



Report of the Chief Planning Officer

PLANS PANEL (EAST)

Date: 23rd February 2012

Subject: Energy Recovery Facility (incineration of waste and energy generation), associated infrastructure and improvements to access and bridge on site of 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

Ward Members consulted
(referred to in report)

Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

RECOMMENDATION:

Members are requested to note the contents of this position statement, provide feedback on the questions posed and are invited to provide feedback on any other aspect of the proposals

1.0 INTRODUCTION:

- .1 The purpose of this report is to update Members following the submission of an application for an Energy Recovery Facility (incineration of waste and energy generation) and to seek Members' views on key issues.
- .2 The application area lies within part of the former Skelton Grange Power Station site. The power station and cooling towers were decommissioned and demolished in the early 1990s. The site has since remained in a disused state.
- .3 The proposals fall under Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 and therefore the application is accompanied by an Environmental Statement.

2.0 PROPOSAL:

2.1 The proposal comprises an Energy Recovery Facility (ERF) utilising incineration as the method of waste treatment.

2.2 The facility would accept non-hazardous commercial and industrial waste. Should the need arise, the facility would also be able to accept municipal waste.

2.3 The application site area extends to approximately 9 hectares.

2.4 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.

2.5 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.

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

- air cooled condensers (ACC) for cooling the recycling 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.

- 2.7 The Air Cooled Condensers (ACCs) would be located to the rear of the ERF building. The (ACCs) 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.
- 2.8 The facility has been designed to accept around 300,000 tonnes of residual waste per annum. Much of this waste stream is currently being accepted to the applicant's Skelton Landfill site which lies 2.5km to the east of the power station site.
- 2.9 Access to the facility would be via Skelton Grange Road to the south of the site (from Stourton), using the existing bridge over the River Aire and Aire and Calder Navigation. The applicant is proposing structural improvements to the bridge as part of the proposal, along with improvements to pedestrian and cyclist access.
- 2.10 The facility would generate up to 30MW of electricity and output 26MW to the national grid, equivalent to the demand of 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).
- 2.11 It is anticipated that around 40 jobs would be created from the proposed development, once operational (around 300 jobs would be created during the construction period).

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 floor slab remains as broken and degraded concrete 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 lie 1.8km to the south.
- 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.

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) which included the proposed site.

5.0 HISTORY OF PROPOSAL AND NEGOTIATIONS:

- 5.1 The applicants made a presentation to Plans Panel (East) on 5th 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 11th 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 very helpful in gaining an understanding of the process.
- 5.5 In terms of community consultation, the applicants held a public exhibition at the Leeds College of Building in Stourton (18-19th 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 Planning Panels and Members of nearby wards.
- 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 has recently been held with the Environment Agency and the applicants to discuss the Environment Agency's objection relating to the potential for impact upon groundwater.

5.8 Officers have also recently met with the applicants to discuss the potential for refinements to the design of the proposed facility.

5.9 *Members are requested to provide feedback as to whether a further visit to an existing Energy Recovery Facility would be useful.*

6.0 PUBLIC / LOCAL RESPONSE:

6.1 The application was advertised in the Leeds Weekly News on 13th October 2011 and the 3rd November 2011. Site notices were posted on 7th October 2011. Four objection letters have been received. Issues referred to include:-

- 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;
- Visual impact.

7.0 CONSULTATION RESPONSES TO DATE:

7.1 Statutory

7.1.1 *British Waterways:* No objection, subject to conditions.

7.1.2 *Coal Authority:* The application site does not fall within the defined Coal Mining Development Referral Area.

7.1.3 *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.

7.1.4 *Environment Agency:* Objection raised due to a lack of information regarding management of risks posed to groundwater from the construction and operation of the proposed waste bunker – further information is therefore requested. In addition, the applicant should demonstrate how they are going to ensure that incoming waste is truly residual and cannot be further reused or recycled. Finally, the density or width of riparian vegetation should be enlarged to mitigate for the additional lighting and increased level of disturbance on wildlife as a result of this development.

7.1.5 *Highways Agency:* Further information regarding the construction phase is requested.

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

7.1.7 *Natural England:* The proposed habitat arrangements for nesting little ringed plover are acceptable but should be enlarged or the use of cages employed to protect nesting birds. In addition, survey work is requested regarding bats and reptiles.

7.1.8 *Yorkshire Water*: Buildings would be sited over the public water supply infrastructure located within the site. Advice is given to amend the site layout to allow for adequate protection of the public water supply or for reassurance to be provided that the water mains can be diverted under s.185 of the Water Industry Act 1991 (at their expense).

7.2 Non-statutory

7.2.1 *Access*: Confirmation is requested in relation to pedestrian access, pathway widths, and design of crossing point. Advice is provided in respect to the coach drop off and pick up area and access into the building.

7.2.2 *Conservation*: Advice has been given regarding off site tree planting to assist with mitigating any harm to the Thwaite Mill site.

7.2.3 *Contaminated Land*: No objections subject to conditions and directions being applied.

7.2.4 *Environment Policy*: No objection, subject to conditions.

7.2.5 *Leeds Bradford International Airport*: No objection, subject to further information.

7.2.6 *Mains Drainage*: No objection. Further information is required to support the flood risk assessment and to fully show the proposed drainage arrangements.

7.2.7 *National Air Traffic Service*: No objection – the proposed development has been examined from a technical safeguarding aspect and does not conflict with the safeguarding criteria.

7.2.8 *Nature Conservation*: A bat roosting survey and a precautionary mitigation method statement relating to reptiles are requested. A recommendation that the bare rubble area for ground nesting birds should be monitored to ensure it is being used and young are not being lost to predators. Advice is given on other solutions that would provide useful habitats for ground nesting birds.

7.2.9 *Neighbourhoods and Housing*: No objection, subject to conditions.

7.2.10 *NGT/Public Transport*: No objection.

7.2.11 *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.

7.2.12 *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.

7.2.13 *Highways*: The proposal is acceptable in principle. However, 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.

7.2.14 *OFCOM*: No objection.

7.2.15 *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.

7.2.16 *West Yorkshire Archaeology Advisory Service*: There are no apparent significant archaeological implications attached to the proposed development.

8.0 PLANNING POLICIES:

8.1 The site is allocated for employment use under policy E4.44 of the adopted Unitary Development Plan.

8.2 The emerging Natural Resources and Waste Development Plan Document identifies the site for strategic waste management use.

8.3 The following are the principal documents that will need to be considered in the determination of the anticipated planning application:-

- Leeds Unitary Development Plan (Saved Policies);
- Yorkshire and The Humber Plan (Regional Spatial Strategy) 2008 (RSS);
- Draft Natural Resources and Waste DPD and Schedule of Changes;
- Draft Aire Valley Area Action Plan DPD;
- National Waste Strategy;
- Planning Policy Statement 1 (Delivering Sustainable Development);
- Planning Policy Statement 1 (Climate Change Supplement);
- Planning Policy Statement 4 (Planning for Sustainable Economic Growth);
- Planning Policy Statement 5 (Planning for the Historic Environment);
- Planning Policy Statement 9 (Biodiversity and Geological Conservation);
- Planning Policy Statement 10 (Planning for Sustainable Waste Management);
- Planning Policy Statement 10 (Update March 2011);
- Planning Policy Statement 10 (Companion Guide);
- Planning Policy Statement 22 (Renewable Energy);
- Planning Policy Statement 23 (Planning and Pollution Control);
- Planning Policy Guidance Note 13 (Transport);
- Planning Policy Guidance Note 24 (Planning and Noise);
- The National Waste Strategy for England (plus Annexes);
- Government Review of Waste Policy in England 2011;
- Designing Waste Facilities (DEFRA).

8.4 The following legislation and guidance will also be relevant when considering the application:-

- European Union Waste Framework Directive (75/442/EEC amended 91/156, 91/692 and 96/350);
- European Union Council Directive 1999/31/EC of 26 April 1999 on the Landfill of Waste;
- European Union Council Directive on Integrated Pollution Prevention and Control (IPPC) (2008/1/EC);
- European Union Waste Incineration Directive (2000/76/EC);
- European Union Directive on Industrial Emissions (2010/75/EU);
- European Union Directive 2006/12/EC of the European Parliament and of the Council on Waste;
- European Union Directive 2008/98/EC of the European Parliament and the Council of 19 November 2008 on Waste;
- The Landfill (England and Wales) Regulations 2002;
- 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;
- Landfill Allowance Trading Scheme (LATS);
- EU Directive 2009/28/EC of the European Parliament and Council on the promotion of the use of energy from renewable sources (amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC); and,
- Leeds Waste Strategy 2005 – 2035 (2006).

9.0 MATTERS FOR CONSIDERATION:

- Principle of development;
- Community Consultation;
- Air Quality & Health;
- Transport;
- Surface water & groundwater;
- Design, appearance, siting and scale of facility;
- Landscape & Visual Amenity;
- Cultural Heritage;
- Biodiversity; and
- Other matters.

10.0 DISCUSSION:

Principle of development

- 10.1 The proposals will need to be considered in the context of both national planning guidance and the Development Plan, which at the time of writing includes the Leeds Unitary Development Plan Review, the Regional Spatial Strategy and any material guidance contained in the emerging Local Development Framework (LDF). The emerging LDF includes the "Natural Resources and Waste" and the "Aire Valley Area Action Plan" Development Plan Documents. Neither of these documents have as yet been adopted but constitute material considerations in the determination of planning applications. The Natural Resources and Waste DPD has recently undergone Examination in Public, whilst the Aire Valley Area Action Plan remains in draft form. The context for the area in terms of the emerging strategy for the Aire Valley will be of particular significance.

Community Consultation

- 10.2 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 Statement of Community Involvement (SCI) complies with the Council's SCI requirements.
- 10.3 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 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; and
- media coverage and advertisements.

10.4 Feeding from the 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.

10.5 As a result of the pre-application consultation exercise, the following changes and amendments have been 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;
- an undertaking to look into raising further awareness of the need to recycle amongst the applicant's future commercial and industrial customers.

10.6 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.

Air Quality & Health

10.7 As part of the Environmental Impact Assessment, the dispersion of stack emissions from the facility has been modelled as part of 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 (850°C for a minimum of 2 seconds) would be employed to destroy pollutants in the waste;
- continuous emissions monitoring would be required 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;*
 - *fabric filters to remove fine particles (dust) and heavy metals which adhere to the particulate matter.*

10.8 Any air quality consideration that relates 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.

- 10.9 The air quality assessment in support of the application has been considered by Environmental Health. 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 process, following commissioning of the proposed plant. However, if permission were granted, it would be for the Environment Agency to impose and enforce conditions, by way of a Permit, to ensure that acceptable environmental conditions are maintained.
- 10.10 The Health Protection Agency (HPA) have 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 (2000/76/EC) (WID). This Directive has been implemented in England and Wales by the Environmental Permitting (England and Wales) Regulations 2011 ('EP' Regulations), which is 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.
- 10.11 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 cannot 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 sector guidance note for combustion 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.
- 10.12 When a Permit application is received by the Environment Agency, organisations such as the local Primary Care Trust (PCT); 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 believe that this is necessary to be able to fully assess the likely public health impacts.
- 10.13 The HPA has reviewed research to examine links between emissions from municipal waste incinerators and effects on health. The HPA concluded that:-
- 10.14 *"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.

- 10.15 *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.*
- 10.16 *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."*
- 10.17 The Environmental Statement summarises by saying that the findings of the assessment of combustion emissions from the proposed facility has found that, for all pollutants, the maximum predicted long-term and short term impacts would be negligible.
- 10.18 *Members are requested to provide feedback on any further detail or clarification they may require. Members are also requested to advise as to whether they would wish for a further discussion session with the Environment Agency in relation to the Environmental Permitting process.***

Transport

- 10.19 The vehicular access into the site is proposed to be via Skelton Grange Road off Pontefract Road (Stourton). In order to upgrade the bridge to modern design standards and to allow for 40 / 44 tonne vehicle loading, the following improvement and strengthening works are 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).
- 10.20 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.

10.21 Pedestrians and cyclists can also gain access to the site via Skelton Grange Road. Additionally, access to Skelton Grange Road can be gained via the Trans Pennine Trail / Cycle Route. The applicant has also been requested to investigate how access to and from the Trans Pennine Trail could be improved for both pedestrians and cyclists as the current arrangements are very poor.

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

Construction (initial 26 month period)

10.23 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

10.24 Once operational, the facility would be anticipated 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 need to be in force.

10.25 Further information has been sought from the applicants 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.

10.26 The applicants were also requested to consider use of the River Aire and 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 unlikely to be practicable due to the fact that none of the applicant's transfer stations are located near the waterway network, so loading waste containers onto barges would involve additional transport and double-handling, in addition to the difficulties of developing facilities at the right locations along the waterway.

10.27 *Notwithstanding the provision of further information that has been formally requested from the applicants, Members are requested to provide feedback at this stage on any transportation matters relating to the proposals.*

Surface water & groundwater

10.28 The key elements relating to surface water and groundwater systems are:-

- Construction of a surface water retention pond – landscaped to encourage wildlife;
- collection and use of rain water for use in the process;
- there would be no need for effluent discharge – water would be re-circulated for use in process (ash cooling, washdown);
- excess surface (rain) water would be discharged to River Aire.

10.29 As discussed above, the Environment Agency have 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. This objection is an objection in detail, not an objection in principle. Following a meeting with the applicants and the Environment Agency, it is

anticipated this objection can be addressed through the provision of additional information in the form of a risk assessment and other technical detail. The applicants have submitted this information in draft form to the Environment Agency, who have confirmed that the additional detail will be adequate to allow the objection to be removed once submitted formally.

- 10.30 Further information relating to surface water drainage proposals has also been sought from the applicant.

Design, appearance, siting and scale of facility

- 10.31 The philosophy behind the design of the facility is focused on the integration of its main operational functions of energy and heat generation located 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 enclose, drape and screen this, with the need to contain the visual impact on nearby communities whilst recognising the site's location within an industrial valley setting.
- 10.32 The building form is predominantly curved in appearance and is separated into a series of volumes which each relate to specific functions: tipping hall, boiler hall and turbine hall.
- 10.33 In terms of materials and colours, the cladding of the main building would have a dark coloured base (blue), with upper sections lighter blue. Sections of the building would comprise of translucent panels (polycarbonate) to provide diffused natural internal lighting and to limit direct light spillage from within. The remaining sections of the building would be clad in a semi-reflective metal composite to allow the structure to take on the tones of its surroundings and sky. The mass of the building is now proposed to be further broken down by vertical translucent strips, adding needed detail to what otherwise could be considered overlarge façades. The roof of the building would be finished with a combination of aluminium and translucent panels. The central office section is proposed to take the form of a projecting cube and would have a glass façade.
- 10.34 The site itself is orientated perpendicular to the adjacent waterways and in keeping with the general 'grid form' of the Cross Green Industrial Estate. The heights of the main building and flue stack would not be dissimilar to main building and cooling towers of the original power station buildings that have since been demolished.
- 10.35 The design has been reviewed in detail at Design Review Board and by the Design Team. Officers have met with the applicants to seek refinements to the design and to gain a better understanding of the proposed material types and colours and to explore various refinements to the initial design.
- 10.36 *Members are requested to provide feedback on the design options presented.***

Landscape & Visual Amenity

- 10.37 A study of the landscape and visual characteristics of the proposals has been carried as part of the Environmental Impact Assessment.

- 10.38 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.
- 10.39 In visual terms, the site is located on the valley floor. 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.
- 10.40 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.
- 10.41 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. The applicant has also been requested to investigate the potential for off site planting and also along the river bank to the south of the site.
- 10.42 *Members are requested to provide feedback in relation to any concerns they may have relating to landscape or visual impact from the proposed development.***

Cultural Heritage

- 10.43 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. Notwithstanding this, the applicant has been requested to investigate the possibility of providing additional planting to soften the views from these sites.

Biodiversity

Bats

- 10.44 The historic cooling tower bases on the site have internal voids which could be used by roosting bats, particularly during the winter months for hibernation. A winter hibernation survey has therefore been requested.

Reptiles

- 10.45 As a detailed reptile survey has not been carried out, a precautionary mitigation method statement has been requested.

Birds

- 10.46 The proposals include for a 'bare rubble area' for ground nesting birds within the site. However, it is thought that this likely to be sub-optimal as it would be subject to disturbance from activity at the plant. The potential for providing a larger area of

suitable habitat on site is very limited and so it is considered that off site opportunities should be explored. A possibility would be the use of floating rafts designed for little ringed plover to be installed at the lagoon 21 site at Skelton Grange Landfill. The applicants have been asked to investigate this further.

- 10.47 Lighting as part of new riverside development in particular can have an adverse impact on protected species in particular otters, bats and migratory fish. In view of the fact that otters and bats use the stretch of adjacent river, it is suggested that a permanent 'dark' vegetated corridor along the river should be maintained. Further information has been requested, including a request for the applicant to investigate opportunities for additional planting between the site and the river.
- 10.48 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.
- 10.49 *Members are requested to provide feedback in relation to any concerns they may have relating to biodiversity at, or in the vicinity of, the proposed development.***

Other

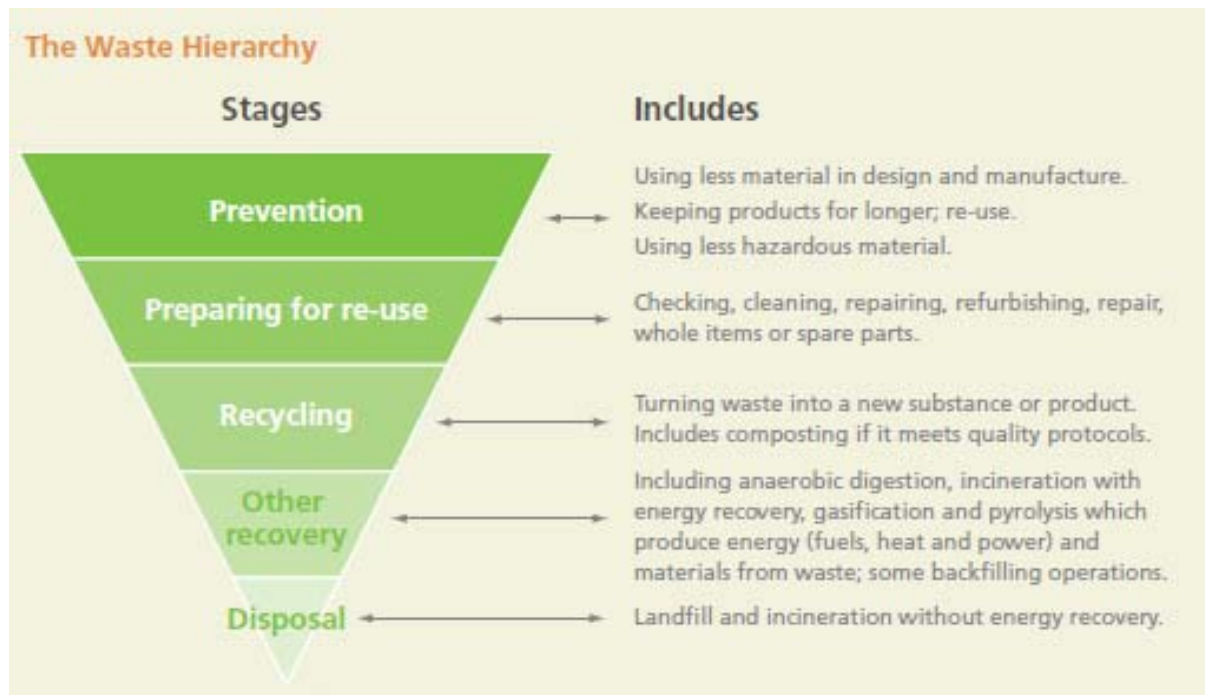
Waste Residues

- 10.50 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 processed IBA can be used in concrete and concrete block construction, replacing up to 50% of the aggregate traditionally used.
- 10.51 The APC residues also include boiler ash ("fly ash") from combustion, together with the other contaminants, which is 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 ("fly ash") represents only about 3% by mass of the waste feedstock.

Waste Hierarchy and Arisings

- 10.52 Currently, the predominant method of managing residual commercial and industrial waste in Leeds is by sending it to landfill. There are two operational landfill sites in Leeds accepting such waste; Skelton Landfill operated by the applicants (2km to the east of the application site) and Peckfield Landfill (10km to the east of the site) operated by Caird Bardon.

- 10.53 No specific recovery targets are set for commercial and industrial waste within the EU Landfill Directive. However it is a primary objective of national policy to divert waste away from landfill. This objective is reiterated within the Natural Resources and Waste DPD. In line with the Government's Review of Waste Policy in 2011, the DPD aims to provide for Leeds to be self sufficient in terms of the waste management needs for the plan period and to support the vision of a Zero Waste Society.
- 10.54 Under the Waste Regulations 2011, the waste hierarchy (as shown below) must be considered in all waste management decisions:-



Source: The Government's Review of Waste Policy 2011

- 10.55 The proposed facility would have a residual waste throughput capacity of 300,000 tonnes per year, which is comparable to the tonnage of waste currently accepted at the applicant's Skelton Landfill. As the landfill has a similar annual capacity and is nearing completion, capacity for the treatment of such waste would, in effect, be transferred from the landfill to the ERF. The figure of 300,000 tonnes per year represents between 60% and 85% of the residual commercial and industrial waste treatment capacity requirement for the plan period (350,000 – 500,000 tonnes) as identified in the Natural Resources and Waste DPD.
- 10.56 Whilst the available data shows that there is a need for a facility to treat such waste, it should be noted that a recent Inspector's decision concluded that the availability of commercial and industrial waste for a merchant facility was essentially a question for the market place, and that a proponent of such a facility, representing a very substantial investment, would only proceed after extremely careful consideration of the project's viability.
- 10.57 Members are requested to provide feedback on any further detail or clarification they may require in relation to the operational process.**

Further information

- 10.58 Further information relating principally to the issues described within this report has been formally requested from the applicants under Regulation 22(1) of the Environmental Impact Assessment Regulations 2011 on 9th December 2011.

Section 106 Agreement

10.59 Proposals for a Section 106 Agreement will be submitted shortly. It is anticipated that following discussions with the applicants, such an Agreement would incorporate items such as Travel Plan fees & monitoring; highway works; cycle path & footpath provision; off site ecological works; off site planting & maintenance; improvements to footpaths & access to Trans Pennine Trail; local employment; and the formation of a community liaison group. Members are also requested to note that the applicants would wish to voluntarily set up a community benefit fund equivalent to £0.20 per tonne of waste received at the facility.

10.60 Members are requested to provide feedback on any further detail or clarification they may require on the potential content of a Legal Agreement.

11.0 CONCLUSION:

11.1 In summary, feedback is requested from Members on:-

- ***whether a further visit to an existing Energy Recovery Facility would be useful;***
- ***any further detail or clarification they may require in relation to air quality and health;***
- ***whether a further discussion session with the Environment Agency in relation to the Environmental Permitting process would be desirable;***
- ***any transportation matters relating to the proposals;***
- ***the design options presented;***
- ***any concerns they may have relating to landscape or visual impact from the proposed development;***
- ***any concerns they may have relating to biodiversity at, or in the vicinity of, the proposed development;***
- ***any further detail or clarification required in relation to waste residues;***
- ***any further detail or clarification they may require on the potential content of a Legal Agreement.***

11.2 Members are requested to consider the contents of this report. Members are also invited to provide feedback in relation to any relevant issues and are asked to raise any questions they may have in relation to the proposed development.

12.0 BACKGROUND PAPERS:

Application file 11/03705/FU;

Plans Panel (East) – 5th August 2010 (Minutes and Agenda);

Plans Panel (East) – 20th January 2011 (Minutes and Agenda).