from municipal waste incinerators and effects on health. While it is not possible to rule out adverse health effects from modern, well regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health*

*and on the fact that modern and well managed municipal waste incinerators make only a very small contribution to local concentrations of air pollutants. The Committee on Carcinogenicity of Chemicals in Food, Consumer Products and the Environment has reviewed recent data and has concluded that there is no need to change its previous advice, namely that any potential risk of cancer due to residency near to municipal waste incinerators is exceedingly low and probably not measurable by the most modern techniques. Since any possible health effects are likely to be very small, if detectable, studies of public health around modern, well managed municipal waste incinerators are not recommended.” (Health Protection Agency, February 2010).* Other than stating the above position NHS Airedale, Bradford and Leeds have no additional comments to make in relation to the application at this stage.

8.2.10 Highways

No objection – the proposal is acceptable in principle. Further information is required regarding the bridge improvements, the impact of the traffic from the whole site and the impact of the construction traffic on the surrounding road network. Detailed conditions are recommended.

8.2.11 Highways – Access

No objection.

8.2.12 Highways – NGT / Public Transport

No objection - the submitted Transport Assessment gives staff number of around 40 on site. Over half of these would be working in shifts with operation running on a 24 hour basis. The numbers using public transport would therefore be small and below the equivalent thresholds for other uses. Therefore, for the reasons outlined above, no PT contribution is required. The site is located immediately adjacent to the protected public transport alignment through the Aire Valley. The proposed scheme and bridge strengthening would not prejudice that alignment.

8.2.13 Highways – TravelWise Team

The proposal is acceptable in principle. A number of alterations to the Travel Plan (including staff and visitor car parking being separate) and the introduction of shower facilities have been requested. The TravelWise Team has also requested that the possibility of using the application to secure improvements to cycle and pedestrian access to Trans Pennine Trail at the Skelton Grange Bridge is investigated. These changes have now been incorporated by the applicants.

8.2.14 Leeds Bradford International Airport

No objection.

8.2.15 Mains Drainage

No objection in principle. Final details can be submitted via condition.

8.2.16 National Air Traffic Services

No objection – the proposed development has been examined from a technical safeguarding aspect and does not conflict with the safeguarding criteria.

8.2.17 National Grid

No objection.

8.2.18 Neighbourhoods and Housing

No objection, subject to conditions.

- 8.2.19 OFCOM  
No objection.
- 8.2.20 Public Rights of Way  
A Public Footpath (No.1 Rothwell) crosses the site on its south western boundary. This footpath does not appear to be affected by the facility so no objection is raised. The proposed outline design for the new Trans Pennine Trail walking and cycling link across Skelton Grange Bridge including the approach route from the site boundary and the proposed ramp down the SW embankment of the bridge is satisfactory.
- 8.2.21 Ramblers Association  
No response received.
- 8.2.22 RSPB  
No response received.
- 8.2.23 Sustainable Development Unit – Conservation  
Advice has been given regarding off site tree planting to assist with mitigating any potential harm to the Thwaite Mill site.
- 8.2.24 Sustainable Development Unit – Contaminated Land  
No objections subject to conditions and directions being applied.
- 8.2.25 Sustainable Development Unit – Nature Conservation  
No objection, subject to conditions requiring the submission of final detail and long term management.
- 8.2.26 West Yorkshire Archaeology Advisory Service  
There are no apparent significant archaeological implications attached to the proposed development.
- 8.2.27 West Yorkshire Fire Service  
No response received.
- 8.2.28 Yorkshire Water  
No objection subject to water mains within site being diverted under s.185 of the Water Industry Act 1991 (at the applicant's expense). In relation to the bridge improvement works, Yorkshire Water has a right of way over the bridge to the Knostrop Waste Water Treatment Works and requires access at all times. If the bridge is to be closed to facilitate improvement works, Yorkshire Water must be given sufficient notice to make other access arrangements.

## **9.0 PLANNING POLICIES & OTHER MATERIAL PUBLICATIONS:**

### Introduction

9.1 The following are the principal documents that are relevant to the determination of this planning application:-

- Leeds Unitary Development Plan (Review) (Saved Policies) 2006;
- Yorkshire and The Humber Plan (Regional Spatial Strategy) 2008 (RSS);
- Natural Resources and Waste DPD;

- Draft Aire Valley Area Action Plan DPD;
- Draft Core Strategy;
- National Waste Strategy;
- Planning Policy Statement 10 (Planning for Sustainable Waste Management);
- Planning Policy Statement 10 (Update March 2011);
- Planning Policy Statement 10 (Companion Guide);
- Overarching National Planning Statement for Energy (EN-1);
- National Planning Statement for Renewables Infrastructure (EN-3);
- National Planning Policy Framework (NPPF);
- Technical Guidance to the National Planning Policy Framework (NPPFTG);
- National Waste Strategy for England (plus Annexes) (WS2007); and
- Government Review of Waste Policy in England 2011.

9.2 Sections of the following legislation, guidance and reports and are also relevant:-

- European Union Waste Framework Directive;
- European Union Waste Incineration Directive;
- Yorkshire and Humber Regional Waste Strategy (2003);
- Environmental Permitting (England and Wales) Regulations 2010;
- The Waste (England and Wales) Regulations 2011;
- The Community Infrastructure Levy Regulations 2010;
- The Town and Country Planning (Environmental Impact Assessment) Regulations 2011;
- Climate Change Act 2008; and
- Leeds Waste Strategy 2005 – 2035 (2006).

#### Development Plan

9.3 The development plan, at the time of writing, comprises the Leeds Unitary Development Plan (Review) 2006, the Natural Resources and Waste Development Plan Document (NRWDPD) and the Yorkshire and Humber Plan: Regional Spatial Strategy to 2026 (RSS) 2008.

#### Regional Spatial Strategy

9.4 The Yorkshire and Humber Plan, Regional Spatial Strategy (RSS) to 2026, was published in May 2008 by the Government Office for Yorkshire and the Humber. The following policies are considered to be relevant:-

- ENV1: Floods and flood risk
- ENV3: Water quality
- ENV5: Renewable energy targets
- ENV8: Biodiversity
- ENV9: Historic environment
- ENV10: Landscaping
- ENV12: Regional Waste Management Objectives
- ENV13: Provision of waste management and treatment facilities
- ENV14: Strategic locational criteria for waste management facilities

- YH2: Sustainable development
- YH4: Focus development on regional cities
- YH5: Focus development on principal towns
- YH7: Location of development.
- LCR1: Leeds city region sub area policy
- LCR2: Regionally significant investment priorities, Leeds city region

#### Unitary Development Plan

9.5 The site is currently allocated for employment use under policy E4.44 of the adopted Unitary Development Plan. The following non-waste policies are relevant:-

- A4: Design to ensure safe and secure environment
- BD2: Design and siting of new buildings
- BD4: External plant and site layout
- BD5: Design of new buildings
- BD8: Signage
- BD14: Floodlighting schemes
- E4: Land allocated for employment use
- GP5: General planning considerations
- GP7: Use of planning obligations
- GP9: Community involvement in the planning process
- GP11: Sustainable design principles
- GP12: Sustainability assessment
- LD1: Landscaping schemes
- N9: Enhancement of environment corridors
- N12: Urban design principles
- N13: Urban design principles
- N23: Landscape design and boundary treatment
- N24: Landscape design abutting open land
- N25: Landscape design and boundary treatment
- N26: Landscape scheme
- N28: Protection of historic parks and gardens
- N49: Wildlife and habitat resources
- N51: Design and wildlife
- R1: Neighbourhood renewal
- T2: Transport
- T2B: Transport assessment
- T2C: Travel plan
- T5: Pedestrian and cyclist accessibility
- T6: Disabled accessibility
- T7: Promotion of new and improved cycle routes
- T7A: Secure cycle parking
- T7B: Secure motorcycle parking
- T24: Parking guidelines
- T30C: Aerodrome safeguarding

#### Natural Resources and Waste DPD

9.6 The Natural Resources and Waste Development Plan Document (NRWDPD) allocates the site for strategic waste management use. The following policies apply:-

- MINERALS 3: Extraction of coal prior to development
- WASTE 1: Support for proposals meeting capacity requirements
- WASTE 3: Development of network of waste managements sites and principles

WASTE 4:	Waste management to be treated as industrial use of land
WASTE 5:	Waste uses within existing industrial areas
WASTE 6:	Identification of strategic waste management sites
WASTE 9:	Consideration of impacts from waste management facilities
ENERGY 3:	Support for low carbon energy recovery
AIR 1:	Emission measures to ensure overall air quality impact mitigated
WATER 1:	Efficiency of water use
WATER 6:	Flood risk
WATER 7:	Sustainable drainage
LAND 1:	Support for development of previously developed land
LAND 2:	Landscaping

### Emerging Policy

#### Core Strategy DPD

- 9.7 The Publication Draft of the Core Strategy was issued for public consultation on 28th February 2012 and the consultation period closed on 12th April 2012. The Core Strategy sets out strategic level policies and vision to guide the delivery of development investment decisions and the overall future of the district. On 14th November 2012 Full Council resolved to approve the Publication Draft Core Strategy and the sustainability report for the purpose of submission to the Secretary of State for independent examination pursuant to Section 20 of the Planning and Compulsory Purchase Act 2004. Full Council also resolved on 14th November 2012 that a further period for representation be provided on pre-submission changes and any further representations received be submitted to the Secretary of State at the time the Publication Draft Core Strategy is submitted for independent examination.
- 9.8 As the Council have resolved to move the Publication Draft Core Strategy to the next stage of independent examination some weight can now be attached to the document and its contents recognising that the weight to be attached may be limited by outstanding representations which have been made which will be considered at the future examination.
- 9.9 The following policies from the Draft Core Strategy are considered to be relevant:-
- |                    |   |
|--------------------|---|
| SPATIAL POLICY 1:  | Location of development   |
| SPATIAL POLICY 4:  | Regeneration priority programme areas                                     |
| SPATIAL POLICY 5:  | Aire Valley Leeds urban eco-settlement                                    |
| SPATIAL POLICY 8:  | Economic development priorities   |
| SPATIAL POLICY 11: | Transport infrastructure investment priorities                            |
| SPATIAL POLICY 13: | Strategic green infrastructure  |
| POLICY CC3:        | Improving connectivity between the city centre & neighbouring communities |
| POLICY EC1:        | General employment land   |
| POLICY P10:        | Design  |
| POLICY P11:        | Conservation  |
| POLICY P12:        | Landscape   |
| POLICY T1:         | Transport management  |
| POLICY T2:         | Accessibility requirements and new development                            |
| POLICY G1:         | Enhancing and extending green infrastructure                              |
| POLICY G7:         | Protection of important species and habitats                              |
| POLICY G8:         | Biodiversity improvements   |
| POLICY EN1:        | Climate change – carbon dioxide reduction                                 |

POLICY EN2:	Sustainable design and construction
POLICY EN3:	Low carbon energy
POLICY EN4:	District heating
POLICY EN5:	Managing flood risk
POLICY EN6:	Strategic waste management
POLICY ID2:	Planning obligations and developer contributions

#### Aire Valley Area Action Plan

- 9.10 The Aire Valley Area Action Plan (AVAAP) aims to promote the regeneration of the Aire Valley in relation to its natural environment and as a place to live and work. The latest proposals map shows the site within an area allocated for general industry and warehousing. Due to the AVAAP being in a relatively early stage of preparation, its policies content should attract minimal weight in the consideration of this application.

#### Supplementary Planning Documents

##### Tall Buildings Design Guide (April 2010)

- 9.11 This SPD provides guidance as to where tall buildings should and should not be built. The document highlights the importance of design and urban design and seeks to protect the best elements already established within the city.

##### Sustainable Design SPD

- 9.12 The proposals are considered to be in line with the aims of the Sustainable Design SPD as the plant would be a significant producer of low carbon energy which would be supplemented by solar panels on the roof of the office block. This demonstrates compliance with the Sustainable Design SPD requirements and helps make maximum use of the development to provide low carbon energy.

#### Draft Supplementary Planning Documents

##### Travel Plans (September 2012)

- 9.13 The SPD provides guidance on thresholds for when a Travel Plan is required, and what kind of detail, objective and targets it should contain. Although not yet formally adopted, this SPD is in regular use and its approach concurs with that of the Department for Transport's guidance on Travel Plans.

#### Government Policy Statements

##### Planning Policy Statement 10 – Planning for Sustainable Waste Management

- 9.14 PPS10 was published in July 2005 and later revised in March 2011 to take account of the 2008 EU Waste Framework Directive. PPS10 is accompanied by a Companion Guide and is the current national policy document directed at waste-related planning proposals.

##### National Planning Policy Framework

- 9.15 The NPPF does not contain specific waste policies, since national waste planning policy is to be published as part of the National Waste Management Plan for England. However, in taking decisions on waste applications, regard should be had to policies in the NPPF so far as they are relevant.

## National Policy Statements

- Overarching NPS for Energy (EN-1)
- NPS for Renewables Infrastructure (EN-3)

9.16 Although the NPS EN-1 and EN-3 relate to major energy infrastructure, they are material considerations in the determination of this application.

## 10.0 MATTERS FOR CONSIDERATION:

- Principle of development
- Design, appearance, siting and scale of facility
- Landscape & Visual Amenity
- Transport
  - *Construction*
  - *Operational*
  - *Regeneration and access to the wider former power station site*
  - *Bridge Improvement Works*
- Air Quality & Health
- Socio-economic and well-being
- Low Carbon & Renewable Energy Generation
- Combined Heat & Power
- Sustainability & Climate Change
- Noise & Vibration
- Biodiversity
- Surface water & groundwater
- Flood risk
- Cultural Heritage
- Cumulative Impact
- Alternatives
- Representations
- Other Considerations
  - *Materials Recovery Facility*
  - *Skelton Grange Landfill*
  - *Meteorological / Wind Impact*
  - *Transport by waterway*
  - *Aviation*
- Section 106 Agreement

## 11.0 APPRAISAL:

### 11.1 Principle of development

#### Proposed Development

- 11.1.1 The development proposed is for an energy recovery facility (ERF) for the treatment of up to 300,000 tonnes of non-hazardous residual waste per year.

#### Development Plan and Emerging Policy

- 11.1.2 Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires the Local Planning Authorities to determine planning applications in accordance with the development plan unless material considerations indicate otherwise.

- 11.1.3 The development plan, at the time of writing, includes the Leeds Unitary Development Plan (Review 2006) (UDP), the Natural Resources and Waste Development Plan Document (NRWDPD) and the Yorkshire and Humber Plan: Regional Spatial Strategy to 2026 (RSS).

#### Unitary Development Plan (Review) 2006

- 11.1.4 The site is allocated for employment use within the UDP under policy E4.44.
- 11.1.5 In terms of the development proposed, the principle is therefore acceptable in terms of the UDP. It is considered that the Leeds UDP policies should attract full weight in the determination of this application.

#### Natural Resources and Waste DPD

- 11.1.6 The Natural Resources and Waste DPD, adopted on 16<sup>th</sup> January 2013, allocates the site for strategic waste management use. Policy WASTE 6 describes the allocation.

#### WASTE 6: Strategic Waste Management Sites

- 11.1.7 The sites identified on the proposals map and described below are allocated as strategic waste management sites suitable for major residual waste treatment, including Energy Recovery, and for the co-location of other supporting facilities where it can be shown these are ancillary to the main operation:-

- Former Skelton Grange Power Station Site;
- Land within Knostrop Waste Water Treatment Works;
- Former Wholesale Markets Site, Cross Green Industrial Estate.

- 11.1.8 These sites will remain allocated for such uses for the duration of the plan. Other non waste management uses, including employment, will only be acceptable if it can be demonstrated that a site is no longer required to meet the strategic waste management needs of the Council's area.

- 11.1.9 Policy WASTE 1 confirms that proposals which meet the future capacity requirements of waste arisings to achieve self sufficiency and demonstrate they support the waste hierarchy will be supported at safeguarded waste management sites such as this site. Policy WASTE 3 supports the development of a network of waste management sites, including strategic waste management sites to meet the needs for major residual waste treatment including energy recovery.

11.1.10 It is considered that the principle of the development proposed is therefore acceptable in terms of the NRWDPD. The NRWDPD policies should attract full weight in the consideration of this application.

#### Regional Spatial Strategy

11.1.11 The Yorkshire and Humber Plan, Regional Spatial Strategy (RSS) to 2026, was published in May 2008 by the Government Office for Yorkshire and the Humber. In June 2010 the Coalition Government announced its intention to abolish the regional tier of development planning and revoked the Regional Strategies. However, in November 2010, a High Court ruling reinstated the RSS. Therefore, for the time being, the RSS remains part of the development plan and must therefore be taken into account in determining this application.

11.1.12 The RSS sets targets for grid connected renewable energy capacity and seeks to encourage the reduction, reuse and recycling of as much waste as possible. There is support for the urgent provision of a combination of facilities and other waste management initiatives based upon moving the management of all waste streams up the hierarchy.

11.1.13 The proposals are considered to be in accordance with relevant RSS policies. However, although the RSS is a part of the development plan, it is due to be revoked on 22<sup>nd</sup> February 2013 (with the exception of the York Green Belt policies). By definition therefore, the RSS policies will carry no weight from 22<sup>nd</sup> February 2013 and have been afforded very little weight by officers in reaching a recommendation on this application. Having said this, the officer view is that the absence of the RSS policies would not materially affect the planning balance in relation to this planning application.

#### Aire Valley Leeds Area Action Plan

11.1.14 The Aire Valley Leeds regeneration area has been identified as one of Leeds City Region's four Urban Eco Settlements (UES), a designation which is recognised formally under draft Policy SP5 of the Core Strategy.

11.1.15 The Aire Valley Leeds Area Action Plan (AVAAP) is being prepared to promote the area as a low carbon community, delivering new jobs and homes as part of a sustainable regeneration programme. Earlier work on the AAP has recognised the potential of the area to provide waste management facilities which have the potential to be linked to district heating networks providing low carbon energy to support new and existing homes and businesses.

11.1.16 The AVAAP (Preferred Options) confirms that, based on site selection criteria that recognise national and waste planning guidance and an appropriate site area threshold, the most likely locations for waste management facilities are:-

- Former wholesale market;
- Knostrop;
- Knostrop (Yorkshire Water surplus operational land); and
- Skelton Grange.

11.1.17 In principle, the proposals are considered to be in accordance with the wider aims of the AVAAP. Due to the AVAAP being in a relatively early stage of preparation, its content should only attract minimal weight in the consideration of this application.

### Core Strategy

- 11.1.18 The draft Core Strategy recognises that substantial potential exists for energy from waste through the provision of strategic waste management facilities to deal with municipal waste and commercial and industrial waste.
- 11.1.19 The strategy for meeting this need is as follows:-
- (i) A strategic site for municipal waste treatment in the Aire Valley;
  - (ii) A strategic site for non-municipal waste management in the Aire Valley;
  - (iii) Safeguarding of a range of existing waste sites across the District, including household waste sites;
  - (iv) Identification of existing industrial estates which are suitable, and have capacity, for waste management purposes; and
  - (v) Restriction on new landfill provision in the district, unless a local need can be demonstrated.
- 11.1.20 In principle, the proposals are considered to be in accordance with relevant policies within the Draft Core Strategy. Due to the Core Strategy being at a relatively early stage of preparation, its policies should only attract limited weight in the consideration of this application.

### National Planning Policy Framework

- 11.1.21 The NPPF does not contain specific waste policies, since national waste planning policy is to be published as part of the National Waste Management Plan for England. However, in taking decisions on waste applications, regard should be had to policies in the NPPF so far as they are relevant.
- 11.1.22 In more general terms, the NPPF applies a presumption in favour of sustainable development. This presumption in favour of sustainable development is accompanied by a set of core planning principles which should underpin both plan-making and decision-taking.
- 11.1.23 The NPPF emphasises that the planning system should focus on whether a development is an acceptable use of the land and the impacts of the use, rather than the control of processes or emissions, which are subject to approval under pollution control regimes.
- 11.1.24 It is considered that the proposed development would be in line with the aims of the NPPF as the scheme would support sustainable economic development by:-
- assisting in the provision of such infrastructure and through the investment of a substantial capital in the region of £several hundred million which will, in turn, contribute to wider economic growth;
  - being of a high quality design;
  - using travel plans during the construction and operational phases to encourage the use of sustainable transport, including public transport, walking and cycling;
  - generating low carbon and renewable energy;
  - by locating the ERF in a sustainable location away from communities yet geographically central to a large number waste producers and close to potential future consumers of heat energy from the plant;
  - conserving and enhancing the natural environment and reducing pollution when compared to the current practice of landfilling such waste; and
  - by re-using land that has been previously developed.

11.1.25 It is considered that there is therefore a presumption in favour of the proposed development unless it is concluded that any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole. The NPPF is a material consideration of very significant weight.

Planning Policy Statement 10 – Planning for Sustainable Waste Management

11.1.26 PPS10 was published in July 2005 and later revised in March 2011 to take account of the 2008 EU Waste Framework Directive. PPS10 is accompanied by a Companion Guide and is the current national policy document directed at waste-related planning proposals.

11.1.27 The overall objective of Government policy on waste is to protect human health and the environment by producing less waste and by using it as a resource wherever possible. By more sustainable waste management, moving the management of waste up the ‘waste hierarchy’ of prevention, preparing for reuse, recycling, other recovery, and disposing only as a last resort, the Government aims to break the link between economic growth and the environmental impact of waste. This means a step-change in the way waste is handled and significant new investment in waste management facilities. The planning system is pivotal to the adequate and timely provision of the new facilities that will be needed.

11.1.28 It is considered that the detail provided in support of the planning application demonstrates that the proposed scheme would contribute towards the key planning objectives set out in PPS10. PPS10 is a material consideration of very significant weight.

Government Review of Waste Policy in England 2011

11.1.29 The Government Review of Waste Policy in England 2011 sets out the objective of aiming 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 last resort. There is therefore a clear requirement to drive the treatment of waste up the hierarchy away from landfill. The Review provides support for EfW facilities such as that proposed, not only in the context of waste management but also having regard to low carbon / renewable energy provision and climate change.

Waste Strategy for England 2007

11.1.30 Waste Strategy 2007 builds upon the 2000 version and continues the general aim to manage waste and resources better, with the objective of delivering more sustainable development. The essential element of the strategy is to reduce the volume of biodegradable municipal solid waste that is deposited at landfill sites, in line with the requirements of the Landfill Directive.

11.1.31 As part of the sustainable management of waste, the strategy emphasises that the reliance on landfill as an option cannot continue in the way that it has in the past. The statutory targets mean that more biodegradable waste will be diverted to recycling and recovery facilities, such as materials recycling facilities (MRFs) or energy from waste (EfW) plants as part of a well-balanced energy policy.

11.1.32 It is considered that the proposed scheme would be in accordance with the thrust of national waste policy contained in PPS10, the Government Review of Waste Policy 2011 and the Waste Strategy for England 2007.

### Conclusion

- 11.1.33 The application site is allocated as a Strategic Waste Management site within the NRWDPD. The site is also allocated as an employment site within the UDP. The principle of the proposed use for this site as an Energy Recovery Facility is therefore considered to be in accordance with the development plan and other material considerations as outlined above. The proposed development is therefore considered to be acceptable in principle, subject to the following detailed assessment of issues in this report.

## **11.2 Design, appearance, siting and scale of facility**

### Concept & Philosophy

- 11.2.1 The design of the facility set out to focus on the integration of its main operational functions of energy and heat generation within an overarching building envelope. In considering this, the applicant has recognised the challenges that a structure of this size and scale presents. The design attempts to integrate the functional requirements of the process technology and the need to contain the visual appearance whilst recognising the site's currently open location within a valley setting. Although the existing and anticipated future context is industrial, there has been a conscious desire to create a building with architectural merit in its own right, albeit using materials consistent with its setting and intended use.

### Building Design – Scale / Mass / Form / Details

- 11.2.2 The heights of the main building and flue stack would not be dissimilar to the main building and cooling towers of the former power station buildings.
- 11.2.3 The proposed building form is predominantly curved in appearance and is separated into a series of volumes which each relate to specific functions e.g. tipping hall, boiler hall and turbine hall.
- 11.2.4 The boiler hall presents the highest point of the building, effectively flanked by two wings which curve downwards at either end following the plant and the operational requirements within. Although this suggests a relatively simple design approach, the plan form reveals the asymmetry of the building, and the challenge that the architect has met in bringing all of the components into a coherent and balanced whole.
- 11.2.5 The imposing scale of the building has been mitigated in a number of ways, by curving the elevations and roof lines as already mentioned, but also by breaking down each wing with additional uncomplicated details, preserving the original design intent, but sitting more comfortably against the varied backdrop of the city centre.

### Materials

- 11.2.6 In terms of materials and colours, the cladding of the main building would have a dark coloured base (blue), with upper sections a lighter blue, semi-reflective metal composite to allow the structure to take on the tones of its surroundings and sky. Sections of the building would comprise translucent panels (polycarbonate) to provide diffused natural internal lighting and to allow limited direct light spillage from within adding interest to night time views. The mass of the building is now proposed to be further broken down by vertical translucent strips, also polycarbonate, adding needed detail to what otherwise could be considered overlarge façades. The roof and gable ends of the building would be finished with a combination of stucco

embossed mill finish aluminium and translucent panels. The central office section is proposed to take the form of a projecting cube and would have a reflective glass façade. Additional low level lighting would run around the base of the building, adding further interest to night time views.



View of Proposed ERF

#### Layout

- 11.2.7 The site itself is orientated perpendicular to the adjacent waterways and in keeping with the general 'grid form' of the Cross Green Industrial Estate.
- 11.2.8 On site circulation has been optimised for the greatest operational efficiency, leaving valuable additional land for naturalised landscape, and making an important contribution to Green Infrastructure in the Aire Valley.
- 11.2.9 Visitor traffic is quickly removed from operational traffic movements onsite, with parking safely located adjacent to a more formal landscaped area designed to provide an appropriate and high quality setting relating directly to the office accommodation.

#### Planning Policy Statement 10

- 11.2.10 PPS10 comments that good design and layout in new development can help to secure opportunities for sustainable waste management, including for kerbside collection and community recycling as well as for larger waste facilities. It also says that planning authorities should ensure that new development makes sufficient provision for waste management and promote designs and layouts that secure the integration of waste management facilities without adverse impact on the street scene or, in less developed areas, the local landscape. Finally, PPS10 suggests that waste management facilities in themselves should be well-designed, so that they contribute positively to the character and quality of the area in which they are located.

### Design Process and Evolution

- 11.2.11 The scheme was first presented to officers in 2009 and the applicant has maintained an open and positive attitude throughout the application process.
- 11.2.12 The scheme has also been presented to the Design Advisory Group on several occasions, receiving a positive reception from the outset as the initial proposals started from a very high level, both in terms of the built form and the site layout. Modifications and refinements were proposed at each session, and the applicant has cooperated at every stage in helping to improve the designs.
- 11.2.13 The applicants have produced amended plans showing two vertical polycarbonate strips to each of the four main shells / facades to the building. Additionally, the aluminium roofing material has been 'rolled' down to the bases of the ends of the building. The aluminium would be rolled on site so that continuous lengths can be formed over the length of the building to minimise and avoid joints; significantly reducing the risk of future maintenance. The appearance of the offices has been changed significantly to create a more coherent central block and instead of the previous, rather cage-like, brise soleil (angled sunscreen that provides shade from the summer sun but allows winter sun to enter the building) solution, the offices would now be constructed from large rectangular panels of reflective glazing.

### Independent Reviews

- 11.2.14 In terms of design, Leeds Civic Trust's Planning Committee supports the proposals as they consider that the scheme fully utilises the site; is a reasonable design for the proposed use and they are encouraged by the optimised layout, aesthetic, scale and massing of the proposal.

### Plans Panel Feedback

- 11.2.15 Following the feedback from the 23<sup>rd</sup> February 2012 Plans Panel (East) meeting, further reviews were undertaken, with the applicants being asked to explore further refinements to the design, particularly in relation to the appearance of the office structure at the front of the building, which they subsequently addressed. The final revised scheme was presented to Members of City Plans Panel on 22<sup>nd</sup> November 2012 and received positive feedback, particularly in relation to the revisions that had been made to the office section of the building.
- 11.2.16 In conclusion, it is considered that the proposed design is of a high standard and is of an appropriate scale for this particular location and for this type of development. Although the proposed structure is large in scale, it can be accommodated well within the existing landscape and has the potential to become a positive landmark within the Aire Valley over the longer term.
- 11.2.17 Overall in terms of design, the proposals are considered to be in accordance with policy WASTE 9 of the NRWDPD, policies A4, BD2, BD4, BD5, N12, N13, N23, N24, N25 and N51 of the UDP and policy P10 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

### **11.3 Landscape & Visual Amenity**

- 11.3.1 An extensive landscape and visual assessment has been undertaken by the applicant. The assessment includes several photomontages, visual representations and modelling and is useful in determining the likely visual impact of the proposals in the context of the surrounding area.
- 11.3.2 In visual terms, the site is located on the floor of a shallow valley. There would be open views of the upper part of the main building and chimney stacks from the valley edges and from within surrounding residential settlements on the upper valley slopes. The assessment concludes that the main ERF building would have a significant presence from some viewpoints within a radius of around 2km from the site. However, due to the urban setting and the presence of intervening buildings and vegetation, such significant effects would be limited in extent beyond this distance, where the majority of rights of way, residential and recreational receptors are located.
- 11.3.3 The proposed development is large in scale and height and the main building mass, chimney stacks and plume all have potential to be visible depending upon conditions. The main approach to mitigation has focused on the delivery of a building of high quality with consideration given to context, orientation, design and layout.
- 11.3.4 Landscaping and biodiversity areas are proposed within the site which would complement the ERF building and also improve the existing landscape appearance and character of the vicinity of the site.
- 11.3.5 Additional planting along the northern bank of the River Aire is proposed, to replace and complement the existing rather poor quality tree belt. This would soften the appearance of the site when viewed from the south and, in particular, from the existing route of the Trans Pennine Trail.
- 11.3.6 In landscape terms, whilst it is clear that there would be some significant effects in terms of visual impact, the overall character of the area would remain as an urban industrial site, similar to that of the surrounding industrial zone where large scale industrial buildings, power lines and strategic highways are frequent.
- 11.3.7 There is no doubt that a structure such as that proposed would be visible from various locations in the vicinity. The main ERF building would be most visible from the M1 to the east and also from the A63 East Leeds Link Road when travelling from the M1 junction (J45) towards the city.
- 11.3.8 It is important to also note the wider context of the land surrounding the site and, in particular, the land between the site and the M1 and East Leeds Link Road. This land has outline permission for large scale warehouse development which is likely to be constructed within the next few years.
- 11.3.9 The views represented from the north and east are therefore likely to change considerably as the warehouses are constructed and the ERF building would become far less conspicuous than shown in the photomontages.
- 11.3.10 The ERF would be visible from the northern edges of Rothwell and also from Halton Moor, although from both directions, the building would be set against a backdrop of existing industrial development. The view from Halton Moor is also likely to

change considerably over the next few years, as the outline consent for development on the Skelton Moor Farm site to the south of Halton Moor is likely to be developed, meaning that it would be unlikely to gain views of the ERF in the longer term from the majority of locations.

11.3.11 The flue stack from the ERF would be visible over a longer distance, although because they are of a slim design and of a grey colour, they are unlikely to stand out against the sky in most situations.

11.3.12 Summary of views:-

- From the north (Halton Moor), the ERF would be visible against the industrial backdrop of Stourton, with the Knostrop sewage works in the foreground. Large scale warehouse development is also anticipated in between and to the east which would diminish and possibly obscure views of the bulk of the ERF building completely from some locations;
- From the south, the main views of the site would be from the elevated land towards Rothwell. These are relatively distant views, looking down towards the site, against the backdrop of Cross Green Industrial Estate and Knostrop sewage works. The existing National Grid substation would also form part of this backdrop with its associated high voltage pylons. The grounds of Temple Newsam are also visible in the distance from this viewpoint, but as the ERF would effectively form an extension to the existing industrial group of buildings the overall character of the view would not change to a significant degree;
- From the west views are available from the approach to Thwaite Mill and the surrounding area. The majority of views would be from existing industrial premises. Other views from areas further to the west including Hunslet, would be over a considerable distance and would largely be filtered by existing structures. The ERF would be visible from the Skelton Grange Environment Centre, located just to the west of the site, although the existing substation and several pylons lie in-between, along with a mature deciduous tree belt;
- From the east, the site would be visible from the M1 when travelling in both directions. These would be transient views and again, the building would be seen against the existing industrial backdrop and the wider cityscape in the distance. Views from the East Leeds Link would widely available and although transient, views of the site would be available along a long stretch of the road when driving towards the city from the M1. Views of the site from this direction would diminish significantly as the intervening land is developed with large scale warehousing; and
- From public areas close to the site, the main views would be from the Trans Pennine Trail which is set down below the level of the site, in between the River Aire and the Aire & Calder Navigation. The intervening tree belt along the northern bank of the river would soften the views of the site, particularly during the spring / summer / autumn months when the trees are in leaf. The ERF building would be most visible when travelling along the footpath towards the city from the east until reaching the Skelton Road bridge.

11.3.13 Whilst views of the site would be possible from the various locations described, none are considered to be overbearing or overly dominant. The starkest views of

the site would be gained from around Thwaite Mill and from an adjacent section of the Trans Pennine Trail.

- 11.3.14 The ERF building is considered to be of a high quality design and suitable for a location such as that proposed. The proposed materials would help the building assimilate into the landscape as they would take on different tones as the lighting and angle of view changes.
- 11.3.15 At night, a soft glow would be visible from the translucent polycarbonate sections of the buildings on the western and eastern facades and also along the central section of roof. The central section of the building would emit a soft glow, and the office block section would also be visible. Low level lighting is also proposed below the upper section of cladding to provide lighting around the base of the structure.
- 11.3.16 Natural England is satisfied that the development would not have a significant detrimental impact on landscape character, due to the previous use of the site and the industrialised nature of the surrounding area. They also consider that the proposed landscaping would help to mitigate any visual effects.
- 11.3.17 In terms of the landscaping detail proposed in and around the site, the Council's Landscape Officer notes that the landscape scheme which, whilst formalised in nature more immediately around the development, is bounded by more informal screen planting to the outer reaches and boundaries. He considers this is a sensible way to develop the site, assuming a sufficient and consistent screen buffer can be provided for setting and amenity. The building would be a large built form which cannot be 'hidden from view' and is of the opinion that effort has clearly been made to develop a positive and hopefully iconic architectural form.
- 11.3.18 The western and eastern boundaries have the potential for developing adequate buffer planting, as new planting and/or supplementing suitably-managed existing planting. The northern boundary comprises a narrow band of planting comprising a hedgerow.
- 11.3.19 The southern boundary is reliant upon existing off-site planting adjacent to the river, although the main building is set back from this boundary.
- 11.3.20 The proposed improvements to Skelton Bridge Road and the actual bridge structure need to provide due consideration to visual amenity, in protecting existing vegetation and providing suitable enhancements through new planting works. The design of the bridge would also have the potential for impact upon the amenity of users of the river corridor. Consideration also needs to be given to minimising the 'engineered' appearance of design solutions to the bridge.
- 11.3.21 The detail of the landscape proposals would be submitted within a scheme required by condition if permission is granted. The landscaping would also need to be supported by a comprehensive long-term management plan which seeks to ensure the sustainable development of a long-term landscape structure for at least the lifetime of the development and which could be developed as a long-term asset for the Aire Valley beyond that time.
- 11.3.22 Overall, the Council's Landscape Officer is positive in relation to the development proposals. It is noted that further detailed work will be needed as discussed above, but it is considered that conditions could be applied to any grant of permission to require detailed schemes and management plans to be submitted.

### Plume Visibility

- 11.3.23 As with all developments of this nature, there is potential for a plume to be generated from the flue stack. The plume consists largely of water vapour. Air can only hold a certain amount of water vapour; once it is saturated, additional vapour would condense into droplets and if dense enough would become visible.
- 11.3.24 Plume visibility is determined by the temperature and moisture content of the plume and subsequent dispersion and the temperature and moisture content of the ambient atmosphere.
- 11.3.25 The applicants have modelled the potential plume visibility and this indicates that a plume would be visible for 23% of the hours in an average year and the average plume length would be 40m. It should be noted that this includes night time hours and therefore it is clear that a large proportion of the hours that the plume is visible would occur at night when ambient temperatures fall.
- 11.3.26 The modelling carried out by the applicants predicts that the plume length would vary between 1m and 179m in length, with the plume length being between 20m and 90m in length for most of the time. The maximum plume length of 179m is predicted for the single hour in the year with the longest plume length. The modelling predicts that, during the time when the plume is visible, the plume length would be less than 54m for 75% of the time.
- 11.3.27 Due to the prevailing wind direction it is probable that the plume direction would most frequently be to the east. The plume would generally appear white or pale grey.

### Summary

- 11.3.28 In overall landscape terms, the application site is considered to have a low sensitivity to development of this type. The overall magnitude of change to the landscape is considered to be low and neutral due to the introduction of a large scale, distinctive industrial building within the relatively urban setting of the Lower Aire Valley onto a site which has previously accommodated a much larger scale development in the form of a coal fired power station.
- 11.3.29 In relation to landscape character, the proposed development would not give rise to any significant effects in relation to an increase in scale of the existing industrial urban setting. There are beneficial effects in relation to the enhancement of the site by the introduction of a landscape structure that would contribute to local biodiversity action plan (BAP) targets and improve the condition of the existing landscape resource.
- 11.3.30 In visual terms, the site is located on the valley floor. There are open views of the upper part of the main building and chimney stacks from the edges and from within surrounding residential settlements on the upper valley slopes. There would be significant views from some locations within a 2.1km radius of the application site. However, due to the urban setting and the presence of intervening buildings and vegetation, these significant effects are limited in extent beyond 2.1km where the majority of rights of way, residential and recreational receptors are located. It is also noted that the permitted outline development already allows a large scale industrial development to occur on this site, which would give rise to a not dissimilar degree of visual impact over the locality.

- 11.3.31 The proposed development is large in scale and height and the main building mass, chimney stacks and plume all have potential to be visible depending on conditions. The main approach to mitigation has focused on ensuring a high quality design of building, with consideration given to context, orientation, design and layout. In terms of other mitigation, there are proposals for significant landscaping to the site's boundaries which would assist with softening close up views and would also improve the site's existing landscape appearance and character.
- 11.3.32 In summary, it is considered that although the ERF is a large scale structure, it can be accommodated well into the existing industrial location. Although views of the site would be possible, it is considered that no unacceptable visual harm would result from any significant viewpoints. However, a degree of impact upon views from the Trans Pennine Trail and Thwaite Mill and also upon distant views of the site from residential areas at the northern edge of Rothwell and Halton Moor, would be unavoidable and therefore this should be afforded considerable weight.
- 11.3.33 Overall in terms of landscape and visual impact, the proposals are considered to be in accordance with policies ENV10 of the RSS and policies WASTE 9 and LAND 2 of the NRWDPD and policy P12 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## **11.4 Transport**

- 11.4.1 As previously discussed, the extant outline planning permission sought to establish principle and access. The vehicular access into the site is proposed to be via Skelton Grange Road off Pontefract Road (Stourton). To enable the site to be satisfactorily accessed and not to introduce harm to the free flow of the highway network a number of on and off site measures were secured under the outline permission. These included improvements to Junction 7 of the M621, Junction 44 of the M1, a number of local junctions, and bus stops on Pontefract Road and Wakefield Road. The predicted traffic level accessing the site was such that the Skelton Grange Road Bridge enhancements took the following form:-
- The introduction of a pedestrian cantilever to enable a 6.7m wide carriageway and 3m shared footway/cycleway;
  - Undertake strengthening/widening as required;
  - Provide street lighting along the un-adopted section of Skelton Grange Road; and
  - Continue the existing footway along the south of Skelton Grange Road.
- 11.4.2 In relation to the ERF, the access arrangement for vehicles are the same as those made under the outline permission. In order to upgrade the privately owned bridge and to allow for 40 / 44 tonne vehicle loading, the following improvement and strengthening works were originally proposed to be undertaken by the applicant:-
- widening of the east footway;
  - reconstruction of the stringcourses (edge beams) to accommodate new parapets;
  - strengthening to the half-joints / connections where the central supported sections span to the next main structure;
  - provision of a new waterproofing layer;

- provision of new road surfacing;
- provision of new road joints;
- traffic lights;
- installation of new proprietary kerb drainage system;
- attachment of concrete pads to accommodate new lighting columns; and
- installation of new post and rail parapets to steps serving the footpath (Trans Pennine Trail).

11.4.3 The implementation of the above works would provide a structure capable of carrying 40 / 44 tonne vehicles with a single lane, traffic light controlled, to avoid two vehicles meeting on the bridge, and a 3m combined foot / cycleway. These works could be carried out without the need to alter the width of the existing bridge deck.

11.4.4 It is anticipated that traffic movements would comprise the following (all figures are 'worst case'):-

Construction (initial 26 month period)

11.4.5 Initially 72 HGV movements (36 in / 36 out) per day (for first 12 months), followed by 50 HGV movements (25 in / 25 out) per day. Around 300 construction staff would work at the site during the construction period and therefore there would be around 400 light vehicle movements (200 in / 200 out) per day. A Travel Plan would be in force to encourage use of public transport by staff and contractors.

Operational

11.4.6 Once operational, the facility is expected to produce 192 HGV movements (96 in / 96 out) and 80 light vehicle movements (40 in / 40 out) per day. Again, an operational Travel Plan would be in force.

11.4.7 As part of the applicant's waste management network in Leeds, the applicants also have an extant planning permission to develop the former British Oxygen (BOC) site on Gelderd Road as a Materials Recovery Facility (MRF). The MRF would initially accept around 90,000 tonnes of waste materials per year, increasing to around 200,000 tonnes per year in the longer term. The residual waste remaining after the recycling / recovery process at the MRF would be taken to the ERF. Following discussion at the 23<sup>rd</sup> February 2012 Plans Panel (East) meeting, clarification was requested on the numbers and routing of HGVs moving between these two sites. It can be confirmed that the route from the future Gelderd Road MRF would be via the A62, A6110 Ring Road onto the M621 at junction 1 and then leaving the M621 at Junction 7, onto the B6481 (Pontefract Road) via the A61 / A639 and then along Skelton Grange Road into the site. The distance of this route is approximately 5 miles and avoids residential areas. The requirement to use this route would be incorporated into the legal agreement. Around 62,000 tonnes of residual waste would arrive at the ERF from this site in the short term, rising to 78,000 tonnes per year longer term. The average payload for the vehicles transporting the material between sites is 20 tonnes and therefore this would equate to around 10 loads per day travelling to the ERF from the Gelderd Road MRF longer term. The applicants are willing to include this specific route between the MRF and ERF within the legal agreement.

11.4.8 As discussed above, the outline permission incorporates a number of off-site improvement works. Considering the ERF would be a relatively low peak hour trip

generator, have a flow spread throughout the day and not involve significant use of motorway junctions due to the trips being locally generated there is no apparent justification for highway works further a field. However, as previously identified, the ERF does not incorporate the whole site as identified by the outline permission. The scenario of the ERF plus remainder of the outline has not been tested in regards to the junctions examined under the outline application. The extant permission gives consent for B1, B2 and B8 uses which generally place a heavier burden on the highway network than an ERF.

- 11.4.9 Skelton Grange Road bridge is currently the only way vehicles could access the proposed ERF and wider site. Therefore, there is a need to ensure that the proposed enhancements to the bridge serve both the present development and that of the future. Using traffic flows from the 2005 and 2011 Transport Assessments, the Highways Urban Traffic Control team have devised a simple Linsig model that showed, even with a significant inter-green to allow the bridge to clear before the opposite flow could commence, there is ample capacity for this proposal, along with the traffic that could potentially be generated by the adjacent site.
- 11.4.10 In maintaining the safe and free flow of the highway network, the initially proposed bridge enhancements proposed were considered satisfactory. However, when weighing up the wider planning balance, Members and planning officers questioned whether this solution in terms of practicalities and design was the best approach in attracting investment to the remainder of the former power station site and whether the proposed development should make a contribution towards the wider infrastructure requirements required under the existing outline consent.
- 11.4.11 The applicants were also requested to consider use of the Aire & Calder Navigation for the transportation of waste as highlighted within the Aire Valley Area Action Plan. However, in this instance, it is accepted that the use of the commercial waterway is not practicable due to the fact that the applicant's transfer station is not located adjacent to the waterway network, so loading waste containers onto barges for the short distance would involve additional transport and double or treble handling. This matter is discussed in more detail later in the report.

#### Regeneration and access to the wider former power station site

- 11.4.12 The Aire Valley is a major regeneration area with significant capacity to provide land for the planned growth of the city. The Council recently confirmed its commitment to supporting economic growth in Aire Valley Leeds through the adoption of a new Leeds Growth Strategy (getting Leeds Working) and through the publication of the emerging Core Strategy.
- 11.4.13 The proposed ERF site is at the south-western extent of a number of sites earmarked for future development. This objective is recognised within the Core Strategy and in more detail within the Aire Valley Area Action Plan (AVAAP) which is currently in draft form (publication draft is expected mid 2013). It is important that the access arrangements for the ERF development do not compromise the longer term development of adjacent sites. A range of infrastructure measures are identified within the AVAAP including a network of roads to service individual sites and the provision of public transport links into the area.
- 11.4.14 Through the Aire Valley Leeds programme, the Council has been working with the landowners and other stakeholders in the area. This is designed to facilitate a joined up approach to development with the objective of ensuring that sustainable new neighbourhoods are delivered, bringing new jobs to the city, which are

accessible to local people. The bridge provides the only access into this substantial area from the south. It is therefore particularly important that the long term development of the river crossing and access arrangements is considered in conjunction with the wider development of the other sites adjacent to the application site.

11.4.15 Outline planning permission for B1(c) / B2 / B8 (General Industrial / Storage Distribution Use Classes) was granted over the wider 24 hectare area in 2007 (ref. 21/279/05/OT). The area covered by the consent includes that of the proposed ERF site, which measures 9 hectares and is situated within the north-western section of the wider site.

11.4.16 Condition 7 of the outline permission specifically imposes a requirement for on and off site highway improvements, to be completed prior to the occupation of the site, including:-

- improving the unadopted section of Skelton Grange Road (resurfacing and provision of lighting);
- improvements to Skelton Grange Bridge comprising structural strengthening and resurfacing to restore a 6.7m carriageway;
- the addition of a new cantilevered section to the east side of the bridge to provide a dedicated 3m wide footway for cyclists and pedestrians;
- construction of new steps to either end of the bridge to connect the Trans Pennine Trail;
- M621 – Junction 7 – Widening of east-bound off-ramp onto A61 from 2 to 3 lanes; localised widening of the A61, and the signalisation of this junction;
- M1 – Junction 44 – widening of south-bound slip road and widening of Pontefract Road at the J44 roundabout;
- signalisation of the Queen Street / Pontefract Road junction;
- improvement to pedestrian facilities at the signalised junction of Skelton Grange Road and Pontefract Road;
- provision of bus shelters and real time bus information displays on Pontefract Road; and
- contribution to proposed improvements at the junction of Pontefract Road / Thwaite Gate.

11.4.17 Clearly it would not be considered reasonable for the applicants of the ERF site to implement all the improvements required as part of the outline permission as the ERF development is a far less traffic intensive use. However, many of the above have now been incorporated into the current scheme following discussion with officers.

#### Bridge Improvement Works

11.4.18 The original carriageway width of the bridge measured 6.7m between kerbs and is currently restricted to 4.0m by the use of safety kerbs. The application proposes restoring the bridge to its full carriageway width of 6.7m to allow two-way traffic and the integration of a cantilevered footpath and cycleway. A section of Skelton Grange Road and the entire bridge structure is owned by the RWE nPower (the landowners of the application site) and would remain in their ownership if the development proceeded. The maintenance requirements for the road and bridge

would also remain with RWE nPower and contributions to maintenance would be made by future developers under a private agreement between those parties. However, the landowners would be prepared to discuss the potential adoption of the road and bridge with the Council and the appropriate commuted sum that would be necessary if this is desirable. The improved ramped access down to the Trans Pennine Trail which is proposed as part of the application could be adopted as a Public Rights of Way, should the Council be minded to do so. However, Public Rights of Way have suggested that this is unlikely and a more preferable solution would be for the applicants to either undertake the maintenance themselves or provide a commuted sum for the Council to undertake such works.

11.4.19 Highways were of the opinion that the initially proposed one-way signalled controlled operation on the bridge had the capacity to cater for the proposed development and the remainder of the extant outline permission. However, following the meeting of City Plans Panel on 22<sup>nd</sup> November 2012, although it is noted by the Highway Authority that the proposal as originally submitted was considered acceptable in highways terms, the need to ensure that the access solution did not compromise or deter future development on adjacent sites was emphasised. The applicants fully recognise that there remains a desire by the Council to realise comprehensive improvements to enable two way traffic on the bridge to be delivered as part of this project, in addition to the bridge strengthening and other footpath improvements already proposed. The applicants are now willing to accept a condition which requires the delivery of these improvements and have provided details and plans of how this would be achieved. A detailed scheme would be required to be submitted prior to development commencing.

11.4.20 The bridge forms an important link to the wider site of the former power station. It is considered that the strengthening and enabling of two-way traffic as proposed is an essential contribution towards facilitating development of the wider site. Future applicants for proposals on the wider site will be expected to make other contributions as developments come forward. The proposals now also meet the wishes expressed by Members at the City Plans Panel meeting of 22<sup>nd</sup> November 2012 in terms of improvements to the bridge.

11.4.21 In summary, in highways terms, the proposed scheme would therefore result in the provision of:-

- double carriageway across the bridge;
- new cantilevered dedicated cycleway and footway;
- reconstruction of the stringcourses (edge beams) to accommodate new parapets;
- strengthening works to allow double carriageway and cantilevered footpath & cycleway;
- new waterproofing layer;
- new road surfacing;
- new road joints;
- new proprietary kerb drainage system;
- concrete pads to accommodate new lighting columns;
- new post and rail parapets to steps serving the footpath (Trans Pennine Trail);

- new staircase to link the bridge with the island section of the Trans Pennine Trail;
- re-engineered and landscaped ramp up to the bridge from the southern bank of the Aire & Calder Navigation and Trans Pennine Trail;
- new lighting columns along the bridge and unadopted section of road;
- Travel Plans for both construction and operational phases;
- routing management for HGVs traveling to and from the Gelderd Road MRF;
- routing management for HGVs accessing the site;
- contribution towards improvements of two bus stops on Pontefract Road, including 'real time' information totally a maximum of £40,000;
- contributions towards provision of pedestrian crossing equipment and an "all-red" phase during each cycle of the signals at junction of Skelton Grange Road and Pontefract Road; and
- new length of cycleway and footpath across bridge and continuing along northern bank of River Aire to a point level with the edge of the site access. This would have the potential to be extended by any future development further downstream.

11.4.22 The above improvements would be undertaken and completed prior to the occupation of the site.

11.4.23 It is considered that the proposals are satisfactory in highway terms and that no unacceptable impact upon the local highway network would result. The improvements proposed by the applicant to strengthen and improve the bridge; to provide much improved access to the Trans Pennine Trail; to provide contributions towards the improvement of bus stops are considered to provide a comprehensive solution in providing access to the site. The improvements should go some way to ensuring that future developers of adjacent sites are not deterred, rather it should provide a catalyst for adjacent sites to develop. Taking into account also that the majority of the HGV movements would essentially be displaced from Skelton Landfill (Pontefract Lane) to the application site (Pontefract Road), overall there would be no net increase in waste traffic during the operational phase within the wider area from this development.

11.4.24 Overall in terms of transport, the proposals are considered to be in accordance with policies T2, T2B, T2C, T5, T6, T7, T7A, T7B and T24 of the UDP, policy WASTE 9 of the NRWDPD, policy T1 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## **11.5 Air Quality & Health**

11.5.1 It is recognised that any potential for impact upon health and air quality is of primary concern for residents in the vicinity of plants such as that proposed. Health is principally an issue for the EA and the pollution control regime. The NPPF confirms that local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively. Equally, where a planning decision has been made on a

particular development, the planning issues should not be revisited through the permitting regimes operated by pollution control authorities.

11.5.2 This particular site is located some distance from local communities but there are areas of public open space and rights of way in the vicinity of the site. There is an area of public open space to the south of the Aire and Calder Navigation, approximately 200m to the south-west of the site and the Trans Pennine Trail which runs east-west to the south of the site, parallel with the waterways.

11.5.3 As part of the Environmental Impact Assessment, the dispersion of stack emissions from the facility has been modelled as part of the air quality assessment. In summary:-

- the facility would be required to operate in accordance with statutory emission limits (Waste Incineration Directive (WID) limits) and UK Air Quality Standards that are protective of human health;
- high temperature thermal treatment (normally 850°C for a minimum of 2 seconds) would be employed to destroy pollutants in the waste (any derogation from the temperature would require full justification);
- continuous emissions monitoring would be required for certain substances to ensure limits are not exceeded;
- there would be integral flue gas treatment systems to reduce pollutants to levels that have been set to avoid human health effects. These include:-
  - *deNOx process to reduce oxides of nitrogen (NOx);*
  - *lime to neutralise acid gases;*
  - *activated carbon to adsorb gaseous mercury, dioxins and furans; and*
  - *fabric filters to remove fine particles (dust) and heavy metals which adhere to the particulate matter.*

11.5.4 Air quality relating to land use and its development is capable of being a material planning consideration. However, the weight given to air quality in making a planning application decision, in addition to the policies in the local plan, will depend on such factors as:-

- the severity of the potential impacts on air quality;
- the air quality in the area surrounding the proposed development;
- the likely use of the development, i.e. the length of time people are likely to be exposed at that location; and
- the positive benefits provided through other material considerations.

11.5.5 The air quality assessment in support of the application has been considered by Environmental Health. Environment Health comment that the modelled results show the predicted contribution of different pollutants on the surrounding area and an assessment of the cumulative effect of nitrogen dioxide, taking into account other emissions in the area. The predicted ground level concentrations show no significant effect upon the surrounding area in terms of the air quality regulations (for nitrogen dioxide) nor in terms of other pollutants associated with the operation of the proposed plant.

- 11.5.6 The Health Protection Agency (HPA) has no objection to the proposals. The HPA confirms that operators of modern waste incinerators are required to monitor emissions to ensure that they comply, as a minimum, with the emission limits stated in the EU Waste Incineration Directive (WID). This Directive has been implemented in England and Wales by the Environmental Permitting (England and Wales) Regulations 2011 ('EP' Regulations), which are regulated by the Environment Agency (EA) and includes Emission Limit Values (ELVs) for a range of pollutants and requires monitoring to ensure compliance during operation.
- 11.5.7 Under the Environmental Permitting Regulations, the applicant is required to apply to the Environment Agency (EA) for an Environmental Permit. As part of this process the EA are responsible for determining acceptable emission limits. The EA will not issue such a Permit if they consider that there would be any harmful effects on human health or the environment. The Permit would set out strict operating requirements which must be complied with to protect the environment and public health. The Permit application would have to demonstrate that the proposed plant would use Best Available Techniques (BAT) in order to control emissions to air, land and water. The EA guidance note for incineration activities identifies the detailed requirements to be met and the EA is under no obligation to issue a Permit, unless it is fully satisfied that the installation would be operated appropriately.
- 11.5.8 When a Permit application is received by the Environment Agency, organisations such as the Health Protection Agency (HPA), the Local Authority (LA) and the Food Standards Agency (FSA) are consulted. The HPA assesses the potential public health impact of an installation and makes recommendations based on a critical review of the information provided for the Permit application. The HPA would request further information at the environmental permitting stage if they believed that this were necessary to be able to fully assess the likely public health impacts.
- 11.5.9 The HPA has reviewed research to examine links between emissions from municipal waste incinerators and effects on health. The term 'municipal' applies equally to the commercial and industrial waste stream due to its similar composition. It is also noted that Councillor R. Grahame provided officers with a report entitled '*The Health Effects of Waste Incinerators*', 4<sup>th</sup> Report of the British Society for Ecological Medicine (2<sup>nd</sup> Ed., June 2008). The HPA concluded that:-

*"While it is not possible to rule out adverse health effects from modern, well regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health and on the fact that modern and well managed municipal waste incinerators make only a very small contribution to local concentrations of air pollutants.*

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

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

11.5.10 An evaluation of the report entitled ‘*The Health Effects of Waste Incinerators*’, 4<sup>th</sup> Report of the British Society for Ecological Medicine’ (BSEM) has also been reviewed by Enviros Consulting Ltd, who drew the following conclusions:-

*“The report falls down badly in its understanding of incineration processes. It fails to consider the significance of incineration as a source of the substances of concern. It does not consider the possible significance of the dose of pollutants that could result from incinerators. It does not fairly consider the adverse effects that could be associated with alternatives to incineration. It relies on inaccurate and outdated material. In view of these shortcomings, the report’s conclusions with regard to the health effects of incineration are not reliable”.*

11.5.11 Having considered the BSEM report, the HPA maintains its position that contemporary and effectively managed and regulated waste incineration processes contribute little to the concentrations of monitored pollutants in ambient air and that the emissions from such plants have little effect on health.

11.5.12 The tables below show the predicted maximum long-term and short term air quality levels. The data demonstrates that any air quality impact from the operation of the proposed development would be negligible. Within the tables, the process contribution (PC), predicted environmental concentration (PEC: PC + background concentration (BG)), magnitude of change and significance of impact are presented.

Pollutant	Applied Standard (Annual Mean)	PC Max ( $\mu\text{g}/\text{m}^3$ ) (ERF contrib)	Magnitude of Change	PEC ( $\mu\text{g}/\text{m}^3$ ) (ERF + bckgrnd)	% of EAL	Significance
PM <sub>10</sub>	40	0.07	Imperceptible	21.47	53.7%	Negligible
NO <sub>2</sub>	40	0.96	Small	35.06	87.6%	Negligible
PM <sub>2.5</sub>	25	0.07	Insignificant	13.67	54.7%	Negligible
SO <sub>2</sub>	50	0.24	Insignificant	26.24	52.5%	Negligible
HCl	20	0.07	Insignificant	4.7E+00	23.3%	Negligible
HF	16	0.01	Insignificant	6.8E-03	<0.1%	Negligible
TOC	5	6.81E-02	Not insignificant	7.5E-01	15.0%	Negligible
Cadmium	0.005	1.70E-04	Not insignificant	3.6E-04	7.2%	Negligible
Thallium	1	1.70E-04	Insignificant	1.7E-04	<0.1%	Negligible
Mercury	0.25	3.41E-04	Insignificant	2.5E-03	1.0%	Negligible
Antimony	5	3.78E-04	Insignificant	3.8E-04	<0.1%	Negligible
Arsenic	0.003	3.78E-04	Not insignificant	9.2E-04	30.6%	Negligible
Chromium (III)	5	3.75E-04	Insignificant	1.9E-03	<0.1%	Negligible
Chromium (VI)	0.0002	3.78E-06	Not insignificant	8.5E-05	42.6%	Negligible
Cobalt	0.2	3.78E-04	Insignificant	3.8E-04	0.2%	Negligible
Copper	10	3.78E-04	Insignificant	9.6E-03	0.1%	Negligible
Lead	0.25	3.78E-04	Insignificant	9.0E-03	3.6%	Negligible
Manganese	1	3.78E-04	Insignificant	4.9E-03	0.5%	Negligible
Nickel	0.02	3.78E-04	Not insignificant	1.6E-03	8.0%	Negligible
Vanadium	5	3.78E-04	Insignificant	2.8E-03	0.1%	Negligible
Ammonia	180	6.81E-02	Insignificant	8.2E-01	0.5%	Negligible

Maximum Predicted Long Term Concentrations

Pollutant	Applied Standard	PC Max ( $\mu\text{g}/\text{m}^3$ )	Magnitude of Change	PEC ( $\mu\text{g}/\text{m}^3$ )	% of EAL	Significance
PM10 (24-hr)	50	0.19	Imperceptible	30.19	60.4%	Negligible
NO2	200	6.10	Small	74.30	37.1%	Negligible
SO2 (24-hr)	125	1.44	Insignificant	19.44	15.6%	Negligible
SO2 (1-hr)	267	4.02	Insignificant	47.02	17.6%	Negligible
SO2 (15-min)	266	9.97	Insignificant	60.97	22.9%	Negligible
CO	10000	4.51E+00	Insignificant	1.45E+02	1.4%	Negligible
HCl	750	2.81E+00	Insignificant	1.20E+01	1.6%	Negligible
HF	160	2.81E-01	Insignificant	2.81E-01	0.2%	Negligible
TOC	208	2.81E+00	Insignificant	4.17E+00	2.0%	Negligible
Cadmium	1.5	7.03E-03	Insignificant	7.41E-03	0.5%	Negligible
Thallium	30	7.03E-03	Insignificant	7.03E-03	<0.1%	Negligible
Mercury	7.5	1.41E-02	Insignificant	1.84E-02	0.2%	Negligible
Antimony	150	1.56E-02	Insignificant	1.56E-02	<0.1%	Negligible
Arsenic	15	1.56E-02	Insignificant	1.67E-02	0.1%	Negligible
Chromium (III)	150	1.55E-02	Insignificant	1.84E-02	<0.1%	Negligible
Chromium (VI)	3	1.56E-04	Insignificant	3.19E-04	<0.1%	Negligible
Cobalt	6	1.56E-02	Insignificant	1.56E-02	0.3%	Negligible
Copper	200	1.56E-02	Insignificant	3.41E-02	<0.1%	Negligible
Manganese	1500	1.56E-02	Insignificant	2.47E-02	<0.1%	Negligible
Nickel	30	1.56E-02	Insignificant	1.81E-02	0.1%	Negligible
Vanadium	1	1.56E-02	Insignificant	2.05E-02	2.0%	Negligible
Ammonia	2500	2.81E+00	Insignificant	4.31E+00	0.2%	Negligible

Maximum Predicted Short Term Concentrations

- 11.5.13 The NPPF states that in order to prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the potential sensitivity of the area or proposed development to adverse effects from pollution, should be taken into account.
- 11.5.14 PPS10 states that modern, 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. PPS10 also indicates that there should be an assumption that the relevant pollution control regime (as applied by the Environment Agency) will be properly applied and enforced.
- 11.5.15 It is also notable that, although it deals with nationally significant infrastructure projects, the NPS for Renewables Infrastructure (EN-3) requires planning decision makers to assume that there will be no adverse impacts on health where a plant meets the requirements of WID and does not exceed local air quality standards. There is no reason to suppose that a similar assumption should not apply in this case.
- 11.5.16 The City Plans Panel are entitled to approach this application on the assumption that the plant would operate in accordance with an Environmental Permit should one be granted and that, should there be any non-compliance, the Environment Agency would act in accordance with its enforcement powers conferred through the environmental permitting regime.
- 11.5.17 It is understandable that some local residents have concerns relating to health impact from such plants. However, the HPA, the Government's statutory advisor on health matters, concludes that, *"whilst it is not possible to rule out adverse health effects with complete certainty, any potential damage to 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”.*

- 11.5.18 Furthermore, the National Waste Strategy for England, 2007, indicates that there is no credible evidence of adverse health outcomes for those living near incinerators. This takes account of research into long-term exposures when emissions from incinerators were much greater than they are now.
- 11.5.19 The Health Protection Agency, Environment Agency, Primary Care Trust and Neighbourhoods & Housing have all raised no objection to the application in terms of impact upon air quality and health. It is noted that the Environment Agency will consider health and air quality issues following submission of an application for an Environmental Permit.
- 11.5.20 In light of clear national guidance, to which considerable weight should be attached; the absence of objections from statutory bodies concerned with health impacts and; the fact that the scheme’s detailed operation would be regulated through the Environmental Permitting regime administered by the Environment Agency, it is considered that no significant weight should be attached to general concerns or perceived fears about the possible impacts of the proposed development upon health or air quality.
- 11.5.21 Overall in terms of air quality and health, the proposals are considered to be in accordance with policies WASTE 9 and AIR 1 of the NRWDP, policy GP5 of the UDP and in line with the guidance contained within Planning Policy Statement 10.

## **11.6 Socio-economic and well-being**

- 11.6.1 The applicants considered census data for all wards within 5km from the site. The data showed that some 175,000 people reside within the study area, with the largest proportion of the population being between the ages of 30 and 59 years. The age structure of the population also showed that the area had a larger than average population of working age. Around 100,000 were of employment age. Of these residents, some 65% were in full time employment either as an employee or self employed. The largest employment categories within the study area were found to be retail, wholesale and the motor trade, with manufacturing being the second largest.
- 11.6.2 The construction phase of the development is likely to take place over a period of approximately 3 years, during which time it is expected that a total of some 300 construction workers would work on the site during a number of sub phases. It is anticipated that whilst some local suppliers and construction workers would be employed, the majority of construction workers would require specialist skills and so may reside in the area for a short period. Consequently, it is considered that in the worst case the construction phase may result in a temporary increase in the population due to the requirement for specialist construction workers.
- 11.6.3 During the operations phase, the ERF would employ 40 permanent staff, and a mixture of employment opportunities would be available. It is anticipated that the majority of the employment opportunities would be fulfilled by recruiting staff from the local area, representing a significant benefit in the deprived areas close to the site. It is not anticipated that there would be an influx of new workers to the area for the operation of the ERF.

- 11.6.4 Overall, it is anticipated that the proposed ERF would have no significant impact on the size of the permanent population of the area.
- 11.6.5 With regard to land use, the study area includes industrial areas in the immediate vicinity of the site and relatively densely populated areas around the edge of Leeds. The M1 motorway runs in a north easterly direction in the south east of the study area. In the context of the surrounding land use, through the EIA process, it has been demonstrated that the proposed development would not affect land uses in the area surrounding the application site.
- 11.6.6 It is recognised that many of the wards located wholly within the study area are among the most deprived areas of the country. Economic impacts associated with new development are often anticipated to be positive due to new employment opportunities and requirements for services that are created which, in turn, can provide increased expenditure in the local area.
- 11.6.7 During the construction phase of the development it is anticipated that there would be a significant number of temporary employment opportunities. It is probable that construction materials would also be sourced within the local area. Construction workers visiting and residing in the area temporarily would increase demand for accommodation, food and other local services.
- 11.6.8 The operational phase of the development would provide around 40 permanent posts as well as a number of indirect employment opportunities for services such as landscaping, maintenance and cleaning. The facility would also require materials from local suppliers.
- 11.6.9 The applicants state that the census also showed that residents in the study area predominantly travel to their place of work by car, but with a relatively high proportion using the bus and walking to work. Public transport was used by some 25 to 28% of people for travelling to work.
- 11.6.10 It is recognised that in some cases travel to work by car is unavoidable. However the applicants propose to encourage more sustainable means of travel such as car sharing, use of public transport and cycling. This would be structured through a Travel Plan as part of the legal agreement. Due to the number of permanent employees at the ERF and the proposed Travel Plan, it is not anticipated that the proposed scheme would result in an adverse impact on local public transport services.
- 11.6.11 It is not anticipated that the proposed ERF would have a negative impact on the provision of education. The ERF would not result in a large influx of new employees and families to the area and therefore would not result in an increased demand on education services. Conversely, the ERF has positive potential to become an educational amenity for organised school, college and university student visits. Links with the nearby Skelton Grange Environment Centre would also be encouraged. Such an education facility is proposed to be located within the office block within the proposed building.
- 11.6.12 Temple Newsam and Thwaite Mill are located within the study area. Both of these venues would have views of parts of the proposed ERF building. Notwithstanding this, it is considered that the visitor experience at both locations would not be

adversely affected by the proposed development, and it is not anticipated that the proposed development would detract visitors from the area as a whole.

- 11.6.13 As well as considering the economic implications of the development, it is also necessary to consider the social aspects and impacts of the ERF. Consideration has also been given to crime, as it is noted that construction works and derelict, remote sites often attract crime such as trespassing, theft and vandalism. The site's boundary would be secured and the applicants would employ security guards and lighting during the construction of the ERF in order to deter theft and vandalism. The potential for crime during the operation of the ERF is considered to be much lower due to the secure nature of the site, the use of CCTV and presence of employees and security staff and as the site would operate on a 24 hour per day basis. The proposed development has the potential to result in a beneficial impact of reducing crime in the vicinity.
- 11.6.14 It is also necessary to consider the potential for the development to result in increased ill health or negative well-being effects, since this is frequently a concern for people living in areas surrounding such waste management facilities.
- 11.6.15 It is considered that the construction of the proposed site would not result in an increase in adverse health effects. The operations have been designed such that they would have no effect on construction workers who would operate in the immediate vicinity, and consequently would have no effect on members of the public outside the boundary of the site. It is also not anticipated that the operation of the ERF would result in an increase in ill health in the local area. Emissions to air from the flue stacks have been considered in the air quality assessment within the EIA which concluded that emissions to air would be negligible, due largely to the operation of flue gas treatment processes and compliance with the Waste Incineration Directive. Furthermore, the height of the flue stacks has been designed to provide suitable dispersion of emissions.
- 11.6.16 It is noted that the Health Protection Agency, Environment Agency, Primary Care Trust and Neighbourhoods & Housing have all raised no objection to the application in terms of impact upon air quality and health. The Environment Agency have stated that they will further consider health and air quality issues following submission of an application for an Environmental Permit.
- 11.6.17 In summary, there is no evidence to suggest that the ERF would adversely affect general well-being or result in an increase in ill health in the surrounding area. Consideration has been given to the potential for the development to impact upon the air quality of the surrounding area and found that the proposed ERF would have only a negligible impact on air quality of the area and would not result in increased ill health.

## **11.7 Low Carbon & Renewable Energy Generation**

- 11.7.1 The NRWDPD provides strong support for low carbon energy generation, in line with national planning policy which sets a context for a rapid transition towards renewable and low-carbon energy generation. Linked to this, the RSS sets a target for Leeds to produce at least 75MW of installed grid-connected renewable energy capacity by 2021. Leeds has retained this target to significantly increase low carbon energy from the current 11MW of existing renewable energy provision to 75MW by 2021.

11.7.2 Indicative contributions of how the Council will deliver the 75MW energy target (mostly power) from low carbon renewable sources are set out within the NRWDPD. These are reproduced in the table below:-

	Current Production Levels (MW) 2010	Potential Contribution (MW) 2021	Comments
Landfill Gas	12	12	Takes account of permissions for Peckfield and Skelton Grange, however these will reduce post 2021 with reductions in landfill
Wind Power	0	20	Based on an estimate of 10 large scale turbines or equivalent
Micro-generation (inc solar power, heat pumps)	0	10	Allowing for half of future house development to have solar PV installations
Energy from Waste	0	35	Based on known potential for plants to be brought forward
Hydro-power	0	2	Based on known multiple, small-scale potential developments
Energy from biomass	0	2	Based on potential for a plant using organic waste (e.g. food, green waste)
<b>Total</b>	<b>12</b>	<b>81</b>	

Estimated Installed & Potential Grid Connected Renewable Energy Generation Capacity (MW) for the Leeds district

11.7.3 The table shows that the target for the contribution from Energy from Waste plants is 35MW capacity. There is currently no production of electricity from Energy from Waste facilities in Leeds. A small gasification plant has consent which, if built, would have a capacity of around 2.6MW. The proposed development would therefore make a significant contribution to meeting the 35MW target by 2021 as the plant would have the capacity to produce around 26MW of electricity to the National Grid.

11.7.4 In terms of the energy produced at a facility such as that proposed, the biomass fraction of the waste feedstock would be classed as renewable and the remainder as low carbon. The proposed plant would produce approximately 26 MW of energy for export to the National Grid, providing sufficient power for about 52,000 homes. This would assist in striving towards the UK's commitment to a target of producing 15% of its total energy from renewable sources by 2020. It would also make a contribution to renewable energy in Leeds and West Yorkshire. The proposed scheme alone would produce more power than all the permitted renewable energy installations in Leeds.

11.7.5 The need for urgent renewable energy provision is emphasized within the National Planning Policy Framework, the UK Renewable Energy Strategy and also the UK Low Carbon Transition Plan. The scheme would accord with the Energy White Paper indication that individual renewable projects should provide benefits shared by all communities, both through reduced emissions and more diverse supplies of energy, helping the reliability of supplies. This should be given significant weight.

- 11.7.6 The energy recovery element of the scheme would assist in:-
- providing security of supply using home-produced residual waste, which would lessen dependence on insecure foreign imports of energy;
  - diversifying energy generation in line with Government policy to move away from a concentration on coal, gas and nuclear energy;
  - helping lessen dependence on a small number of centralised generating plants; and providing a constancy of supply, unlike some other forms of renewables which are weather-dependent.
- 11.7.7 The proposed plant would also be enabled to provide Combined Heat and Power (CHP) and in respect of which the WS2007 indicates particular attention should be given to siting facilities where the opportunity for CHP can be maximised. The site is within an Urban Eco Settlement (UES) zone and extremely well positioned for providing heat to potential customers within the immediate vicinity, giving the development potential within the Aire Valley over the coming years. The relatively short distances to these potential users and their commercial / industrial nature would suggest that the ERF would be particularly well located to maximise the benefits of CHP. Savings in their waste management and fuel costs are advantages to these local businesses that could result. This matter is discussed in more detail later in the report.
- 11.7.8 It is considered that the proposal would make a significant contribution in terms of low carbon and renewable energy generation towards local targets. Overall in terms of low carbon and renewable energy generation, the proposals are considered to be in accordance with policy ENV5 of the RSS, policy ENERGY 3 of the NRWDPD, policy EN3 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## **11.8 Combined Heat & Power (CHP)**

- 11.8.1 One of the key elements of the proposed facility is the inclusion of a Combined Heat and Power (CHP) plant. This would enable the facility to generate electricity (for export to the National Grid) and / or heat (for local end users). The potential exists for the heat to be supplied via a district heating network of highly insulated underground pipes to nearby heat users, resulting in significantly lower carbon emissions as compared to conventional heating methods. The realisation of the sustainable heat and power opportunities is heavily dependent on the location of the proposed facility in relation to potential users of the energy, whether in the form of industrial processes; new developments; existing premises; or communal facilities.
- 11.8.2 The heat generated by the combustion process is used to heat water within a heat exchange boiler to produce high pressure steam, which is then fed through turbines to generate electricity, much as in conventional electricity generation. Super-heated steam is supplied to the turbine which drives the electricity generator. The steam gradually reduces in pressure and can then be passed out from the latter stages of the turbine and used to heat a local water network i.e. CHP. The CHP facility is able to provide heat to a local heating network by transferring it through a heat exchanger and via insulated piping to nearby heat consumers, to a combination of residential, leisure and commercial / industrial users. The co-generation of heat and power in a single facility represents a significant efficiency gain over a conventional power station, as the heat that would normally be wasted in a power plant's cooling

towers is put to beneficial use instead, reducing the primary fuel use of the heat consumers.

- 11.8.3 If optimised to generate only electricity, the facility is anticipated to have the potential to generate around 30MW of electrical power when fully operational (26MW exported to the National Grid, 4MW to power the ERF), with some 176 Million kWh per year being exported to the National Grid, equivalent to the energy requirements of around 52,000 households, or approximately 16% of the households in Leeds. The existing distribution network adjacent to the site would be utilised to export the electricity. This is an efficiency of 71% calculated using the methodology set out in the Waste Framework Directive. Additional efficiency, up to 82%, would be realised with the addition of CHP generation.
- 11.8.4 Environmental Permits for such facilities impose standard conditions on operators to ensure that the facility is designed to enable heat provision in the event that suitable users are identified. It is a requirement that the heat plan be regularly reviewed. There is also an obvious significant commercial incentive for the applicants to provide heat to any suitable neighbouring users.
- 11.8.5 Heat from the facility at Skelton Grange would have the potential to be piped via super-insulated piping to consumers, at a relatively high temperature of between 80° to 125°C, from which the user would extract as much heat as necessary to satisfy their personal demand. The proposed plant could produce up to 70MW of heat at the expense of electrical output (proportions of electricity and heat output can be varied according to end-user demand). If the plant were set up to produce less electricity, the capacity for heat output would increase and vice versa.
- 11.8.6 The feasibility of a CHP scheme relies largely upon a consistent market for the heat supplied by the plant. In order to determine the existing potential market for heat in the area, a baseline assessment has been carried out which involved locating the potential users who could provide demand for an essential base load for the proposed CHP scheme.
- 11.8.7 The CHP assessment suggests that the most viable potential users would be those situated within a 5km radius of the site, and which used fairly large amounts of heat, preferably with 24 hour demand. Using CHP outside of 5km becomes less viable due to factors such as cost of infrastructure for transportation, heat loss and maintaining pressure if transporting steam. Local users are deemed to be more economically viable as the cost of pipeline can be up to £1,000 per metre, thus short pipelines carrying large amounts of heat are most cost effective, and also cause the least disruption during the installation process as compared to a large number of smaller pipelines.
- 11.8.8 As most of the potential heat users are existing buildings, the cost and viability of retrofitting is also a major consideration. Large centrally heated buildings were considered to have better potential as retrofitting to an already existing large system is much easier and economical than to several small systems. The preferred option is the integration of a CHP scheme into a new development as it is being built.
- 11.8.9 The initial assessment revealed a number of potential heat users within a 5km radius of the proposed Skelton Grange ERF. The potential opportunities are significant, particularly with the anticipated large scale development within the Aire Valley in the vicinity of the application site. The applicants are looking to pursue these opportunities should they obtain planning permission and, given the lengthy

construction period for the site, this would allow arrangements to be developed with potential consumers and infrastructure to be installed ready for when the plant is commissioned.

- 11.8.10 It is considered that the proposed ERF is very well sited for heat provision in the future, particularly in relation the development of the wider eco-settlement aspired to in the Aire Valley Aire Action Plan and also the wider industrial / business development in the remainder of the Aire Valley. It would be beneficial to be able to link this energy centre to a wider district heating scheme in order to provide additional resilience, capacity and coverage of the system. The remainder of the land adjacent to the site covered by an existing outline planning permission for B8 and B1 / B2 industrial, warehouse and office use would also represent a potential market for heat distribution. The applicants and landowners suggest that the ERF would attract specific industries to the wider area with a requirement for heat and as such the ERF could act as a catalyst for the sustainable redevelopment of the Aire Valley. They also suggest that as the proposal represents a major investment in the Aire Valley, delivery of the ERF would be likely to increase the marketability of the wider area as the economy recovers in the next few years, with it attracting developers with specific heat needs.
- 11.8.11 It is clear that there is significant potential for supplying heat from the proposed plant to existing and future nearby developments. It is also notable that the application site is within the city's Urban Eco Settlement where new and higher standards of living, employment and energy are being encouraged. The ERF has the potential to improve local energy diversity, resilience and security whilst also complementing the aims of reducing the carbon profile of a large area of Leeds. Whilst the ultimate provision of heat to end users is a market driven process, it is an option the applicants are likely to pursue given the plant would be CHP ready; the resulting increased efficiency of the plant and; the consequential economic incentives. Although the planning system cannot control or require consumers to be connected to such a network through this scheme, the ability of the plant to output heat if such agreements are achievable is important in terms of the overall sustainability of the proposal and to ensure that national objectives of encouraging CHP are met.
- 11.8.12 It should also be noted that Leeds City Council has coordinated a city-wide Expression of Interest to apply for £2.514m ELENA (European Local ENergy Assistance) technical assistance funding to establish a city-wide local strategic body for Energy Services (Energy Leeds) whose role will be to oversee the delivery of an Investment Programme of low carbon energy infrastructure projects throughout the city. The projects build on Leeds' unique industrial heritage and are supported by the Council's Climate Change Strategy and Leeds Growth Strategy. The principal focus would be:-
- District heating: Realising the opportunity for low carbon district heating in the city centre, and the Aire Valley, both locations at the heart of the Leeds City Region economy;
  - Energy efficiency improvement: Addressing the legacy of Leeds' pre-first world war domestic properties and the challenge of 20th century high rise tower blocks. Also working with public and private sector partners to tackle the inefficient commercial stock in the city;
  - Transport refuelling: Capitalising on Leeds excellent transport linkages to form a low carbon refuelling hub for freight in the strategic location of the Aire Valley.

- 11.8.13 Technical assistance funding could be used for development of feasibility and market studies, structuring of programmes, business plans, energy audits, preparation of tendering procedures and contractual arrangements, and programme implementation units and include any other assistance necessary for the development of investment programmes.
- 11.8.14 Overall in terms of combined heat and power potential, the proposals are considered to be in accordance with policy ENERGY 3 of the NRWDPD, policies EN3 and EN4 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## 11.9 Sustainability & Climate Change

### Global Warming Potential Performance

- 11.9.1 The table below, produced using the Environment Agency's Life Cycle Assessment Tool (WRATE) suggests that, based on a throughput of 300,000 tonnes per year, the operation of the proposed ERF would result in a net carbon benefit of some 87 million kg of CO<sub>2</sub> per year (and hence a net negative environmental footprint) when compared to a similar tonnage of waste going to landfill and is also superior when compared to other competing technologies.

	<b>Baseline (Landfill)</b>	<b>Skelton Grange ERF</b>	<b>ATT (Pyrolysis)</b>	<b>MBT with EfW</b>
<b>kg CO<sub>2</sub> eq.</b>	62,352,945	-24,998,247	10,585,043	-2,399,926

### Employment and cost of managing waste

- 11.9.2 The cost of managing waste for local businesses could be reduced by the proposal providing a more competitive method of waste management for commercial and industrial waste for which no Landfill Tax would be payable. The scheme would provide employment opportunities both at the construction and commissioning phase, which itself is likely to take in the region of three years, and then when operational. It is estimated that construction would involve some 300 employees and the plant when operating would employ 38 to 40 on a shift basis. Indirect jobs may be created and local employers may be supported through the plant's operation by reducing waste costs and being a potential source of cheaper and more secure power.

### Design and materials

- 11.9.3 The design of the ERF facility has been developed to maximise the use of natural light and ventilation and minimise carbon dioxide emissions. The materials proposed for the facility, such as steel, glass and aluminium can be recycled with almost no loss of performance. The applicant confirms that materials that contain CFCs or use them in their manufacture will be avoided. Recycled aggregate and masonry would be used where practicable, including base material for the construction of the access road for the ERF. Ground Granulated Blast Furnace Slag (GGBS) would be considered for all concrete works as a replacement for Portland cement in concrete mixes to reduce carbon emissions.
- 11.9.4 Established principles of low energy design have been used in the design of the offices and Visitor Centre, together with the ERF building itself. These include:-

- the width of the office building being 15m, enabling natural ventilation ensuring low energy use;
- the orientation of the offices being south east, producing an energy efficient environment for workers and visitors;
- the energy requirement of the offices being generated on site by the ERF and via the solar panels on the roof of the office;
- the construction methods and systems used would keep air leakage to a minimum. The building envelope would be to, or in excess of, the new airtight standards required by the Building Regulations;
- undertaking a BREEAM assessment (classed as 'Very Good');
- using locally sourced materials and suppliers; and
- using materials with a high recycled content provided these meet with durability and life span targets.

### Travel

- 11.9.5 The process would create around 90,000 tonnes of incinerator bottom ash (IBA) per year, which would need to be exported from the site and treated to extract ferrous metals and then processed for use in the construction industry.
- 11.9.6 The operators intend to minimise vehicle movements generated by the site. To ensure vehicles bringing waste to the site are fully laden, it is proposed to make maximum use of waste transfer stations to bulk up waste from the surrounding area.
- 11.9.7 The applicants would also develop a Staff Travel Plan to encourage car sharing, thereby reducing the number of private cars journeys generated by the development.
- 11.9.8 Natural England welcome the measures outlined in the Travel Plan to encourage staff to get to work by means other than the private car, such as the provision of cycle storage and showers and public transport information.
- 11.9.9 In summary:-
- the WRATE assessment undertaken by the applicants concludes that the facility would result in a negative environmental footprint that is, an overall reduction in environmental impacts such as global CO<sub>2</sub> emissions. This can be attributed to the generation of electricity from waste and the subsequent displacement of fossil fuel electricity generation;
  - the ERF would produce carbon dioxide emissions but this is a far less harmful greenhouse gas than methane, which would be produced if the same waste was landfilled;
  - the ERF and offices would be powered by energy produced on site and the surplus energy would be exported to the National Grid. Recovered energy avoids the need to produce electricity from non-renewable (fossil) sources, which in turn reduces emissions associated with the extraction and combustion of fossil fuels;
  - the ERF has been designed to minimise energy use and carbon emissions during construction and operation;

- the site has been designed to attenuate surface water runoff and ensure that the facility would not give rise to additional surface water runoff or down stream flooding;
- the ERF would have the potential to provide heat and energy to existing and future development in the local area; and
- new development in the vicinity of the facility could be future-proofed by ensuring the infrastructure is in place to allow CHP system to be fitted during construction.

11.9.10 It is considered that the proposed development benefits from strong national and local policy support in terms of its potential contribution to achieving climate change and energy objectives, sustainable waste management and economic benefits. The proposal would make a significant contribution to delivering the Government's Climate Change programme and energy policies and in so doing contribute to global sustainability in line with objectives.

11.9.11 Overall in terms of sustainability and climate change, the proposals are considered to be in accordance with policies ENV5 and YH2 of the RSS, policies ENERGY 3, WATER 1 and WATER 7 of the NRWDPD, policies GP5 and GP12 of the UDP, policies SPATIAL POLICY 5, EN1, EN2 and EN3 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## **11.10 Noise & Vibration**

11.10.1 A noise assessment was undertaken as part of the Environmental Impact Assessment and considered the likely noise levels that would be generated by the proposed development at nearby noise-sensitive receptors. The assessment considered the potential for the construction and operational activities to result in noise and vibration impacts at the closest noise-sensitive receptors.

11.10.2 The main operational processes would take place within the ERF building with HGVs accessing the site, via the weighbridge, to the waste reception hall area at the northern side (rear) of the development.

11.10.3 The layout of the site has been designed in such a way that external activities would be screened from the nearby noise-sensitive receptors by either the intervening landform or by the proposed buildings within the development.

11.10.4 An assessment was made of the baseline situation and the potential impact of the proposals. Environmental advantages and disadvantages were identified and where appropriate, mitigation measures and/or scheme changes to offset potentially adverse environmental impacts have been identified by the applicants.

11.10.5 Noise surveys were carried out at the noise-sensitive receptors considered closest to the application site to capture typical background noise levels. The noise monitoring locations chosen by the applicants are considered as being representative of the nearest noise-sensitive locations to the proposed site:-

- Yarn Street / Hunslet Mill, to the west of the proposed development;
- Thwaite Mills Museum, to the west of the proposed development;

- Skelton Grange Environment Education Centre, to the west of the proposed development;
- Skelton Moor Farm, to the north of the proposed development;
- Cartmell Drive / Halton Moor Road, to the north of the proposed development; and
- The Trans Pennine Trail, located to the south of the proposed development.

11.10.6 Measurements were taken over a number of 15 minute non-consecutive periods to cover the proposed operational hours of the proposed development during a normal weekday period and on a Sunday. Measurements were taken at each location during the daytime and at residential receptors during the daytime and night-time periods.

11.10.7 It is inevitable with most major developments that some disturbance would be caused to those living and working nearby during the construction phase. However, disruption due to construction is a localised phenomenon and is temporary in nature. In general, only people living within 100 to 200m of the site boundary (of which there are currently none) would be likely to be seriously impacted by noise from construction.

11.10.8 The assessment considered four phases of construction: site preparation; piling works; foundation works; and building works with predictions assuming a 'worst case' situation.

11.10.9 The assessment concluded that the predicted worst-case noise levels produced by construction operations would have a minor, barely perceptible, impact on the existing ambient noise climate at all locations except the adjacent Trans Pennine Trail where there would be a substantial impact.

11.10.10 The closest vibration sensitive residential property to the proposed development is Skelton Moor Farm at a distance of approximately 800m from the closest area of construction. It is therefore considered that vibration from construction operations would be imperceptible at this distance and therefore at any residential properties.

11.10.11 For the majority of the construction period, there would be around 25 heavy goods vehicles per day accessing the site. These would be spread evenly across the working day (0700-1900). At worst, this would result in a minor, barely perceptible, impact on the existing ambient noise levels.

11.10.12 Considering the assessment, it is concluded that:-

- construction noise levels are predicted to be well below the 75dB criterion adopted for this assessment at all receptors;
- construction traffic movements would have, at worst, a minor, barely perceptible, impact on the existing measured ambient noise levels at all of the locations assessed;
- perceptible levels of vibration from the construction works is improbable at the nearest vibration-sensitive properties, however, it has been recommended that vibration levels are subject to a watching brief;
- operational noise rating levels are predicted to give rise to a situation between marginal significance and complaints unlikely at Skelton Grange Environment Education Centre during the daytime and Skelton Moor Farm during the night-

time on Sundays. At all other times and locations there would be a situation where there is a good indication that complaints would be unlikely;

- operational noise levels from fixed plant would be well below the existing ambient noise levels on the Trans Pennine Trail;
- site-related heavy goods, light goods and passenger vehicle movements would have, at worst, a minor, barely perceptible, impact on the existing measured ambient noise levels at all of the locations assessed; and
- cumulative impact of all operations and vehicles movements associated with the proposed development would have, at worst, a minor, barely perceptible, impact on the existing noise levels at all of the locations assessed.

11.10.13 A number of mitigation measures and management actions would be implemented to minimise potential noise emissions from the site during the construction period. These principally relate to good management of the operations but also more specific measures such as the erection of screens or hoardings to shield any particularly noisy process and the phasing of works to maximise the benefit from perimeter structures.

11.10.14 Environmental Health have considered the proposals in detail and officers raise no objection to the scheme subject to conditions limiting the noise levels at the nearest sensitive properties and also restricting the permitted hours for construction works.

11.10.15 It is considered that any potential for noise impact from the site can be adequately mitigated and that no unacceptable harm would result from either works during the construction period or from the operation of the ERF.

11.10.16 Overall in terms of noise and vibration, the proposals are considered to be in accordance with policy WASTE 9 of the NRWDPD, policy GP5 of the UDP and in line with the guidance contained within Planning Policy Statement 10.

## **11.11 Biodiversity**

11.11.1 A comprehensive ecological assessment of the application site and surrounding area was undertaken as part of the Environment Impact Assessment.

11.11.2 The application site comprises bare open ground, stockpiles of crushed aggregate, scrub, semi-improved and secondary grassland and ruderal vegetation. In addition, the bases of two partially demolished power station cooling towers remain present within the site.

11.11.3 In addition to the construction of an ERF with associated access routes and car parking, a surface water attenuation lagoon and associated wetland and reedbed would be constructed, alongside the creation of wildflower grassland, tree lines, species rich hedgerows and an open area of bare rubble-covered ground. The assessment identified the following receptors of ecological importance:-

- statutory and non-statutory designated sites within the zone of influence of the proposed development;
- nesting bird assemblage;
- invertebrate assemblage;
- reptile assemblage (suitable habitats); and

➤ bats (commuting, foraging and potential hibernation habitat).

- 11.11.4 The assessment of impacts upon ecological receptors within and around the application site identified a range of potential hazards, i.e. habitat loss, fragmentation, hydrological effects, dust, noise and visual impacts; that could result from the construction and operation of the ERF plant. The ecological receptors have been assessed against these hazards to identify the likelihood of significant ecological effects.
- 11.11.5 Mitigation measures have been proposed to minimise the potential impacts upon birds, invertebrates, reptiles and bats. Specific mitigation and avoidance measures have been outlined for protected species to ensure that there are no adverse effects upon these species and that the legal statutes protecting these species are adhered to during construction and operation of the ERF.
- 11.11.6 Habitats on the site have been identified as being suitable for reptiles and therefore precautionary mitigation measures have been proposed, based on the assumption that reptiles are present on the site. Precautionary measures are also proposed to protect nesting birds. A number of Little Ringed Plovers were found to be nesting on the site which is a species is protected under the Wildlife & Countryside Act. The development would result in the loss of a significant area of suitable nesting habitat for this species, which has been declining in South and West Yorkshire in recent years due to the reclamation of former industrial sites. The applicants intend to provide an area of bare rubble within the site to provide suitable habitat for ground nesting birds, but following Natural England's advise, they also propose to create habitat off site within the managed ecological area of Lagoon 21 at their Skelton Landfill site. It is considered that this would more than offset the loss of any existing habitat.
- 11.11.7 Natural England had initial concerns that there may have been the potential for bat roosts within the bases of the old cooling towers. However, additional information submitted confirmed that entrances to any voids had historically been blocked up. Natural England are satisfied that the site therefore does not provide suitable roosting habitat for bats. They also support the precautionary measures proposed to prevent harm to any reptiles that may be present during construction. The proposed provision of off-site habitat for the Little Ringed Plover is also welcomed. Finally, Natural England support the additional tree planting along the river bank and the lighting design to ensure that the riparian corridor remains dark.
- 11.11.8 The Council's Nature Conservation Officer has considered the scheme in detail and has no objection to the proposals. It is suggested that conditions are applied to any grant of permission to ensure the implementation of the ecological mitigation. Conditions are also suggested to require the developer to submit a method statement to control the Giant Hogweed on the site and a detailed landscaping and habitat creation & management plan. An integrated landscape and ecological management plan is recommended to be required via the S106 Agreement. This plan would be formulated at the end of the 5 year standard aftercare period and would be reviewed at 5 year intervals for the lifetime of the development.
- 11.11.9 The Council's Landscape Officer comments that the proposed attenuation pond is detailed to be responsive to biodiversity enhancements and is welcomed but detailed design will be required via condition and it is also important that the pond is of a sufficient scale to meet drainage and biodiversity needs without conflict.

- 11.11.10 The Environment Agency has no objection to the proposals in terms of impact upon biodiversity, subject to the existing riparian habitat being retained alongside the site. This seeks to retain a continuous unobstructed and functioning river corridor, which has ecological, amenity and aesthetic benefits. Lighting as part of a new riverside development in particular can have an adverse impact on protected species in particular otters, bats and migratory fish. The Environment Agency encourage the improvement of the width of riparian vegetation to mitigate for the increased lighting and increased level of disturbance on wildlife as a result of the development. Any new lighting features on site should not spill light directly onto the river and be as low as safety guidelines permit.
- 11.11.11 The Environment Agency also make reference to Skelton Grange weir which is some distance from the application site but is a part of the former power station infrastructure. The weir is currently a barrier to the movement of fish, and as such its presence represents a continued ecological impact from the power station, which should be addressed by the planning system.
- 11.11.12 However, it is noted that the extant outline permission (which has a 10 year implementation period) for the wider power station site includes a condition requiring the weir's removal and so this would allow this objective to be achieved prior to the permission being implemented. It is not considered to be appropriate to require the weir's removal as part of this proposal as it would be difficult to demonstrate that such a requirement would be consistent with Regulation 122 of the CIL Regulations. Notwithstanding this, it would of course be possible for the owner or a third party with the owner's agreement, to apply for funding for such an environmental project from the applicant's proposed voluntary fund.
- 11.11.13 It is therefore considered that the proposals would result in a net benefit in terms of biodiversity, through providing long term, managed habitat off site for the Little Ringed Plover and through providing significant areas of managed landscaping and habitat both within the site, around its perimeter and along the adjacent river bank. It is considered that the proposed development would not result in any unacceptable harm in terms of biodiversity subject to the proposed mitigation measures being implemented.
- 11.11.14 Overall in terms of biodiversity, the proposals are considered to be in accordance with policy WASTE 9 of the NRWDPD, policy ENV8 of the RSS, policies N49 and N51 of the UDP and policies G7 and G8 of the emerging Core Strategy.

## **11.12 Surface water & groundwater**

- 11.12.1 The key elements relating to surface water and groundwater systems are:-
- Construction of a surface water retention pond – landscaped to encourage wildlife and biodiversity benefit;
  - collection and use of rain water for use in the process;
  - no need for effluent discharge – water would be re-circulated for use in process (ash cooling, washdown); and
  - excess surface (rain) water, which would be discharged to River Aire.
- 11.12.2 The Environment Agency initially objected to the proposals due to insufficient information having been provided relating to the impact upon groundwater due to

the tipping bunker being proposed below the established water table level over an underlying secondary aquifer. However, upon the submission of further detail, the Environment Agency withdrew their objection and has requested specific conditions relating to the detail of the construction of the bunker to be applied to any subsequent planning consent.

- 11.12.3 The site would operate with an effective sustainable drainage system and there are no objections from the Council's Drainage Team or the Environment Agency in relation to this issue. Natural England comment that they are pleased to note that a water attenuation area would be included as part of a sustainable drainage system for the site.
- 11.12.4 If Members are minded to grant permission for the development, conditions would be applied relating to detailed drainage schemes and the design of the waste bunker.
- 11.12.5 Overall in terms of surface water and groundwater, the proposals are considered to be in accordance with policies ENV1 and ENV3 of the RSS and policies WASTE 9, WATER 1, WATER 6 and WATER 7 of the NRWDPD.

### **11.13 Flood risk**

- 11.13.1 The applicants have submitted a comprehensive flood risk assessment as part of the EIA. The hydraulic modelling results for the River Aire adjacent to the application site confirm that the maximum 1% annual probability flood level incorporating an allowance for climate change is 21.76m AOD. Survey data confirms ground elevations along the southern boundary are at least 1m above this elevation. This confirms that the application site is outside Flood Zone 3 and therefore not at a significant fluvial flood risk.
- 11.13.2 Leeds City Council Strategic Flood Risk Assessment confirms the site is located in Flood Zones 1 and 2. The proposed development is classed as a 'less vulnerable' type of development within the NPPF Technical Guidance and therefore appropriate to locations covered by Flood Zones 1 and 2.
- 11.13.3 Measures are proposed to manage and control surface water runoff so that development of the site would not pose an increased flood risk to users of the site or downstream land and property.
- 11.13.4 It is considered that with respect to flooding, the proposed development would pose no increased flood risk.
- 11.13.5 Overall in terms of flood risk, the proposals are considered to be in accordance with policies ENV1 and ENV3 of the RSS and policies WASTE 9, WATER 1, WATER 6 and WATER 7 of the NRWDPD and policy EN5 of the emerging Core Strategy and in line with the guidance contained within the NPPF.

## **11.14 Cultural Heritage**

- 11.14.1 Thwaite Mill and Temple Newsam lie some 500m and 2.5km from the site respectively. Views of the ERF building would be possible from locations at both of these locations, although the proposals are not considered to cause unacceptable impact on the setting of these important heritage assets.
- 11.14.2 The Hunslet Mill and Victoria Works complex lies 2.3km to the north-west of the proposed ERF. Distant views of the flue stack would be possible, especially from the upper, easterly facing, floors. However it is considered that the development of the ERF would not affect the setting of this group of buildings to any significant degree.
- 11.14.3 The Council's Conservation Officer has reviewed the proposed scheme in detail and has no objection in terms of the potential for impact upon local heritage interests. English Heritage have also raised no objection to the proposals.
- 11.14.4 The Civic Trust comment that in terms of design, Leeds Civic Trust's Planning Committee supports the proposals as they consider that the scheme fully utilises the site; is a reasonable design for the proposed use and they are encouraged by the optimised layout, aesthetic, scale and massing of the proposal. They do not raise any concerns in relation to heritage issues.
- 11.14.5 Much of Temple Newsam's designed landscape would be screened from development by vegetation cover and the landform, particularly the eastern half of the estate and only partial views of the development are possible from Temple Newsam house. Therefore the development would only be likely to give rise to an element of minor adverse impact in terms of the designated landscape and house.
- 11.14.6 The proximity of the proposed ERF to Thwaite Mills means that parts of the proposed development would be visible above the mill complex and between the buildings from certain locations. However, it is considered that this would not interfere with the relationships between the buildings, and does not directly interrupt the setting, which is limited to the canal, river and the associated buildings. The effect of the proposed development on the setting of the mill complex is considered to be of relatively minor significance.
- 11.14.7 It is considered that as the main ERF building would be visible from the grounds of both the aforementioned heritage sites, a degree of adverse impact is unavoidable and as such this should be afforded some weight in the overall planning balance.
- 11.14.8 Overall in terms of cultural heritage, the proposals are considered to be in accordance with policy ENV9 of the RSS and policy WASTE 9 of the NRWDP, policies N28 and N29 of the UDP and policy P11 of the emerging Core Strategy and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## 11.15 Cumulative Impact

11.15.1 The EIA Regulations 2011 require an Environmental Statement to consider cumulative effects, i.e. the cumulative effect of the project being carried out alongside other developments. This should form part of the description of the likely significant effects of the development on the environment and should cover the direct effects and any indirect, secondary, “cumulative”, short, medium and long-term, permanent and temporary, positive and negative effects of the development. It should also cover effects resulting from the existence of the development; the use of natural resources; the emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant of the forecasting methods used to assess the effects on the environment. The applicants have submitted such an assessment as part of the EIA.

### Existing Waste Management Uses

11.15.2 An existing landfill site, also owned by the applicants, lies approximately 2.5km from the application site. It is anticipated that the landfill would be completed around the time the proposed ERF would become operational if granted permission (the landfill permission expires at the end of April 2016). As the proposed ERF would effectively replace the landfill site, there would no significant cumulative impacts with Skelton Grange landfill site.

11.15.3 There are two existing small scale incinerators within the Knostrop WWTW site. One is the clinical waste incinerator which treats around 10,000 tonnes of such waste per year and the other is the sewage sludge incinerator which burns around 25,000 tonnes of sewage waste per year from the water works. A further site within Cross Green (T.Shea) was granted permission in 2009 for a small scale gasification plant (around 30,000 tonnes per year). This has yet to be constructed. All three sites, along with other existing emissions from industry in the vicinity have been taken into account in the form of the background air quality assessment and the subsequent modelling.

11.15.4 The NRWDPD identifies two further strategic waste management sites close to Skelton Grange which are deemed suitable in principle for the development of a strategic facility for the management of Leeds’ municipal waste. These sites are the former wholesale market to the north west of the application site and land adjacent to the Knostrop Waste Water Treatment Works to the north east of the application site. An application (ref 12/02668/FU) for the former wholesale market site has been submitted to the Council for consideration. The development proposed is for a Recycling & Energy Recovery Facility (RERF) to process principally the Council’s municipal waste.

11.15.5 It is inevitable that there would be an element of cumulative impact if both ERF sites were to become operational. There will be locations where both ERF buildings or flue stacks would be visible but taking into account the locations of the sites and the intervening industrial landscape, any cumulative impact would be very minor in terms of landscape and visual impact. In terms of emissions, the Environment Agency have considered ‘in combination’ effects as part of their consideration of the Environmental Permit application for the proposed RERF on the Wholesale Market site. It is noted that the Environment Agency’s Air Quality Modelling & Assessment Unit’s report raises no concerns in relation to cumulative impact from the operation of both the proposed ERFs with the check modelling confirming that the relevant environmental standard for human receptors should not be exceeded.

### Other Land Uses

- 11.15.6 To the south of the river and the site lies Stourton Industrial Estate. Knostrop Waste Water Treatment Works lies to the north. To the west lie further industrial areas such as Hunslet and Cross Green. To the east the land use is currently more agricultural comprising several restored former opencast and landfill sites, the remainder of the former power station site and sludge lagoons of the WWTW. Temple Newsam grounds and golf course lies to the north east of the site. Residential areas generally lie further from the site to the north west and south.
- 11.15.7 In terms of allocations in the adopted Leeds Unitary Development Plan Review, the site itself and land surrounding the site to north and south is allocated as a Neighbourhood Renewal Area.
- 11.15.8 As for future development, outline planning permission was granted in 2007 for industrial and warehouse development (Class B8 and B2/B1c use) on land that included the application site and adjacent areas of the former power station site. In addition, a small gasification plant is proposed on Knowsthorpe Lane, approximately 600m from the application site. Given the extent and type of recent new development in the area, it is anticipated that any future development in the vicinity of the site would be for light and general industrial development. The emerging Area Action Plan for the Lower Aire Valley also indicates proposals for the application site and immediate surrounding area will be likely to include predominantly general industry / warehousing and mixed use.
- 11.15.9 Modelling of the cumulative impact of air emissions from the permitted gasification process was undertaken by the applicants and concludes that the ERF emissions would not lead to exceedences of air quality objectives.
- 11.15.10 In terms of transport, the applicant has considered both growth in traffic on the highway network, and the implications of the extant outline planning permission for the former Skelton Grange power station site. The baseline traffic data incorporates the HGV movements associated with the existing industrial premises to the south of the application site. By factoring in growth to the traffic data and assessing in future years, allowance has been made for future development in the area, together with population growth. It is considered that the proposed development would not give rise to adverse effects on the local highway network in terms of traffic flows and highway capacity.
- 11.15.11 Cumulative impacts upon air quality would result from traffic using the local highway network (with the greatest contributor being users of the M1) and emissions from other local industrial processes. Baseline data were obtained through monitoring air quality around the application site. This data includes emissions from the existing sources, allowing for a cumulative assessment to be undertaken. The predicted long-term process contributions from the proposed ERF were then combined with the background concentration to identify the predicted environmental concentrations (PEC).
- 11.15.12 It is considered that there would be no significant adverse air quality effects for either human or ecological receptors which, cumulatively, would adversely impact upon the site or the surrounding area.
- 11.15.13 The submitted noise assessment demonstrates that noise levels at nearby receptors would be significantly below measured background noise levels, and as

such, the likelihood of complaints is low and therefore there is considered to be negligible potential for cumulative impact to arise.

- 11.15.14 The proposed development would result in significant visual effects from a number of key viewpoints around the site, but due to the industrial nature of the development and its industrial context, the proposed building would be compatible with its surroundings and impacts are assessed to be neutral.
- 11.15.15 As such, the potential for cumulative impact in from landscape and visual impact is considered to be limited.
- 11.15.16 The potential for cumulative impacts to the water environment is predominantly associated with surface water run off entering water courses, which, if not managed, could cause pollution or flooding.
- 11.15.17 The proposed ERF would have large areas of impermeable surfacing, including the main building's roof and roadways / vehicle manoeuvring areas. The surrounding land is largely undeveloped and therefore the potential for an accumulation of pollutants, such as suspended solids, and high levels of runoff in storm events is currently low. Any future development resulting in increased areas of hard standing would need to be designed to avoid or minimise the risk of cumulative impacts to the River Aire.
- 11.15.18 The EIA incorporates a detailed assessment of the potential impacts upon the water environment. Mitigation, in the forms of SuDS, has been proposed to manage surface water. Through the use of SuDS, discharge from site would be limited to "greenfield" levels and the assessment concluded that so significant impacts would arise.

#### Use of natural resources

- 11.15.19 The construction and operation of the ERF facility would require the use of a range of natural resources including land, water, materials and energy. However, there is no evidence to suggest that the ERF facility would give rise to unacceptable cumulative impact for this reason.

#### Emissions and creation of nuisances

- 11.15.20 For reasons set out elsewhere in this report, it is not considered that the development would, in itself, give rise to unacceptable cumulative impact through specific emissions or other nuisances. It is further concluded, taking into account the advice received from the relevant consultees, that there is no evidence to suggest that the development either, as a whole, or in combination with other development, would be likely to give rise to unacceptable cumulative impacts with respect to these particular issues.

#### Elimination of wastes

- 11.15.21 The proposed ERF would effectively move waste up the hierarchy by recovering energy from it. It is therefore considered that the development would not give rise to any unacceptable cumulative impact in relation to this subject.

#### Combination effects

- 11.15.22 The Environment Agency have confirmed that they will consider effects from the proposals in conjunction with existing sites as part of their processing of a subsequent Environmental Permit application.

- 11.15.23 Natural England have not raised any concerns relating to cumulative impact from the proposals.
- 11.15.24 In terms of the potential cumulative impact on the road network, neither the Highway Authority nor the Highways Agency have any objections to the proposals.
- 11.15.25 The potential for cumulative impact upon air quality from the operation of both ERF plants has been specifically considered within the EIA for the Wholesale Market site (as the application was received some time after the submission of the Skelton Grange ERF proposal), with likely cumulative effects for NO<sub>2</sub> being modelled. NO<sub>2</sub> is generally the air pollutant of primary concern for purposes of regulation against air quality strategy objectives. The total predicted NO<sub>2</sub> concentration, including all existing background emissions, together with the contribution from the proposed Skelton Grange ERF and Wholesale Market RERF, would be well within the accepted air quality standard.
- 11.15.26 The Director of Public Health was requested to specifically review this data and consider the potential cumulative impacts from the operation of both proposed plants to facilitate a joined up approach with the Health Protection Agency (HPA) to best address public and Member concerns as the permitting process proceeds and onwards through plant commissioning should the applications be granted permission.
- 11.15.27 The HPA responded on behalf of the Director of Public Health, confirming that the available data would suggest that the impact on particulate levels in the region of the proposed plant is likely to be limited. These predictions are in line with the HPA position statement (ref RCE-13) which states that, 'Modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable'.
- 11.15.28 Leeds PCT have considered the above advice from the HPA and further comment as follows:-
- Leeds PCT is a separate organisation from the Health Protection Agency;
  - the PCT has a public health directorate overseen by the Director of Public Health, and works very closely with the Health Protection Agency which has provided an evidence based assessment of the potential impact of the Veolia planning application for a RERF on the Wholesale Market site;
  - the HPA has taken account of the proposed Veolia RERF at Cross Green, as well as a "check review" of information provided in association with this planning application by Biffa at Skelton Grange in the same area of Leeds; and
  - the emissions from the proposed Veolia RERF, as well as combined emissions from both plants, are likely to be a small proportion of overall air pollution. The PCT agrees with the HPA statement that it *"is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable"*.
- 11.15.29 Environmental Health (Leeds City Council) have also taken into account any potential cumulative impacts from the scenario where the proposed ERF would operate concurrently with the RERF proposed for the Wholesale Market site. Environmental Health comment that, individually, neither proposed ERF would be likely to make a significant contribution to the existing acceptable background

environmental air pollution concentrations. Environmental Health confirm that emissions from the two plants would be controlled under permits issued by the Environment Agency and that the Environment Agency's Air Quality Modelling and Assessment Unit have now had the opportunity to consider the detailed permit application in respect of the Wholesale Market RERF and have produced a report on behalf of the National Permitting Service. In the report, the Environment Agency considers the cumulative impact of the effect of both sites operating concurrently, concluding that following analysis of both facilities and the check modelling, the relevant environmental standard for human receptors should not be exceeded.

- 11.15.30 In conclusion, it is considered that there would be no significant cumulative impact in terms of health, air quality or traffic from the proposed development when considered in combination with other sources. It is also concluded that there would be no other cumulative effects resulting from the proposed development when considered in combination with other sources.
- 11.15.31 Overall in terms of cumulative impact, the proposals are considered to be in accordance with policies WASTE 9, ENERGY 3 and AIR 1 of the NRWDPD and in line with the guidance contained within the NPPF and Planning Policy Statement 10.

## **11.16 Alternatives**

- 11.16.1 Schedule 4 of the EIA Regulations requires an Environmental Statement includes an outline of the main alternatives studied by the applicant and an indication of the main reasons for any choice, taking into account the potential environmental effects.
- 11.16.2 For this scheme, the alternatives considered relate to:-
- alternative sites to the former Skelton Grange power station site;
  - alternative waste management techniques and technologies to that proposed; and
  - alternative designs or ways of developing the Skelton Grange site.
- 11.16.3 In addition to the sites put forward within the NRWDPD, the applicant considered proposals for locating an ERF facility within its landfill site, some 2.5km to the east of the application site. However, this site was not considered as a feasible alternative site due to lack of space, unsuitable ground conditions and its relatively rural location within the Green Belt.
- 11.16.4 The Integrated Waste Strategy for Leeds aims "to achieve maximum diversion of waste from landfill and to recover the maximum value from waste". Although mainly aimed at MSW, the principles of biodegradable waste diversion from landfill and recovery of value are equally relevant to C&I waste. The results of an options appraisal showed energy from waste (EfW) as the best performing option, achieving the highest ranking in terms of cost and benefit criteria and the highest ranking of all technologies in terms of risk, recognising its proven track record. The results are equally applicable to C&I waste treatment as to MSW.
- 11.16.5 The Environment Agency life cycle assessment software WRATE was utilised to model the potential environmental impacts of the proposed facility. The

environmental burdens for global warming potential were calculated for the processing of 300,000 tonnes per annum of residual C&I waste through a number of waste treatment processes, including:-

- energy from waste (EfW) with power export;
- advanced thermal treatment (ATT), specifically pyrolysis;
- mechanical biological treatment (MBT) with refuse derived fuel (RDF) to EfW; and
- MBT with bio-stabilised output to landfill.

11.16.6 The assessment compares the potential environmental impacts of the proposed solution, energy from waste, against three other waste treatment processes, as well as landfill, as the baseline scenario. All residual treatment technologies result in reduced carbon dioxide equivalent (CO<sub>2</sub>e) emissions compared to landfill, the baseline scenario. Two scenarios (EfW power export and MBT with EfW) outperform the other scenarios and result in a net avoided burden of CO<sub>2</sub> equivalent, i.e. the avoided burdens of recycling and energy recovery outweigh the burdens of CO<sub>2</sub> from the direct and indirect emissions.

11.16.7 The estimated global warming potential of the five waste treatment scenarios is shown in the table below; the global warming potential emissions are valued to provide a score of between 0 and 1, with 1 representing the most sustainable waste treatment technology.

	<b>Baseline (Landfill)</b>	<b>Skelton Grange ERF</b>	<b>ATT (Pyrolysis)</b>	<b>MBT with EfW</b>	<b>MBT with Landfill</b>
<b>kg CO<sub>2</sub> eq.</b>	62,352,945	-24,998,247	10,585,043	-2,399,926	18,224,334
<b>Score</b>	0.0	1.0	0.6	0.7	0.5

11.16.8 The final design for the proposed ERF is the culmination of an iterative design process. The architectural design has evolved from initial concepts, to more involved design informed by the EIA process. At the same time, the layout of the facility has also evolved.

11.16.9 The site available at Skelton Grange for the ERF building is rectangular, located on a northeast / southwest axis. The site is severely constraint by pylons on the northwest and southwest. The site is characterised by its former function as a power station which impacts the site levels and building footprint. The site is bordered by the River Aire to the southwest and the sewage treatment works to the northeast. The site area available, suggests a linear plan form, which suits the layout of the technology; this became the starting point for the design.

11.16.10 It is essential for the proposed development to ensure a safe and efficient flow of operational traffic through the site and this is one of the major factors influencing the design. The design incorporates a peripheral two-way road around the building perimeter. From this, one-way routes are taken through the building for operational and maintenance access. This arrangement combines the paramount need for safe traffic flows and the pre-existing site constraints to minimise vehicle crossing. Another important consideration is to separate out pedestrian and small vehicles

from the operational heavy goods vehicles. This has been achieved by separating incoming, queuing operational traffic shortly after entering the site. The site entrance has been located on the south east side of the site and provides a clear linear approach from the southwest up to the offices and visitor centre which have been orientated south/southeast for optimal daylight, and to separate them from the operational traffic entering the tipping hall, which would make up the bulk of the operational traffic on the site.

- 11.16.11 Another key consideration in the orientation of the building is the location of the air cooled condensers. These tend to be one of the noisiest components of the process. When considering the options available within the linear arrangement, it was clear that the preferred location for the air cooled condensers was away from the proposed offices / visitor centre and adjacent to the existing substations and pylons which bound the site.
- 11.16.12 The three part plan form of the building that developed from this iterative design process is considered entirely appropriate in this industrial setting, reinforcing the building's function. The idea of celebrating the form was then incorporated in to the profile of the building, to ensure that the building related in a positive way to its context. The roof form curves to minimise the appearance of the building's height and form, creating an architectural drape over the process technology.
- 11.16.13 Various options were considered for the treatment of the flue stack. Central to all ideas was the fact that the ERF is adjacent to the motorway, and as such marks its location, as a gateway to Leeds and the Aire Valley. A sculptural treatment of the flue stack would act as a landmark for the motorway junction and the valley. Two approaches were considered: the first was the sculptural treatment of the flue stack, wrapping them in a double helix to create a landmark. This would announce the building's presence at the gateway of the Aire Valley. The second approach adopted feedback from other ERF projects which suggested that treating the flue stack in a more understated manner would be better received by the public. It has therefore been decided to locate the flue stack within the boiler hall; minimising their diameter; designing them in as an unobtrusive way as possible, rather than as a standalone sculptural element. The colour of the flue stack would be selected to de-emphasise their silhouette against the sky.
- 11.16.14 The materials and colours for the building evolved initially from a range of colour options, which took into account the building's context against the sky, the landscape, the surrounding industrial heritage and the recent industrial building stock. The design intention for the upper portions of the building is to ensure that upper sections of the building are not too dark against the sky. The lower portion of the building may be viewed against the sky or against the land depending on the view point and as such it is difficult to select a colour that is sympathetic to a changing background. Nevertheless, it is considered that a range of blues are the right option to sit against the building's skyline context. The cladding would be a pale metallic blue with a darker metallic blue for the base to ground the building. This is seen as the right solution as metallic colours tend to break down the bulk of the building and pick up on colours around them. The boiler hall would be clad with a mix of Danpalon (a translucent polycarbonate) and glazing, creating a contrast in material textures and reflectivity.
- 11.16.15 Initially the roof was proposed as a Kalzip aluminium standing seam with a natural finish. However, it is now proposed to use a pre-weathered finish called Aluplus Patina which would give a matt finish and thereby not emphasize the expanse of

the roof. Consideration was also given to colour coating the roof, but such a finish would be less durable than the aluminium and on balance it is considered that proposed solution would be more sustainable.

11.16.16 It is considered that the requirements of the EIA Regulations have been fully met in this respect.

## 11.17 Representations

11.17.1 The majority of the representations received have been addressed within specific sections of this report. However, the following issues were also raised and comment is provided to explain how these concerns would be taken into account:-

- Unpleasant aroma in Garforth;

*Response – odour from the plant is extremely unlikely to occur within the vicinity of the plant due to all waste operations taking place within the building. Air would be drawn in to the building to facilitate the incineration process and so it would be very unlikely that any odour would escape. It is therefore considered that there would be no significant impact from the operations in terms of odour. This matter would also be taken into account within any Permit granted for the plant.*

- No account taken about safeguarding health & welfare of residents should a major incident occur such as a fire breaking out or explosion taking place;

*Response – the West Yorkshire Fire and Rescue Service have been consulted and have not felt it necessary to respond. This matter would also be taken into account within any Permit granted for the plant.*

- No reference to the provision of incorporating monitoring stations to be set up in and around residential areas including Garforth;

*Response – emissions will be monitored at source and so there is no need for additional monitoring elsewhere.*

- Public information should be available on an internet website on a daily basis to inform residents on the plant's performance in safety terms;

*Response – this would be a requirement of any Permit granted for the plant.*

- Only one incinerator should be approved, away from housing. Biffa and Veolia are requested to work together to develop a preferable option;

*Response – the sites allocated within the NRWDPD have all been assessed to be acceptable in principle for Strategic Waste Management facilities. The applications before the LPA must therefore be considered on their merits. The accompanying covering report covers this matter in more detail.*

## 11.18 Other Considerations

### Materials Recovery Facility (MRF)

- 11.18.1 As part of the applicant's waste management network in Leeds, the applicants have an extant planning permission to develop the former British Oxygen (BOC) site on Gelderd Road as a Materials Recovery Facility (MRF). The MRF would initially accept around 90,000 tonnes of waste materials per year, increasing to around 200,000 tonnes per year in the longer term. The residual waste remaining after the recycling / recovery process at the MRF would be taken to the ERF. Following discussion at the 23<sup>rd</sup> February 2012 Plans Panel (East) meeting, clarification was requested on the numbers and routing of HGVs moving between these two sites. It can be confirmed that the route from the future Gelderd Road Beeston MRF would be via the A62, A6110 Ring Road onto the M621 at junction 1 and then leaving the M621 at Junction 7, onto the B6481 (Pontefract Road) via the A61 / A639 and then along Skelton Grange Road into the site. The distance of this route is approximately 5 miles and avoids residential areas. The requirement to use this route would be incorporated into the legal agreement. Around 62,000 tonnes of residual waste would arrive at the ERF from this site in the short term, rising to 78,000 tonnes per year longer term. The average payload for the vehicles transporting the material between sites is 20 tonnes and therefore this would equate to around 10 loads per day travelling to the ERF from the Gelderd Road MRF longer term. The applicants are willing to include this specific route between the MRF and ERF within the legal agreement.
- 11.18.2 It was noted at the City Plans Panel meeting on 22<sup>nd</sup> November 2012 that Members questioned whether it might be beneficial for the MRF to be situated on the same site as the ERF. However, the applicants do not own the ERF site and the landowner has outline planning permission on the adjacent land for industrial warehouses and offices. It is important to remember that recycling objectives are primarily achieved at the point of collection, through the waste collection services which collect residual waste and recyclable wastes separately. Even without the availability of a MRF development by Biffa at the Gelderd Road site, recyclables would already have been removed from the general waste stream at source, so there would be no particular benefit in building a MRF at the proposed EfW site as they are two separate functions, one dealing with the collected residual waste stream, the other dealing with separately collected recyclables stream.

### Skelton Grange Landfill

- 11.18.3 The applicants have operated several landfill sites within Leeds over the last 30 years. Currently, their only remaining active landfill site, which lies to the east of the application site, has permission for tipping until April 2016. The applicants have agreed to incorporate a clause into a Section 106 Agreement, requiring landfilling to cease at the site if the ERF were built, should permission be granted.
- 11.18.4 The combination of the closure of Skelton landfill and the commissioning of the ERF if it were granted permission, would result in the displacement of the collection vehicle routes from the vicinity of the landfill to the ERF. There would therefore be a corresponding reduction in HGV traffic in the Oulton / Woodlesford area and along Pontefract Lane.
- 11.18.5 Regarding other waste traffic to the ERF this would comprise collection vehicles carrying commercial and industrial waste from across Leeds, typically arriving via Hunslet Low Road and Stourton and the highway network that feeds into this area.

These vehicles are already on the road in Leeds, but currently go to the landfill site at Skelton.

#### Meteorological / wind impact

11.18.6 The applicants provided information in relation to the potential for impact from air currents and wind from the structure upon vehicles and any public in the vicinity. This information was reviewed by Arup. Arup's response commented that the proposed development would be taller than the existing surroundings and the structure would also be exposed to prevailing westerly winds. The building is considered to be of a reasonable scale and its orientation and shape are beneficial as there is no tall bluff facade facing west. The distance between the building and the site boundary is also considered to be sufficiently large. Arup's assessment on behalf of the Council concluded that:-

- The proposed development is not expected to have a major off-site impact; and
- Wind conditions on-site may be locally windy, especially around corners. However, the site is not accessed by general public and the wind impact is generally limited to possible on-site operational activities.

11.18.7 It is therefore considered unlikely that any adverse meteorological or wind impacts would arise upon vehicles or public in the vicinity from the proposed structures.

#### Transport by waterway

11.18.8 There has been discussion as to the potential for use of the Aire & Calder Navigation for the transportation of waste. The applicants have confirmed that they do not wish to rule out the future use of the waterways for the transportation of waste. However, there are a number of factors which indicate that development of such a transportation option at the current time is not viable, and may not achieve environmental benefits in any event due to the need to haul waste by road to various transfer stations and wharves along the waterways system.

11.18.9 The wharf for the former Skelton Grange power station which lies some distance downstream was used to deliver coal from a mine or mines outside Leeds. It was therefore a case of transporting materials from one fixed location to another. However, the fuel for the proposed facility is residual waste which arises in a multitude of locations from premises throughout Leeds. There would need to be a series of transfer stations along the waterways throughout Leeds to serve such a system, the cost of which alone would be prohibitive. It would also be unlikely to be practical in planning or environmental terms to be able to secure a series of transfer stations on the waterways in Leeds even if sites were available.

11.18.10 Most importantly water transportation lends itself to the transportation of materials over long distances which would mean it is really only viable for importing significant volumes of waste from other large urban settlements outside Leeds. Also, since the source of waste arisings is widespread across the urban areas due to the widespread nature of the waste producers, HGVs would still have to collect the waste by road and transport it by road to wherever the feeder points were situated.

#### Aviation

11.18.11 No aviation stakeholders object to the proposed development. However, following discussions with the Civil Aviation Authority, it has been recommended that the flue stack incorporates a steady red aviation warning light. It is considered that due to the proposed maximum height of the flue stack (90m) and that they would be the

largest structure in the vicinity, that this requirement should be applied as a condition should the application be approved.

## **11.19 Section 106 Agreement**

11.19.1 With regard to planning conditions and obligations, the NPPF indicates that local planning authorities should consider whether unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition. Both the NPPF and the Community Infrastructure (CIL) Regulations (Reg 122) provide that planning obligations should only be sought where they meet all the following tests:-

- necessary to make the development acceptable in planning terms;
- directly related to the development; and,
- fairly and reasonably related in scale and kind to the development.

11.19.2 The proposed Section 106 Agreement would incorporate:-

- travel plan fees & monitoring;
- routing of HGVs between Gelderd Road MRF and Skelton Grange ERF;
- routing management plan for HGVs;
- cycle path & footpath provision;
- Trans Pennine Trail improvements (and maintenance) including first phase of alternative route along northern river bank and re-engineered ramp access;
- contribution towards bus stop improvements on Pontefract Road, including real-time information;
- contribution towards pedestrian crossing equipment and an “all-red” phase during each cycle of the signals at junction of Skelton Grange Road and Pontefract Road;
- off site ecological works at Lagoon 21 of Skelton Grange Landfill;
- off site planting & maintenance – planting between site boundary and river and within ramp loop linking Trans Pennine Trail and the bridge;
- cessation of landfilling at Skelton Grange Landfill;
- local employment;
- the formation of a community liaison group;
- integrated landscape and ecological management plan; and
- a voluntary community / environmental project fund.

### Travel Plan fees & monitoring

11.19.3 The applicants have submitted detailed travel plans for the development which can be conditioned or included within the S106 legal agreement requirements the appropriate management fees. The travel plans would not be static documents and would evolve through the construction and operational periods of the development.

#### Routing of HGVs between MRF and ERF

- 11.19.4 The route from the future Gelderd Road MRF would be via the A62, A6120 Ring Road onto the M621 at junction 1 and then leaving the M621 at Junction 7, onto the B6481 (Pontefract Road) via the A639 and then along Skelton Grange Road into the site.

#### Routing management plan for other HGVs using the site

- 11.19.5 Residual waste would be collected from multiple industrial and commercial premises throughout Leeds and as such it is not feasible to have a fixed routing agreement covering the collection routes to and from all customers' premises. However, with the exception of local deliveries drivers would be advised to use the motorways and 'A' roads to travel to the ERF wherever available.

#### Cycle path & footpath provision

- 11.19.6 To link Trans Pennine Trail, across bridge, following the site access road to a point level with southernmost edge of application site.

#### Trans Pennine Trail improvements (and maintenance) including first phase of alternative route along northern river bank and re-engineered ramp access

- 11.19.7 The routing of the supplementary path would be along the north east river bank. It has been confirmed that there is sufficient space to accommodate the link along the site frontage.
- 11.19.8 The proposed access ramp linking the south western towpath with the bridge can be incorporated into a suitably worded planning condition if necessary.

#### Contribution towards improvements of two bus stops on Pontefract Road, including 'real time' information

- 11.19.9 A maximum of £20,000 per bus stop would be provided. £10,000 for the shelter and a further £10,000 for the Real Time Passenger Information (RTPI) board. One bus stop in either direction would be provided, totally a contribution of £40,000.

#### Contribution towards pedestrian crossing equipment and an "all-red" phase during each cycle of the signals at junction of Skelton Grange Road and Pontefract Road

- 11.19.10 Formal crossing facilities at Skelton Grange Road and Pontefract Road are required by the Highway Authority through provision of pedestrian crossing equipment and an "all-red" phase during each cycle of the signals.

#### Off site ecological works at Lagoon 21 of Skelton Grange Landfill

- 11.19.11 It is proposed to create new Little Ringed Plover habitat on Lagoon 21 at Skelton Landfill, a site owned and managed by the applicants. Lagoon 21 is located approximately 2.5km to the east of the development site and has a 35 year Ecological Management requirement associated with it.
- 11.19.12 The new habitat would comprise three floating rafts, staked to the embankments of the lagoon in areas free from overhanging trees and scrub. The rafts would each be 4m x 4m in area and would be free from vegetation. They would have a retaining, wire mesh fence, approximately 25cm in height around the perimeter, to prevent young chicks from falling overboard. The top of the fence would be finished to allow birds to safely perch upon it.
- 11.19.13 The rafts would be constructed of shingle, with a black polythene sheet beneath to limit vegetation growth. The raft maintenance would form part of the 35 year Ecological Management Plan when it is next updated in 2015 / 2016. Small ramps

would be provided to allow access of little ringed plover to the mainland whilst limiting access onto the rafts by predators.

Off site planting & maintenance – planting between site boundary and river and within ramp loop linking Trans Pennine Trail and Skelton Road bridge

- 11.19.14 Landscaping would be provided within the loop of ramp from canal to the bridge and also along bank of river to complement that already existing and to provide a more substantial, long term, landscape belt.

Cessation of landfilling at Skelton Grange Landfill

- 11.19.15 The proposed ERF would effectively replace Skelton Grange Landfill site as a waste management facility for residual wastes. The landfill site is anticipated to be operational until April 2016. It would take three years to construct the ERF and an additional period to commission the facility. It is proposed that following commissioning of the ERF, the landfill would cease accepting waste within six months. The landfill permission has its own detailed restoration requirements.

Local employment

- 11.19.16 The applicants would be required to use their best endeavours to create jobs for people within the local area. Contractors tendering for building / maintenance / engineering contracts would also be encouraged to make best endeavours to employ people within the local area. The applicants would also encourage apprenticeships connected with the construction of the ERF to be sourced from within the local area. For the purposes of this clause, it is suggested that the 'local area' should be defined as the application wards and those adjoining.

Community liaison group

- 11.19.17 The operators of the ERF would be required to hold regular meetings with interested representatives of the local community, local Councillors, the Environment Agency and the Local Planning Authority.

- 11.19.18 This would include invitations for representatives from the College of Building and Skelton Environment Centre to attend to discuss ways of forming educational links.

Integrated landscape and ecological management plan

- 11.19.19 An integrated landscape and ecological management plan is proposed to be included within the S106 Agreement. This plan would be formulated at the end of the 5 year standard aftercare period and would be reviewed at 5 year intervals for the life of the development. This could also be achieved via the imposition of a condition if Members are minded to grant permission.

- 11.19.20 The proposed content of the S106 Agreement as outlined above is considered to meet the requirements of the three tests as outlined above and as set out within the Community Infrastructure Regulations (CIL) and the NPPF.

Voluntary community / environmental project fund

- 11.19.21 The applicants have additionally expressed a wish to voluntarily set up a community / environmental fund of value up to £90,000 per year, based upon £0.30 per tonne of waste received at the facility. This would result in a fund value of up to £2¼ million over the 25 year design life of the site. The applicants have confirmed that the fund is not put forward in order to justify the development in planning terms, but that it is intended to voluntarily make provision for funding for local community and environmental projects. Officers are also of the view that such a fund is not necessary to address any planning consequences associated with the development

and consequently the provision of such a fund should not be taken into account when it comes to determining the planning application. However, it would be possible to incorporate a mechanism within the legal agreement to ensure that the fund was delivered.

11.19.22 Biffa intend that the fund contributes to local environmental projects as well as local community projects. However, they have suggested that if monies set aside for environmental projects were not spent within a set period of perhaps 3 years then those funds would be allocated to community projects. It is considered that any such fund should focus on the two wards within which the application site lies, Burmantofts & Richmond Hill and City & Hunslet. Consideration should also be given to other surrounding wards and Beeston & Holbeck ward due to traffic between the MRF and ERF traveling through this ward. As views of the site would also be possible from areas within Temple Newsam, Rothwell and Garforth & Swillington wards, it is recommended that these wards should be considered within the scheme. It is proposed that the legal agreement would include a clause requiring the submission of a scheme detailing how the fund would work in practice.

## **12.0 CONCLUSION:**

12.1 The application site and the land immediately to the east and south is allocated in the Natural Resources and Waste DPD as a 'Strategic Waste Management' site and therefore the use associated with the proposed development is acceptable in principle.

12.2 The site benefits from the local topography and geography in that it is sited away from local communities and adjacent to other, principally industrial, development. It is almost unavoidable for a facility of this scale to have no adverse impact upon the appearance and character of the area in which it would be sited. However, as is evidenced by the photomontages and taking into account the high quality design of the structure and the site layout, it is considered that the building would assimilate well into the existing industrial landscape. The fact that the site accommodated a large coal fired power station until the 1990s also serves to demonstrate the ability of the site to accommodate large scale structures such as the building proposed. Having said this there would be an adverse impact on distant views from a limited number of residential areas, from the Trans Pennine trail and from local heritage assets.

12.3 Air quality and public health issues have been fully considered by the appropriate consultee bodies, including the Environment Agency, Directorate of Public Health and Environmental Health. It is concluded that there would be no significant impacts upon either air quality or public health as a result of the proposed plant operating, either independently, or in combination with the operation of the proposed Wholesale Market RERF and / or the Cross Green Heat & Power gasification plant. It is also concluded that there would be no significant cumulative effects from the operation of the ERFs in terms of traffic movements.

12.4 In terms of traffic generation, the site would effectively displace the HGVs currently transporting waste to Skelton Landfill. The landfill site accepts around 400,000 tonnes of waste per year. Once the landfill is closed, there would be a resultant decrease in the level of waste traffic in the surrounding area, although it is recognised that such traffic would increase along Pontefract Road but that this would not result in any significant or unacceptable impacts.

- 12.5 The proposed ERF would make a significant contribution towards the targets in the development plan for renewable energy and would facilitate the diversion of a considerable volume of residual non-hazardous waste from landfill. With the proposed permanent closure of the applicant's Skelton Landfill, this would assist in moving the waste further up the hierarchy.
- 12.6 The plant would produce significant quantities of renewable and low carbon energy in the form of electricity which would be exported to the National Grid, supporting national policy to improve the diversity and security of energy supplies and would have the potential to export heat to existing and future local consumers as adjacent sites are developed.
- 12.7 The proposed development represents sustainable economic development, creating jobs and demand for materials in addition to meeting the locational requirements of the development plan at both strategic and local level whilst contributing to meeting a significant need for such waste management facilities. The proposal would also assist in achieving self-sufficiency in terms of waste management for Leeds, in accordance with both local and national policy. The benefits of the proposed scheme are considered to be significant. They are material considerations that substantially outweigh the dis-benefits.
- 12.8 The competing matters in the balance are all of importance, but in this case it is considered that the case for the development and the support given to it at national, regional and local level clearly outweighs any identified adverse impact.
- 12.9 An Environmental Statement was produced in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 in support of this proposal. This, together with all subsequent addendums and additional information has been taken into account in arriving at these conclusions and it is considered that the requirements of the Regulations have been met.
- 12.10 The application is therefore recommended for approval, subject to conditions and the completion of a Section 106 Agreement as summarised within this report.

### **13.0 APPENDICES:**

13.1 The following are appended to this report:-

- Appendix 1 – Summary of proposed conditions;
- Appendix 2 – Previous Plans Panel Meetings – Minutes and Comments; and
- Appendix 3 – Regulation & Monitoring – Environment Agency; and
- Appendix 4 – Plan showing extent of outline planning permission 21/279/05/OT.

### **14.0 BACKGROUND PAPERS:**

Application file 11/03705/FU;  
Plans Panel (East) – 5<sup>th</sup> August 2010 (Minutes and Agenda);  
Plans Panel (East) – 20<sup>th</sup> January 2011 (Minutes and Agenda);  
Plans Panel (East) – 23<sup>rd</sup> February 2012 (Minutes and Agenda);  
Plans Panel (East) – 9<sup>th</sup> August 2012 (Minutes and Agenda);  
City Plans Panel – 22<sup>nd</sup> November 2012 (Minutes and Agenda).

**APPENDIX 1 – SUMMARY OF PROPOSED CONDITIONS**Approved Plans and Documents

List of approved plans and documents (including EIA)

Copy of permission, approved plans and documents to be kept available on site for duration of development

Implementation period

Development to commence within 5 years of the date of permission

Waste types and volumes permitted per annum

Maximum of 300,000 tonnes of non-hazardous residual waste to be accepted in any 12 month period. Submission of annual monitoring report to Council.

Hours of operation

During construction works, operations permitted 0700-1900 (Mon-Fri) and 0700-1600 (Sat)

Bridge Improvement Works

Detailed scheme (submitted prior to commencement and to be implemented prior to occupation) for works to Skelton Grange Road Bridge to include:-

- strengthening works;
- provision of double carriageway enabling two way traffic;
- cantilevered cycleway and footpath (3m width);
- improved access ramp (2.5m width) linking southern end of bridge to Trans Pennine Trail;
- replacement staircase from mid section of bridge to Trans Pennine Trail; and
- provision of temporary traffic signals to enable one way traffic during construction period.

Flue Height

Top of flue stack to be of height no greater than 115m AOD (max 90m in height)

Highways

All construction HGVs to arrive / depart the site via Junction 44 of the M1

Construction related HGV movements not to exceed 17 movements to and from the site in the AM peak of 0730-0830 and 8 movements to and from the site in the PM peak of 1645-1745

Construction Traffic Management Plan (prior to commencement)

Construction Phase Travel Plan (prior to commencement)

Detailed lighting scheme covering the full length of the unadopted section of Skelton Grange Road (including the bridge and new access ramp) to the site access (submitted prior to commencement and to be implemented prior to occupation)

Details of improvements to pedestrian crossings in the form of controlled facilities (and associated works) at the junction of Skelton Grange Road and Pontefract

Road (submitted prior to commencement and to be implemented prior to occupation)

Details of cycle and motorcycle facilities

Details of improved bus stop shelters on Pontefract Road to include 'real-time' displays

Maintenance Strategy for bridge (including ramp and stairs) and unadopted section of Skelton Grange Road

Vehicle parking facilities to be provided within the site for the period of construction of the development and all vehicles associated with the development shall be parked within the site

#### Biodiversity and management

Integrated Landscape and Biodiversity Protection, Enhancement and Management Plan to be submitted

Method statement for the control and eradication of Giant Hogweed within the site to be submitted

#### Aviation

Method statement to minimise attraction of birds

Scheme detailing the coordinates of the development site, date construction is to start, date construction is to end by; the maximum extension height of any construction equipment and; the latitude and longitude and height of the tallest part of the completed structure of the turbine and details of aviation warning lighting to be submitted

#### Noise

Noise level from all mechanical services plant on the development not to exceed a level at the nearest noise sensitive premises higher than 5dB below the lowest prevailing background noise level in the absence of noise from the proposed plant, during hours of plant operation

#### Lighting

Details of the location, height, design, sensors, hours of operation, luminance and intensity of all proposed external lighting – to be designed to minimise the potential nuisance of light spillage. Scheme to include details of night-time lighting scheme for ERF building

#### Sustainability

Submission of Sustainability Statement

#### Drainage

No building or other obstruction to be located over or within 5m either side of the centre line of the 12" water mains

No building or other obstruction to be located over or within 3m either side of the centre line of the 6" and 9" water mains

No development until details of suitable protection works for the water mains such as appropriate diversion measures have been submitted

No piped discharge of surface water from the application site shall take place until works to provide a satisfactory outfall for surface water have been completed in accordance with details to be submitted

Detailed surface water and foul drainage scheme based on sustainable drainage principles (prior to commencement)

Details of attenuation facilities for surface water flows (prior to commencement)

Details of disposal of contaminated water during construction phase (prior to commencement)

#### Materials

Details of all proposed materials; fencing; gates; signage to be used externally. Materials for offices shall ensure no glare upon receptors outside of site

#### Environmental Protection

Any facilities for the storage of oils, fuel or liquid 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 tanks plus 10%. If there is multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank plus 10%. All filling points, vents and sight glasses must be located within the bund. There must be no drain through the bund floor or walls

Details of the design and construction, together with a hydrogeological risk assessment, of the fuel storage bunkers

Details of provision of facilities for storage and disposal of litter

#### Contaminated Land

Submission of final contaminated land reports including desktop study, remediation statement and site investigation

Submission of amended remediation statement following unexpected contamination

Submission of contaminated land verification report

#### Complaints

Following the receipt of any complaint about operations on site affecting neighbouring land users or the environment, the operator shall, within 24 hours, notify the County Planning Authority of the complaint, details of the investigation and if relevant, any mitigation measures taken

## A2 APPENDIX 2

### Plans Panel (East) Meeting of 23<sup>rd</sup> February 2012

A2.1 For ease of reference the minutes and resolutions of the previous meeting are reproduced below. Summary clarification of points by officers is provided in bold.

A2.2 Members questioned officers on a range of issues and received the following information:

- that details of the total tonnage of Biffa's waste collected in Leeds annually could be provided in a further report – **details are provided within the section entitled 'Need'**;
- that the total annual amount of waste received at Biffa's landfill site had decreased from around 500,000 tonnes to about 300,000 tonnes per annum in recent years. In terms of waste arisings, extensive research to support the NRWDPD had been undertaken. The NRWDPD had recently undergone public examination and would provide the basis on which the Council would need to assess the application – **actual figures for waste delivered to landfills within Leeds over recent years is provided within the section entitled 'Need'. These figures show that over the last three years, waste delivered to Peckfield Landfill has been between 300,000 – 400,000 tonnes per year and Skelton Landfill has been between 400,000 – 500,000 tonnes per year**;
- the capacity of the vehicles transporting the waste to the ERF from customers would generally be 10 tonnes, with the larger, 44 tonne vehicles being used to transport the bottom ash away from and to deliver bulked up waste to the site. There would be about 90 HGVs arriving and leaving each day mainly between 9am – 4pm, although the plant would operate for 24 hours per day;
- regarding the sorting practices of other waste operators and that small skip operators can recycle up to 80% of the waste collected and that the remainder was sent to landfill. The total residual waste arising is approximately 350,000 – 500,000 tonnes per annum as set out in the NRWDPD and that Government policy is to impose fines on landfill, so alternative methods of dealing with residual waste have to be found and that there are over 1.2 million tonnes of commercial and industrial waste arisings within Leeds per annum;
- that another waste operator in Leeds (Leeds Skips Services) indicated a 75% recycling level could be achieved on the waste they collected and that officers should view this plant. The Principal Minerals Planner who presented the report stated he was aware of the site and the recycling levels as it was one which was monitored by the Council – **it should be clarified that this site does not accept the same types of waste as the ERF proposed. The Leeds Skips Services site accepts primarily construction and demolition wastes**;
- that the Environmental Permit which would need to be issued by the Environment Agency would exclude types of waste which could be recycled, so ensuring all materials which are capable of being recycled, are recycled. Furthermore, economic driving forces ensured operators supported recycling measures. The average gate fee to ERFs is around £73 per tonne as opposed to £15 per tonne for a recycling centre. Landfill gate fees are on average £76 per tonne which comprised £20 gate fee and the remainder landfill tax – **this tax will rise to £80 per tonne in 2014**;

- in terms of sorting the waste, it would be the customer's responsibility to do this. Concerns were raised about the financial incentives to sort waste, however it was felt that customers would be most unlikely to want to pay the additional costs to send recyclable materials to an ERF;
- that Biffa had planning permission to erect a large materials recycling facility at Gelderd Road Beeston (adjacent to the British Oxygen depot) where the recycling side of the business would take place;
- there would be storage capacity at the ERF for 5 days worth of waste and as there would be two lines in operation, there was the possibility of operating one whilst carrying out maintenance on the other;
- that the height of the wind turbine which was granted permission on the Yorkshire Water Sewage Works was confirmed at 125m – blade tip height – and 80m – hub height;
- in terms of the footpath on the south side of the river, the proximity of the Trans-Pennine trail was outlined and that the applicants were looking to improve access by improving the existing spiral access; providing a footway and cycle path along the existing bridge, with the potential for re-routing the Trans-Pennine trail past the site and along the northern bank of the Aire and Calder Navigation. The work beyond the site would need to be completed as future development came along. This would make it more accessible and would form part of the S106 Agreement;
- officers confirmed that no surface water would be discharged from the plant;
- that the plant is designed to be 'CHP Ready' in accordance with Leeds policy Energy 3 but until consumers for the heat come forward the ERF would only produce electricity.

#### A2.3 Members commented on a range of issues, including:-

- that a case had not been made on the basis of the information provided for the need of this facility and that issues relating to capacity, sorting procedures and traffic movements had not been clarified and that firm facts and figures must be provided as part of the considerations for such facilities – **further detail is provided within the section entitled 'Need'**;
- concerns about the public consultation process and that health professionals had not been made aware of the two ERF schemes under consideration in the city – **it is confirmed that the Health Protection Agency, Environmental Health, Environment Agency, the Leeds Primary Care Trust and Public Health office have all been consulted as part of the original consultation process (October 2011) and following the submission of the Regulation 22 additional information (April 2012)**;
- concerns about the content of the waste, and that reassurances were needed that batteries and heavy metals would be properly dealt with;
- whether when maintenance of the plant is required, reciprocal arrangements would be in place with other plants to maintain the waste process – **it is**

**confirmed that such arrangements would not be necessary for this site as the proposal includes two processing lines and so if one line is out of action for maintenance, the other line will continue to process the waste;**

- whether other photo montages were needed for Members' consideration: mention was made of the wind turbine and the subject site – **a photomontage is available showing the relative size and position of the permitted turbine and the proposed ERF in a view from Rothwell;**
- incoming regulations to reduce industrial waste – especially around packaging – and that information on this should be provided as it could relate to what Biffa could harvest – **further detail is provided within the section entitled 'Need';**
- that the level of funding from the Caird Bardon fund at Peckfield Landfill had reduced in recent years due to the decrease in landfilling;
- the concerns of Leeds' citizens about proposals for two ERFs in Cross Green adjacent to some of the most deprived areas of the city; that these communities had not been consulted on where they would like such facilities to be sited and concerns that previously Biffa had indicated their facility could take the Council's household waste – **further clarification is provided within the section entitled 'Community Consultation'. It is also confirmed that the plant itself could accept commercial and industrial and / or municipal waste streams as they are similar in composition;**
- whether powers granted under the LGA 2000 in respect of Community Wellbeing applied. On this provision, the Panel's Legal Adviser stated that the decision to hold a vote on an issue is discretionary rather than compulsory;
- the view that there were no problems with the site; that the operation was no different from the previous power station use and that the infrastructure was already in place;
- the various figures mentioned, including those in the NRWDPD and the need to judge the proposal on real figures and taking into account the MRF process which would in all likelihood be developed in view of the operator having obtained permission for such a facility on Gelderd Road – **further detail is provided within the section entitled 'Need';**
- concern about the use of the Leeds Weekly News (LWN) to advertise the proposals in view of this publication not being in circulation in those areas which would be most closely affected by the development. Members were informed that site notices were also placed around the area; that the decision to select LWN for the press advertisement was based solely on cost and that in terms of how best to advertise planning applications, newspaper advertisements were found not to be particularly efficient in reaching communities, compared to site notices;
- consultation with local groups and that Ward Members should be contacted for details of these – **further detail is provided within the section entitled 'Community Consultation'.**

A2.4 The Panel provided the following responses to the questions posed in the submitted report which were to aid officers in their work on this application, rather than being the Panel's final thoughts on the proposals:-

- that a further visit to an existing ERF might be useful – a visit can be arranged, if it is the Panel's wish.
- that air quality and health were primarily matters for the Environment Agency to consider;
- that a further discussion session be arranged with the Environment Agency in respect of the Environmental Permitting process. If the facility was granted approval, that such information should be provided on a regular basis with a suggestion being made that the Council sets up its own monitoring stations – **the Environment Agency have been invited to attend the Panel meeting to answer any queries Members may have in relation to these matters;**
- that further details be provided on transportation matters, including details of the number of traffic movements and the route from the proposed MRF at Gelderd Road Beeston to the site – **it is confirmed that the route from the future Gelderd Road MRF would be via the A62, A6120 Ring Road onto the M621 at junction 1 and then leaving the M621 at Junction 7, onto the B6481 (Pontefract Road) via the A639 and then along Skelton Grange Road into the site. Around 62,000 tonnes of residual waste would arrive at the ERF from this site in the short term, rising to 78,000 tonnes per year longer term. The average payload for the vehicles transporting the material between sites is 20 tonnes and therefore this would equate to around 10 loads per day travelling to the ERF from the Gelderd Road MRF longer term;**
- that there were concerns about the proposed design from some Panel Members. Some felt it was reminiscent of 1960s architecture, although it was acknowledged that the previous development on the site had comprised six cooling towers and ancillary structures – **further changes have been incorporated into the design following consultation with the Design Review Board. The changes include additional detail to the facades of the building and a re-design to the office structure. The Civic Architect (Mr J Thorpe) is very supportive of the design and sees it as an appropriate building for this location. An officer from Design Team will attend the Panel meeting;**
- that in terms of visual impact, it was accepted there would be some impact;
- that in terms of biodiversity and landscaping there were no major concerns although it was felt that a good landscaping scheme was required;
- that no further clarification in relation to waste residues was required;
- in terms of the S106 agreement, that it was premature to consider issues relating to this.

**[23/2/2012] RESOLVED –**

- i) To note the report and the comments now made;

- ii) To note the responses provided by Panel on the specific questions posed in the report and that further information on these matters be provided;
- iii) That further information be provided on the amount and type of waste being produced by the city to ensure there would not be over capacity in view of a similar proposal at Cross Green;
- iv) That officers seek clarification from Biffa on the capacity of their proposed ERF; the intended use for this and whether there was the capacity to cater for the Council's household waste within this development;
- v) That a further report be submitted to Panel providing the information requested, in due course.

#### Plans Panel (East) Meeting of 9<sup>th</sup> August 2012

A2.5 For ease of reference the minutes and resolutions of the Plans Panel (East) meeting of 9<sup>th</sup> August 2012 are reproduced below:-

- Further to minute 178 of the Plans Panel East meeting held on 23<sup>rd</sup> February 2012, where Panel considered a position statement on proposals for an Energy from Waste Facility (ERF) on the site of the former Skelton Grange Power Station, Members considered a further position statement. Attending for this item were representatives from the Environment Agency, the body responsible for issuing permits for ERFs to provide information on the permitting process for the benefit of new Panel Members. Also attending the meeting to provide technical advice to the presenting Officer on issues relating to minerals and waste, was Ms White, the Senior Minerals Planner, who was dealing with the Council's own application for an ERF.
- Before the report was presented, the Head of Planning Services referred to the information in the report provided about need, in response to questions raised by Members at the meeting in February 2012 and stated that the guidance in the National Planning Policy Framework suggested that need was not a material planning consideration.
- Officers presented the report which related to proposals for an ERF taking in 300,000 tonnes of commercial and industrial waste per annum. Plans, photographs, drawings, graphics and a sample of the proposed main cladding material were displayed at the meeting. In the light of Members' previous comments, the design of the building had been modified to include additional detail to the facades of the building and the redesigning of the office accommodation. The bridge serving the facility would be strengthened but would remain single lane. An improved footway/cycleway across the bridge would also be provided and the applicant had been asked to consider how pedestrian and cyclist access could be improved to and from the nearby Trans Pennine Trail.
- The Panel then heard from Tim Shaw, a representative of the Environment Agency (EA) who outlined the permitting process and provided the following information:-
  - that in respect of incinerators, the EA needed to ensure that the facilities were built and run to meet the strict environmental standards;
  - that the EA was a consultee in the planning process but that it was for Councils to decide how waste should be managed;

- in terms its Environmental Permitting role, it was not necessary for planning permission to be in place before the permit was granted but that the permit had to be granted before the ERF could operate;
  - that the EA would only grant a permit if it was demonstrated that the facility would run in compliance with the relevant UK and European legislation and would not cause significant pollution or harm to people's health;
  - that the EA could require older facilities to retro-fit to ensure they were meeting best available technologies;
  - that receipt of an application for an ERF, once deemed to have been duly made, would be advertised and a period of public consultation on the proposals would commence. If the application was considered to be controversial, drop-in sessions would be held for the public where further information on the permitting process could be obtained. As well as public consultation, comments were also sought from a range of consultees including the Primary Care Trusts and the Health Protection Agency (HPA). Once the closing date for comments had passed and the application assessed, the EA's draft decision would be published and further comments sought. If the decision was to grant the permit, the EA would then move into regulation mode, where its role would be to ensure emissions from the ERF did not cause significant harm to human health or the environment;
  - strict monitoring would take place which would include checking that the equipment met the required standards and was correctly calibrated. The management of the plant would also be checked to ensure it was being appropriately operated. The energy efficiency of the plant would be checked as would measures in respect of accident prevention; noise and odour, although it was stated noise and odour were not particular problems for ERFs. Checks to ensure the facility complied with the Waste Incineration Directive and the environmental permit conditions would be undertaken;
  - the environmental permit did not cover traffic movements; visual impact; operating hours or light pollution;
  - most of the checks would be audit-based and monthly emissions data would be provided to the EA. In the event of any exceedences of the limits set, the EA would need to be informed together with what measures had been put in place to bring this back into compliance. Whilst occasionally there were issues, the EA did work with operators and the community to resolve these and there were very few complaints made about such facilities;
  - enforcement action could be taken against operators with the EA having a range of measures including a site warning; a formal caution; prosecution and suspension or prohibition notices.
- In response to questions from the Panel, Mr Shaw provided the following information:-
- that the emission of dioxins from modern ERFs were extremely low; were monitored regularly and to tight limits;
  - that the systems used to prevent dioxin emissions were very reliable with few, if any, breaches of the dioxin limits occurring;

- in order to determine an application for an environmental permit, all emissions were modelled using very conservative levels, so building in safety factors;
  - that the EA would not issue a permit to an ERF if there was an indication it would have a significant impact on health or the environment;
  - in terms of a link between health issues and living close to such a facility, the HPA had undertaken much work on this subject which was well-documented, with no link being found. To access this research, the EA had set up a link to the HPA's website;
  - in respect of whether the environmental permit matched the conditions on the planning permission, the permit issued by the EA was a separate process to the planning permission and any such issues would be flagged up in the EA's consultation process which included the LPA. Concerning the health issues raised, Councillor R Grahame referred to a letter from the Director of Public Health, Dr Cameron, which he would be passing to the Chair of Plans Panel East.
- Members then commented on the following matters in respect of the proposal:-
- the colour of the proposed cladding, with a mix of views on whether this should be altered to reduce the visual impact of the building or whether for a development of this scale it should be accepted for what it was;
  - the landscaping proposals and the types of trees to be considered in the planting scheme;
  - the proximity of the site to Newsam Green and the boundary to Swillington, with Officers agreeing to provide this information directly to Councillor McKenna;
  - whether there was capacity to take municipal waste at this site; how it could be ensured that the applicant was recycling as much material as possible rather than burning it; the Combined Heat and Power (CHP) process and where the energy produced on the site would be used;
  - that the wharf should be retained;
  - the bridge to the site and whether a new, two-lane bridge could be constructed.
- Officers provided the following responses:-
- that the total capacity of the ERF would be 300,000 tonnes of waste per year and the proposals for this plant was to take commercial and industrial waste. As two lines would be operating it was feasible for one line to take municipal waste, but that would then reduce the amount of commercial and industrial waste being dealt with, which would still need to be managed;
  - that there were economic reasons in respect of the amount of materials being recycled; the applicant wished to sell waste which could be recycled, and as incineration was a more expensive option of waste disposal, it was also cheaper for customers to recycle as much material as possible;
  - that there was capacity for CHP but this relied on a company coming forward to express an interest in using this, but that the electricity produced

on site would be used to power the site with spare capacity being sold to power homes;

- that the future of the wharf could be given further consideration;
- that for technical reasons relating to power supplies, it was not possible to demolish the bridge. On this matter the Chief Planning Officer stated that the application site was within the city's Urban Eco Settlement where new and higher standards of living, employment and energy were being encouraged and that the ERF had the potential to complement this but that it was important to consider in detail how this area could be linked to the wider area. Whilst the traffic flow from the ERF was relatively light, the longer-term picture should be considered at this stage and that a temporary, single lane access did not achieve this.

#### **[9/8/2012] RESOLVED –**

- To note the contents of the report;
- To note the information provided from the Environment Agency;
- To note the design changes and the comments now made on aspects of this;
- To note the comments about the vehicular access; the need for two way access and for sufficient access to be provided to open up the site to a wider area of the city to maximise its potential.

#### City Plans Panel Meeting of 22<sup>nd</sup> November 2012

A2.6

For ease of reference the minutes and resolutions of the City Plans Panel meeting of 22<sup>nd</sup> November 2012 are reproduced below:-

- Plans, photographs including historical images and graphics were displayed at the meeting. A Members site visit had taken place earlier in the day.
- Officers presented a position statement on proposals for an Energy Recovery Facility (ERF) on the site of the former Skelton Grange Power Station at Stourton. The former Plans Panel East had previously received pre-application presentations and position statements on the proposals and minutes from these meetings were included in the report before Panel, to provide further background information. In view of two applications for ERFs in the city being received, a visit by Panel, relevant Ward Members and Officers to two such facilities in Sheffield and Mansfield would take place on 23rd November 2012.
- With reference to the detailed report before Panel, Members were informed that the proposals were for an ERF which could accept up to 300,000 tonnes per annum of non-hazardous commercial and industrial waste and that if planning permission was granted, there was the potential to ensure that landfill ceased at the Skelton Grange landfill site which was operated by Biffa, the applicants for the ERF.
- The facility would result in 40 jobs at the site with approximately 300 jobs during the construction phase.
- Currently the site was derelict concrete and rubble which was now evolving into scrub land.
- Some poplar trees on the site would need to be removed but the area around the building would be landscaped and improved.

- In terms of the size of the building, this was largely dictated by the scale of the plant within it although design principles had been set at an early stage, with some modifications being made to the design in view of comments made by Plans Panel East. The proposed scheme provided additional detailing at the end of the building's elevations, with the office element now being raised higher and having a more refined facing to it. Good quality landscaping was proposed which would set the benchmark for future developments. As part of the scheme the Trans Pennine trail would be re-engineered, giving improved pedestrian and cycle access.
- One matter which was considered by Plans Panel East at the meeting in August 2012 was vehicular access and the single carriageway solution which was proposed. Plans Panel East was of the view that there was a need for two way access and for sufficient access to be provided to open up the site to a wider area of the city to maximise its potential.
- Members were informed that this had been considered but that the applicant had agreed to carry out full strengthening works to the bridge which would allow the full width of the bridge to be provided as other developments came along.
- The Panel then received a presentation from Tim Shaw, a representative of the Environment Agency (EA), who outlined the EA permitting process and provided the following information:-
  - that applications for ERFs were assessed to ensure they were designed to the highest standards;
  - that the EA had a role as a consultee in the planning application process as well as a permitting role once an application for an environmental permit was received;
  - that a permit could be issued before planning permission was granted but that currently no permit had been applied for on this site;
  - that an environmental permit contained strict conditions to ensure the environment and people's health were protected and only when the applicant had demonstrated that the ERF would operate in line with UK and European laws and using best available technology, would a permit be issued;
  - that for older plants, the EA could require these to be retro-fitted to meet best available technology ;
  - that once the permit application was received and checked that all the necessary information had been submitted, it would be advertised and a period of public consultation would commence which would also include other agencies, e.g. Natural England and PCTs. The EA had an obligation to take into account all comments which were received and once the application had been assessed, a draft decision was produced with further consultation on this being held and then a final decision was taken;
  - once a permit was issued the EA then assumed a regulatory role which required audits and inspections; continuous monitoring of emissions and periodic sampling. Emission reports would be reviewed and published;

- management and operating procedures would also be monitored but the EA's role did not cover issues relating to traffic movements; visual impact of the development; operating hours or light pollution;
  - the enforcement action could be taken if this was necessary with a range of sanctions being available to the EA including suspension/prohibition notices being issued and prosecution for non-compliance.
- Members discussed the report and the presentation by the EA and commented on the following matters:-
- concerns that the applicant had not yet applied for an environmental permit and that they should be encouraged to do so. The Chair advised that this was a matter for the applicant;
  - the transportation of waste from the applicant's materials recovery facility (MRF) on Gelderd Road and that it would be more efficient to sort the waste on the same site as it was being incinerated;
  - the fact there was another application for an ERF in close proximity and whether in the EA's evaluation, these were considered separately or collectively;
  - whether there was sufficient waste in the city to fully utilise both of the proposed facilities;
  - the topography of the area where the ERFs were proposed with concerns that due to the shallow valley these were sited in, the dispersion of emissions could be slow;
  - whether any similar scheme to that proposed had been refused an environmental permit;
  - the possibility of utilising the waterways to transport waste;
  - the possibility of both facilities being located on this site;
  - for residential properties which were sited close to an ERF, whether a higher standard for emissions or vibrations was required;
  - whether permits were time limited or had to be renewed.
- The following responses were provided:-
- regarding the movement of materials from the MRF on Gelderd Road, whilst planning permission for the Gelderd Road site had been granted, it had not yet been implemented. In theory it would be more efficient to sort and incinerate waste on the same site, that proposal had not been put forward and it would only be residual waste which was transported from the MRF, which equated to around 9-10 vehicles per day;
  - that when determining the environmental permit for this site, the fact there was another facility proposed in close proximity would be taken into account and the EA would only grant the permit if it was satisfied it was safe to do so. When considering a permit for this site, the assumption would be made that the operators of the other site – which had applied for an environmental permit – would be operating at full capacity, so these emissions would be added to the background emissions and then those produced by this site would be added for the EA's consideration. If it was felt that the air quality standard was at risk through the level of emissions, it

would be possible to refuse the permit or require additional technology to be provided to mitigate against this;

- that in terms of waste arisings, the RSS set out the amount of waste the region produced and then further detailed information had been obtained in the research for the Natural Resources and Waste Development Plan Document (NRWDPD) which indicated that between 350,000 and 500,000 tonnes of commercial and industrial waste per annum had to be catered for, which included recycling materials but not municipal waste which was in addition to that figure;
  - that some applications for ERFs had been withdrawn, rather than refused an environmental permit;
  - that the NRWDPD was supportive of transporting goods by water but that this was a difficult site to achieve this at as transport stations would be required along the route;
  - that the standards applied to emissions and vibrations were the same regardless of location but that all complaints would be investigated and where there were problems, the EA could require the operator to put in further measures;
  - that environmental permits were not time limited and would remain in force until either the EA revoked them or the operator sought to surrender the permit, although the permits were reviewed regularly.
- The views of Members were sought on the bridge and whether this should be two way either now or in the future. The Panel's Highways representative stated that an assessment had been carried out and that the proposed one-way signalled controlled operation of the bridge would be sufficient for the proposed development but that there were concerns for the future development of the site and that a two way bridge would be needed when all the land was developed.
- Members noted that the footpath and cycleway would be cantilevered at the side and separated from vehicular traffic which would provide a safer environment Panel discussed the proposals and that if a two way route could not be provided by this development, that details were needed about the trigger point to achieve this, for further consideration.

**[22/11/2012] RESOLVED –**

- To note the report, the presentation and the comments now made.

## A3 APPENDIX 3

### **Regulation & Monitoring – Environment Agency**

A3.1 The Environment Agency's (EA) role regarding EfW facilities is primarily to regulate facilities under the Environmental Permitting Regulations 2010. Regulation of these types of facilities does not differ from regulation of other waste and manufacturing facilities covered by the regulations.

A3.2 Another of the Environment Agency's roles is to act as a consultee for planning applications. The EA can give its views on how the proposals could affect the environment.

#### Permitting Process

A3.3 The Operator must apply for a permit under the Environmental Permitting Regulations 2010. These permits have strict conditions to make sure the facilities will not cause significant pollution to the environment or harm people's health. When applying, the Operator must give details of how the plant will be built and run and how this could affect the environment. The Operator must demonstrate that the requirements of UK and European laws and standards are met. The EA will not grant a permit if they believe it is likely to cause significant pollution to the environment or harm people's health.

A3.4 To help the EA make the best decision when issuing a permit, they consult widely with relevant agencies and Members of the public, inviting them to make comments and ask any questions that they may have about the details of the application. The EA advertise the application in local newspapers and on their website. The EA will consider undertaking extensive engagement with interested organisations and Members of the public by the use of drop in sessions.

A3.5 Once a decision had been made on the permit application, a draft decision is issued to consult the public and other stakeholders before the final decision is issued.

#### Monitoring

A3.6 The responsibility for monitoring emissions is on the operator. The Environment Agency will include conditions within the permit that will dictate what monitoring is required. The monitoring for this type of facility is comprehensive. For example, the operator is required to carry out continuous monitoring of emissions to air for some substances such as particulates, sulphur dioxide, nitrogen oxides, total organic compounds, carbon monoxide and to monitor periodically for other substances. The monitoring has to be to certain strict standards and the EA have various tools including assessment of reports, checks on monitoring techniques used, inspection and auditing, to ensure that the monitoring is carried out appropriately.

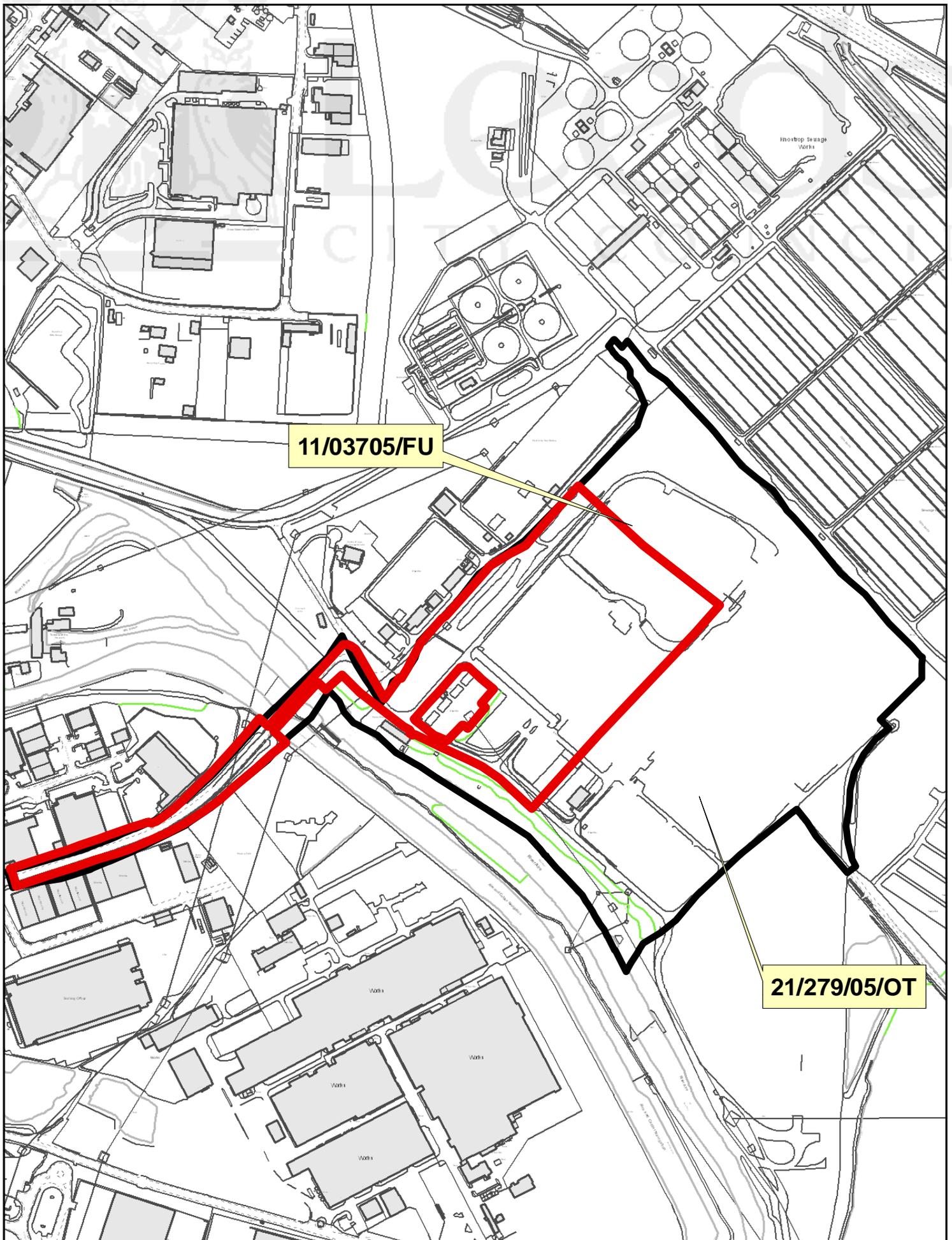
#### Frequency of Inspection

A3.7 Facilities are inspected depending on their risk. The Environment Agency uses a scoring system to assign a risk level depending on the type of facility, the likely emissions, their location, how good the management systems are and how good their compliance is. The score allows them to assign their resources to facilities proportionately to the risk. The EA have the ability to inspect announced or unannounced and do this where they believe it is warranted. However, their experience shows that 'auditing' more thoroughly and less frequently is more useful to allow them to check whether the operator is complying with the permit. Typically this may mean that the site is visited four times per year. The operator also has to

submit a variety of reports which the EA assess. Often, regular meetings are held with site operators to discuss compliance with the permit and improvements that could be made. All compliance activities, reports and their assessments etc are recorded and placed on the public register which can be viewed at the EA offices and at local authority offices.

#### What Happens if Permit Conditions are Breached?

A3.8 The permit contains a variety of conditions, including emission limits, conditions relating to management of odour, noise, energy, raw materials, accidents, containment and other procedures. If any of these are not complied with or 'breached' the EA will act in accordance with their enforcement and prosecution policy. The breach will be scored depending upon its severity and action will be taken ranging from advice and guidance or a site warning to a prosecution and potentially suspension of the activities on the facility.



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**APPENDIX 4**

**PLAN SHOWING OUTLINE PERMISSION**