

Application No: 13/4749W

Location: W T L INTERNATIONAL LTD, TUNSTALL ROAD, BOSLEY, CHESHIRE, SK11 0PE

Proposal: Installation of a 4.8MW combined heat and power plant together with the extension of an existing industrial building and the erection of external plant and machinery including the erection of a 30m exhaust stack

Applicant: BEL (NI) Ltd.

Expiry Date: 10-Feb-2014

### **SUMMARY RECOMMENDATION**

Approve subject to conditions

#### **MAIN ISSUES**

- Sustainable waste management
- Renewable energy
- Alternative sites
- Countryside beyond Green Belt
- Noise and disruption
- Air quality
- Highways
- Landscape and visual
- Ecology
- Water resources and flood risk

### **REASON FOR REPORT**

The application has been referred to Strategic Planning Board as the proposal involves a major waste application.

### **DESCRIPTION OF SITE AND CONTEXT**

The application site lies within an existing wood recycling facility in Bosley which is operated by Wood Treatment Limited. The site is located off Tunstall Road which connects to the A523. The site is approximately 800m south west of Bosley and approximately 6km east of Congleton and 8km south of Macclesfield.

The wood recycling facility lies on a linear strip of land which is located in a valley directly adjacent to the River Dane. It is characterised by a mixture of traditional red-bricked and

modern steel framed industrial buildings with items of externally located processing plant and machinery and part of the facility is split by Tunstall Road. The site benefits from a substantial belt of natural screening provided by woodland aligning the River Dane to the west.

The surrounding land is used for agriculture and there are two farms located to the east of the site, and a smaller industrial complex to the north. Due to the topography, nearby residential properties lie at elevation with the closest being Lower Key Green farmhouse which lies approximately 80m to the east of the site. A further residential property lies approximately 100m to the north; whilst a terrace of ten dwellings lies adjacent to Tunstall Road approximately 150m to the north.

The application site covers an area of approximately 0.46ha within the wood recycling complex and is located at the southern end of the site. It comprises of the existing industrial buildings, along with part of the internal access road connecting with Tunstall Road.

The application site is located within the boundary of the Peak Park Fringe Area of Special County Value (ASCV). It also lies within 90m of the River Dane and a small portion of the access road is located within flood zone 2 and 3 on the Environment Agency flood zone maps.

## RELEVANT HISTORY

The site has been subject to a number of planning permissions for industrial related development which include:

- Application 11384PB - erection of steel structural building. Approved **August 1977**;
- Application 21148P – new storage building. Approved **Jan 1980**;
- Application 52572P - Construction of a warehouse building. Approved – **April 1988**;
- Application 64871P - Erection of a steel framed building designed to BS449 for use as a trailer maintenance building. Approved – **November 1990**;
- Application 75642P - production building for grinding sieving and bagging of products. Approved **November 1993**;
- Application 79676P - replacement industrial process building plus updating of existing building. Approved **January 1995**;

## DETAILS OF THE PROPOSAL

This is an application on behalf of Wood Treatment Limited (WTL) for the development of a 4.8MW biomass Combined Heat and Power (CHP) plant. The CHP plant would use waste wood as a fuel for the boiler/steam turbine which would generate electricity and hot water for use by the existing re-processing facility on site.

The main factory is used as a timber processing plant, predominantly concerned with the production of materials for use in industrial processes and animal bedding from European softwoods. It is proposed to use the waste products from these processes, in addition to importing materials from a sister plant, to fuel the CHP plant. The feedstock would be UK-wide collection of centrally sorted and shredded grades B and C waste wood.

In order to accommodate the CHP no changes to the building footprint are required; however the following elements are proposed:

- An increase in the height of the central section of the building from a ridge height of 7.7m to 13.4m with cladding to match the existing building;
- Modifications to the building to incorporate 3 galvanised steel roller shutter doors, 3 wooden access doors, louvers, mechanical air vents and external lighting;
- A 30m high (1.2m wide) exhaust stack located directly to the south of the building;
- 6 x 10m high water storage tanks and 8.3m high cooling towers located adjacent to the exhaust stack;
- 8.7m high particulate bag filter and ash storage container located to the west of the building;
- A substation;

The biomass CHP plant would enable the throughput of approximately 45,000 tonnes of waste wood per annum. The waste wood is already generated on site at the existing wood recycling factory and a further portion would be sourced from the sister plant in Wigan and transported using the empty HGVs that already return from this plant to the site. The waste wood requires no additional processing prior to being used as a fuel in the CHP plant. The biomass CHP plant would be operational 24 hours a day over a 7 day week.

The scheme proposes an additional 4 car parking spaces; however there is sufficient parking for site staff and visitors available on the existing car park that serves the wider timber processing site.

The facility would generate 15 full time positions.

#### The biomass process

The waste wood is combusted in the biomass boiler to generate steam. This is passed through a steam turbine to generate electricity which would be fed into the National Grid. Heat will be generated by the process and at least 2MW per hour of usable heat can be recovered and made available to enhance the current wood business' growing market.

Fuel will be off loaded directly onto an enclosed automated fuel floor. Storage capacity allowance is on this floor only and is sized in order to ensure there is enough fuel to cover bank holiday periods. No additional external storage is required.

The fuel reception area is enclosed, with plastic style strips to ensure there is a barrier between the fuel and the outside. The HGVs will reverse into the building and off load the pre-shredded and dust extracted wood onto the floor. The area will be on a slight negative draw, with cyclone (or similar) dust extraction in place.

Wood is initially placed on the reception area and then transferred via conveyor to the boiler. It is heated and the gasses created are then passed through the boiler to create the steam required to drive the high efficiency turbine. This in turn drives a generator that creates the electricity. Any remaining energy left in the steam not used for electrical power and heat is returned back into the system via a cooling system to be re-heated and passed through the turbine again to create an efficient system. The cooling system would also be fitted with

variable speed motors to ensure valuable energy is not wasted. The flue gases are then dispersed through the exhaust stack.

The by-products generated by this process are condensate and ash. The condensate would be released to the River Dane, whilst bottom ash/char and fly ash are capable of being used as a recycled aggregate in the production of concrete blocks. Approximately 4 kg of ash is expected to be produced for every tonne of wood fuel used; which, based on an annual throughput of 45,000 tonnes, equates to 180 tonnes of ash.

## **POLICIES**

The Development Plan comprises the Cheshire Replacement Waste Local Plan 2007 (CRWLP) and The Borough of Macclesfield Adopted Local Plan 2004 (MBLP).

The relevant development policies are;

### ***Cheshire Replacement Waste Local Plan (CRWLP)***

- Policy 1: Sustainable Waste Management
- Policy 2: The Need for Waste Management Facilities
- Policy 5: Other Sites for Waste Management Facilities
- Policy 12: Impact of Development Proposals
- Policy 14: Landscape
- Policy 17: Natural Environment
- Policy 18: Water Resource Protection and Flood Risk
- Policy 23: Noise
- Policy 24: Air Pollution; Air Emissions Including Dust
- Policy 26: Odour
- Policy 27: Sustainable Transportation of waste
- Policy 28: Highways
- Policy 29: Hours of Operation
- Policy 36: Design

### ***Macclesfield Borough Council Local Plan (2004)(MBLP)***

- NE1: Areas of Special County Value
- NE11: Nature Conservation
- NE12: SSSI's, SBI's and Nature Reserves
- BE1: Design Guidance
- GC5: Countryside Beyond the Green Belt
- DC2: Extensions and Alterations
- DC6: Circulation and Access
- DC3: Amenity
- DC8: Design and Amenity – Landscaping
- DC9: Tree Protection
- DC13: Noise
- DC14: Noise mitigation
- DC17: Flooding
- DC18: SUDS
- DC19: Groundwater
- DC20: Water Quality and Contamination
- DC62: Renewable Energy

DC63: Contaminated Land

IMP2: Transport

### ***National Planning Policy and Guidance***

National Planning Policy Framework (2012) (NPPF)

PPS 10: Planning for Sustainable Waste Management (PPS10)

### **Other Material Considerations**

The revised EU Waste Framework Directive 2008 (rWFD)

Government Review of Waste Policy in England 2011 (WPR)

Waste Management Plan for England 2013

Cheshire Consolidated Joint Waste Management Strategy 2007 to 2020

Cheshire East and Cheshire West and Chester Councils Waste Needs Assessment Report ('Needs Assessment')

National Planning Practice Guidance

### **Cheshire East Local Plan Strategy Submission Version 2014**

Paragraph 216 of the National Planning Policy Framework (NPPF) states that, unless other material considerations indicate otherwise, decision-takers may give weight to relevant policies in emerging plans according to:

- the stage of preparation of the emerging plan (the more advanced the preparation, the greater the weight that may be given);
- the extent to which there are unresolved objections to relevant policies (the less significant the unresolved objections, the greater the weight that may be given); and
- the degree of consistency of the relevant policies in the emerging plan to the policies in the NPPF (the closer the policies in the emerging plan to the policies in the Framework, the greater the weight that may be given).

In view of the level of consultation already afforded to the plan-making process, together with the degree of consistency with national planning guidance, it is appropriate to attach enhanced weight to the Cheshire East Local Plan Strategy - Submission Version in the decision-making process.

At its meeting on the 28<sup>th</sup> February 2014, the Council resolved to approve the *Cheshire East Local Plan Strategy – Submission Version* for publication and submission to the Secretary of State. It was also resolved that this document be given weight as a material consideration for Development Management purposes with immediate effect.

### **CONSULTATIONS (External to Planning)**

#### **The Strategic Highways and Transport Manager:**

With regard to traffic movements, the applicant has provided data on existing vehicle movements and these are weekly, HGV's – 130, Cars – 270 and Maintenance – 12. There are no proposed additional HGV movements identified as part of the CHP plant as lorries that are returning empty to the plant anyway from deliveries can bring back fuel for the plant.

There are 2 HGV movements proposed every four days for the removal of ash from the plant. Staff trips will be 30 movements over the course of the day. There will be no additional parking provided as parking can be accommodated in the existing car park.

Therefore, the traffic impact of the CHP plant is considered to have a minimal impact on the road network and no highway objections are raised to the application.

**The Council's Environmental Protection Officer:**

AIR QUALITY COMMENTS

The application is for the construction and operation of a 4.8MW biomass Combined Heat and Power (CHP) plant which will burn approximately 45,000 tonnes of non-hazardous waste wood per annum. The waste wood is specified in the approved documents as meeting the specification grades B & C in accordance with PAS111:2012 (Specification for the requirements and test methods for processing waste wood, BSI & WRAP).

The plant will be located at the southern end of the existing Wood Treatment factory, which is situated in a valley setting. The valley location of the factory and plant will affect the normal dispersion of airborne pollutants and could have the potential to cause higher ground level concentrations than would otherwise occur.

Wood burning plant has potential to cause local emissions of airborne pollutants, most notably fine particulates (PM10 and PM2.5), Nitrogen Oxides (NO<sub>2</sub>), Sulphur Dioxides (SO<sub>2</sub>) and potentially emissions of heavy metals. In addition there is potential for local dust to be generated from activity on the site (such as fuel deliveries / export of ash from the site and handling / storage of raw materials on site).

Operation of the plant will be subject to an Environmental Permit (A1) from the Environment Agency as it is a listed activity under the Environmental Permitting (England and Wales) Regulations 2010 (as amended). It is noted that the Agency are under NO obligation to issue an environmental permit if they are not satisfied that the installation will meet the requirements of the appropriate legislation.

The Government expect that planning permissions in respect of such applications look to the Pollution Control Regime to regulate emissions, and as such this office is only able to assess the application in respect of potential harm to public health for matters which would not ultimately be controlled by the Environmental Permit.

The applicants submitted a number of documents with the application in respect of providing information regarding the potential impact of airborne pollutants at ground level.

- Dispersion Modelling Assessment (Ref: 2639-953-F)
- Biomass Information Request Form (Updated 31 January Ref 2639-953-L\_v2)
- Dust Impact Assessment (2535-426-A)

In addition, Environmental Health consulted Public Health England on this application to determine whether the location of such a facility in close proximity to residential properties raised a concern for public health.

Public Health England responded advising that “based on the application’s dispersion modelling assessment, this installation does not present any obvious cause for concern in regards to a significant health risk to local receptors from emissions providing it is well run and managed”.

Concerns were raised about the dispersion modelling assessment, in particular;

- Did the modelling technique used take sufficient account of the topography of the area?
- A discrepancy with respect to the fuel source in the documentation

The applicants responded with an addendum to the report (31 January 2014 2639-953-O) confirming that the topography had adequately been considered and that the discrepancy was due to the evolution of the scheme over time and correcting that discrepancy.

The dispersion modelling report concludes that a 30m chimney is sufficient to provide adequate dispersion of atmospheric emissions from the plant. This conclusion is accepted however it is noted the report uses input data to reach this conclusion and ANY changes to the following parameters would require a re-evaluation of the emissions:

1. Fuel grade and quality (specifically if hazardous waste were to be used)
1. Fuel storage arrangements
2. Specification of the boiler itself, including abatement equipment etc
3. Maintenance and operational management of the installation

As stated above, much of this will be regulated by the Environment Agency.

Taking into account all the above, no objection is raised on the grounds of Air Quality however I would recommend that the following conditions be placed on any planning permission:

1. The installation is to be constructed, operated and maintained in accordance with the approved documents submitted with the application and listed below including, where mentioned, mitigation requirements.
  - a. Dispersion Modelling Assessment (Ref: 2639-953-F)
  - b. Biomass Information Request Form (Updated 31 January Ref 2639-953-L\_v2)
  - c. Dust Impact Assessment (2535-426-A)
  - d. Planning Design and Access Statement (2639-953-B)

*Reason: To safeguard public health from the harmful effects of atmospheric emissions.*

2. All deliveries of waste wood, or disposal of ash from the site shall be in sheeted lorries or other enclosed vehicle.
2. There shall be no processing (shredding / chipping) of waste wood undertaken at any time on the site
3. All handling and storage of waste wood fuel / ash will be undertaken within an enclosed building.
4. Ash shall be stored in an enclosed hopper prior to export from site.

*Reason: To minimise fugitive emissions of dust and safeguard residential amenity and protect occupiers from harm.*

## PUBLIC PROTECTION AND HEALTH COMMENTS –

### **NOISE**

The noise assessment considers impacts at sensitive receptors of noise sources from the cooling towers, CHP plant and any associated vehicle movements.

The latter are not likely to cause significant noise impacts, however such are the potential noise impacts from the operation of the plant the report considers the use of noise attenuated louvers and cladding. The report considers the night time impacts as the worst case situation as this is when background levels are lowest and the potential for disturbance is greatest.

Following concerns about the noise impacts during the night-time, additional information was submitted and detailed the frequency spectrum of noise sources and specified the location of an acoustic fence to further reduce the noise impacts at the most sensitive receptors. The fence is proposed to be a height of 2 metres and to run along the top of a 12 metres earth bank. The acoustic fence should be installed and maintained as proposed.

Where a planning proposal will also require an environmental permit application the planning regime needs to consider the impact of the use of the land on health and quality of life and therefore the noise levels at sensitive receptors resulting from the proposed activities should be conditioned. It is considered that the inclusion of an acoustic fence is a planning matter and therefore its inclusion and maintenance should also form part of any planning permission.

Having reviewed the noise information provided and the proposed design there should be no adverse noise impacts at sensitive receptors if the following conditions are applied.

### *NOISE MITIGATION*

A 2 metre high acoustic fence shall be installed at the location indicated on the topographical survey plan submitted with this planning application. The acoustic fence shall be maintained throughout the use of the development as such to retain its acoustic attenuation properties.

*Reason: To protect the residents from noise disturbance*

### *NOISE CONDITIONS*

The noise rating level contribution from all fixed and mobile plant associated from this development as measured in accordance with BS4142 shall not exceed 34db LAeq when assessed at the nearest noise sensitive property at any time.

It is recommended that this is measured at a location where the proposed site noise is dominant and then used calculate the site contribution at the sensitive receptor taking into account obstructions and ground cover.



*Reason: To protect the residents from noise disturbance and ensure that the proposed mitigation measures are installed and maintained*

Except in the case of emergency, all HGV movements associated with the proposed development shall be restricted to the following hours:

Monday – Friday	08:00 – 18:00 hrs
Saturday	08:00 – 13:00 hrs
Sunday and Public Holidays	Nil

*Reason: To protect the residents from noise disturbance*

## **LIGHTING**

Prior to its installation details of the location, height, design, and luminance of any proposed lighting shall be submitted to and approved in writing by the Local Planning Authority. The details shall ensure the lighting is designed to minimise the potential loss of amenity caused by light spillage onto adjoining properties. The lighting shall thereafter be installed and operated in accordance with the approved details.

*Reason: To minimise the nuisance and disturbances to neighbours (and the surrounding area)*

## **DEMOLITION AND CONSTRUCTION PHASE OF DEVELOPMENT**

### *PILE FOUNDATIONS*

All Piling operations shall be undertaken using best practicable means to reduce the impact of noise and vibration on neighbouring sensitive properties. All piling operations shall be restricted to:

Monday – Friday	09:00 – 17:30 hrs
Saturday	09:00 – 13:00 hrs
Sunday and Public Holidays	Nil

In addition to the above, prior to the commencement of development the applicant shall submit a method statement, to be approved by the Local Planning Authority. The piling work shall be undertaken in accordance with the approved method statement:

The method statement shall include the following details:

1. Details of the method of piling
2. Days / hours of work
3. Duration of the pile driving operations (expected starting date and completion date)
4. Prior notification to the occupiers of potentially affected properties
5. Details of the responsible person (e.g. site manager / office) who could be contacted in the event of complaint

*Reason: In the interests of residential amenity*

## **MAJOR DEVELOPMENT CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PLAN**

Prior to the development commencing, an Environmental Management Plan shall be submitted and agreed by the planning authority. The plan shall address the environmental impact in respect of air quality and noise on existing residents during the demolition and construction phase. In particular the plan shall show mitigation measures in respect of;

- Noise and disturbance during the construction phase including piling techniques, vibration and noise limits, monitoring methodology, screening, a detailed specification of plant and equipment to be used and construction traffic routes;
- Waste Management: There shall be no burning of materials on site during demolition / construction
- Dust generation caused by construction activities and proposed mitigation methodology.

The Environmental Management Plan above shall be implemented and in force during the construction phase of the development.

*Reason: To reduce the impacts of dust disturbance from the site on the local environment*

### **INFORMATIVE**

#### **CONSTRUCTION HOURS OF OPERATION – Noise Generative Works**

It is recommended that the hours of noise generative\* demolition / construction works taking place during the development (and associated deliveries to the site) are restricted to:

Monday – Friday	08:00 to 18:00 hrs
Saturday	09:00 to 14:00 hrs
Sundays and Public Holidays	Nil

*\*For information “Noise Generative” is defined as any works of a construction / demolition nature (including ancillary works such as deliveries) which are likely to generate noise beyond the boundary of the site.*

#### **CONTAMINATED LAND COMMENTS - No Comment**

##### **Informative**

This section has used all reasonable endeavours to recommend the most appropriate measures regarding potential contamination risks. However, this recommendation should not be taken to imply that the land is safe or otherwise suitable for this or any other development.

##### **Nature Conservation Officer:**

The proposed development is located within the boundary of the River Dane (Site of Biological Importance (SBI)/Local Wildlife Site).

The River Dane SBI was designated due to the presence of semi-natural woodland, heathland, unimproved grassland and the river itself. None of these habitats are present or will be directly affected by the proposed development. It should however be ensured that there are no indirect ecological impacts associated with the operation of the proposed development.

I advise that there are unlikely to be any significant protected species issues associated with the proposals.

**The Council's Landscape Officer:**

The proposals increase the ridge height of an existing building from 7.7m to 13.4m; and involve the installation of an exhaust stack of 30m, external water storage tanks 10m, cooling towers 8.3m and a particulate bag filter 8.7m, as well as a substation and ash storage container – for which heights and dimensions are not given.

As part of the application a Landscape and Visual Impact Assessment has been submitted, this is identified as being informal, although I'm not entirely sure exactly what this means. The assessment refers to the Guidelines for Landscape and Visual Impact Assessment 2013, 3<sup>rd</sup> Edition. The assessment identifies the baseline landscape in relation to the National Character Area and the Local landscape Character, namely Landscape Character Type 16: Higher Woods and Farms and specifically within this type Gawsworth Character Area (HFW1).

The application site is located to the west of the River Dane and at this location the river marks the boundary between Cheshire East and Staffordshire, which means that the land immediately to the west, including the eastern slopes of The Cloud, are within the boundary of another authority. The assessment identifies the proximity of the application area to the Peak District national park, which lies approximately 2km to the east.

Although the assessment notes the proximity of the Peak District national Park under Designations (3.3), it omits to identify that the application site is also located within the boundary of the Peak park Fringe Local landscape Designation Area (formerly known as ASCV). This is a transitional landscape adjacent to the Peak District National Park and has many of the special qualities associated with the National park. It is a distinctive landscape of stone walls, steep slopes and recognisable skylines.

The landscape character within the site has been identified and I would agree with the assessment, as well as with the identification of the wider landscape and value of the landscape as being high (3.6.1).

I would broadly agree with the landscape effects as assessed. The proposals involve alterations to existing built features which are characteristic of the site locality. While there are new features, the topography and existing buildings and vegetation mean that they will not have a significant landscape effect, nor will they appear incongruous. The proposals will involve the installation of an 18m high stack towards the southern part of the site, although the proposals also entail the removal of an existing 8m stack further to the north of the site. I would agree that the landscape effect at the wider scale will be negligible.

As part of the visual assessment a Zone of Visual Influence has been identified and a number of representative viewpoints have been identified. I would agree that the magnitude of change to visual receptors in the wider study area is negligible to minor adverse, but greater to receptors within the ZVI of the local study area. However there are a number of receptors for whom the change will be greater and the assessment does identify that the effects will be adverse for a number of receptors.

Although mitigation will not be possible, due primarily to the height of the proposed stack, I do feel that the final finish and colour of the stack will be very important. The assessment indicates that these details are to be finalised (1.23).

**The Environment Agency:**

We have no objection in principle to the proposed development but we would like to make the following comments.

We can confirm that this operation will fall under the Environmental Permitting Regulations (2010) and under the remit of us as a Part 2, Chapter 5, Section 5.1 Part A (1) activity.

Based on the information provided with the planning application, it will not be possible to identify the specific sub-section under this clause but will be either:

Section 5.1 Part A(1) (a) The incineration of hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 10 tonnes a day.

Or

Section 5.1 Part A(1) (b) The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes a day.

Further information regarding the specific waste types will be needed during the Pre-Application discussions that are due to be held between ourselves and the operator before a specific categorisation can be made i.e whether it is Section 5.1 Part A (1) a) or b).

The permit will include conditions relating to the Waste Incineration Directive. Further discussions regarding the required abatement plant and control of emissions to air and water will be included during the Pre-Application meetings and during the determination process to ensure the site operates at BAT (Best Available Technique) for their process.

Our Flood Map indicates that the proposed development site is located predominantly within Flood Zone 1. Our Flood Map indicates that a relatively small part of the access route to the north, at the junction with Tunstall Road and a section of Tunstall Road itself to the east, is shown to be located within Flood Zone 2 and Flood Zone 3. However, it should be noted that these maps are indicative only.

A Flooding Emergency Plan has been submitted by Oaktree Environmental (dated July 2013, Ref: 2639/953/FEM/01) in support of the application. This details the actions to be undertaken by the occupants/users in the event that flooding is expected. We do not normally comment on or approve the adequacy of flood emergency response procedures accompanying development proposals, as we do not carry out these roles during a flood.

The Technical Guide to the National Planning Policy Framework (paragraph 9) states that

those proposing developments should take advice from the emergency services when producing an evacuation plan for the development.

Where emergency response is fundamental to managing flood risk, we advise local planning authorities to formally consider the emergency planning and rescue implications of new development in making their decisions. Site operators should ensure that there is no possibility of contaminated water entering and polluting surface or groundwater.

**Natural England:** no comments received

**United Utilities:** no comments received

## **VIEWS OF THE PARISH / TOWN COUNCIL –**

### Original comments

The expansion of the works at this site and especially the erection of a 30m exhaust stack are contrary to several local Government Planning Policies as follows;

DC62 & PPG22 - this policy states that renewable energy developments must not be unduly obtrusive and not have a significant adverse effect on the character of the area. Although the site is already a large business the proposed expansion and the exhaust stack would be visible in many directions; including from the local tourist landmark of Bosley Cloud. The 30m stack would cause a significant obtrusive structure to the neighbours at Higher Key Green Farm, Station House and Lower Key Green Farm and the fumes emitted could form a significant risk to health. The appearance of the "plume" emitted will vary dependant on the quality & moisture content of the fuel burnt and will in cold weather cause a significant visual plume which will detract from the visual amenity of the rural setting, particularly given the proposed 24/7 operation of the plant.

DC3 & DC13 - the noise generated from the combined heat and power plant (and especially as it appeared that the proposed cyclone dust control apparatus has not been assessed) would cause loss of amenity for the local residents. As we understand this is a 24/7 operation, we are surprised that they quote there will be no increase above background noise at night; in a rural setting background noise is virtually none. The extra noise generated at all times of the day & night would cause loss of amenity for the neighbouring residential dwellings and this would be in contravention of these policies which are there to protect the current residents.

GC5 - the proposed expansion of the works and especially the exhaust stack would not satisfy the policy for development in the open countryside beyond the green belt, as it is not "essential for agriculture, forestry, outdoor recreation". The Council and local residents have great concerns about the level in increase in vehicular traffic along this rural lane. The idea that there are already several lorries a day sending waste wood to the Astley site for treatment implies that there is already a vast quantity of waste wood product being transported off the Bosley site currently and we are unconvinced on this point. The extra vehicles to dispose of ash from the burning process will be additional to any current movements. There is a fear that once the plant is in operation a greater number of vehicle movements will occur - by which time it will be too late to stop it. The lane and the small stone bridges on it's length are already at breaking point and any increase in traffic would be detrimental to our village & the countryside.

Other comments made by Council were:

Pollution Issues have been raised by Council members and the public at the recent meeting. the fuel to be used is said to be untreated "virgin" waste wood and as such should not produce pollutants - there is scant information of how this will be monitored to ensure wood containing pollutants does not get into the power plant process. The automated emissions monitor will be located within the stack, but there is no monitoring planned for receptors beyond the plant. The Dispersion Modelling Assessment assumes that legal limits set out in the ELV's Directive can, and will be, observed; without any confirmation of how these limits will be achieved. Is it feasible to maintain these pollution levels from burning the type & quality of wood being burnt? No evidence has been provided from other plants using similar materials for fuel and using similar technology. This system appears to be unproven with the type of wood fuel proposed to be used as the main fuel source and therefore raises uncertainties as to the predictions cited.

Dust Pollution must be expected to increase given the transportation of further waste wood to the site for burning. The current dust pollution of the whole site is already of great concern to the Parish Council and residents. Visual inspections proposed to eliminate any excess dust particles to leave on the vehicles is non-sensical as this does not currently happen to any significant degree and causes constant issues of dust on cars and washing, dirt & sawdust on the public road and breathing difficulties; issues raised frequently by neighbours.

Exhaust Stack - size & location. The Dispersion Modelling Assessment (Doc ref 2639-953-F) uses the modelling software AERMOD to map predicted dispersion of whatever pollutants emerge from the stack and in doing so have then determined the minimum stack height in order to ensure adequate dispersion at a number of locations around the plant. We are concerned that the historical metrological data used has been taken from Manchester Airport. Manchester Airport is a predominantly flat site and we have concerns that this is not representative of the valley topography in which the proposed site is located.

The area modelled is a grid of 4.5km centred on the site and we have concerns whether this is adequate in relation to:

- a. the accuracy of the predominantly west/south-westerly winds as they come over the hill to the west of the site (Bosley Cloud), which would potentially create leeward turbulence adding to the risk of 'plume grounding' (i.e. where the smoke hits the ground rather than rising up and dispersing safely).
- b. whether areas beyond the modelled area ought to be considered - especially given that many areas to the east and west will be at a significantly higher elevation.

Related to this, we have concerns that the stack is located at the bottom of a valley. As the plans clearly show there is a bank of over 10m *immediately* to the east of the site. Whilst this is good news from a visual perspective it does mean that on this side of the stack, the 'net' height is less than 20m - is this sufficient height for pollution dispersal (particularly given you would not have to travel very far - possible only a few hundred metres - before the ground height was at the proposed stack height (i.e. 30m higher than the river).

Whilst it is recognised that the modelling software does take into account topography we have concerns that this particular piece of software is perhaps not the most robust at accurately modelling plume dispersion over hilly terrain.

Water Consumption at the site will be vastly increased as it is expected to need 23 cubic metres per hour for the boiler. the applicants believe this can be drawn from a local aquifer, but this could cause disturbance to the local wildlife and should be restricted & monitored to ensure continuity of supply.

Electricity Connection as the proposed power plant will be generating 4.8MW of energy and the current site only uses 2MW, the excess energy of that required by WTL will be fed back into the National Grid. We understand extra cabling will be required along Tunstall Lane and this will cause serious disruption to the local residents and will probably cause the current operation to use alternate (& smaller) rural lanes for the HGV's required to operate the site on a daily basis.

If the proposal is accepted by C.E.C. we would like the following conditions to be included in any approval:

- during the construction phase all vehicles leaving the site must go through a wheel wash to ensure the public roads are kept clear.
- the power room containing the turbine should be sufficiently clad with noise abatement products to reduce noise levels and the ventilation louvres should be directed away from the neighbouring properties; to ensure the amenity of local residents.
- weekend & night time workings should be minimised as a persistent noise is just as obtrusive as the occasional reversing beep of wagons on the site; to ensure the amenity of local residents.
- water extraction from local aquifers & the river Dane will require suitable licences from the Environment Agency.

In conclusion the increase in transportation on the rural road and the potential for pollution from the exhaust stack are our great concerns, together with the increased noise from the new plant which will cause undue distress to local residents and result in a detrimental visual impact on those residents and others visiting the wider area.

We hope you take into account the views of the local Council and seek clarification on dust and air-borne pollution dispersals patterns in light of the above comments.

We would also suggest a site visit to acquaint you and the other officers of the site and it's position in the river valley. If possible our councillors would also like to be in attendance to hear comments & questions raised in anticipation of the hearing by the Strategic Planning Board.

#### Comments in respect of the addition of acoustic fence

The installation of a 2m high, wooden, closed board fence will look out of keeping with the rural field-scape and will be very visible to the neighbouring property. We would like to see some mitigating planting to alleviate this eyesore. By utilising some of the ground to install a hedge along the neighbours side of the fence, the infrastructure could be softened and be more acceptable.

A planting scheme to ensure sound proofing of the industrial site & to mitigate the incongruous site of a panel fence in this rural setting would be advisable. We would suggest a hedge planted with holly & blackthorn to get a really effective sound barrier in the long term. A wooden fence of this type will only last 10-15 years before needing to be replaced and by

then the hedging will have grown to help mitigate the sights and sounds of the industrial development.

We would also propose that some additional trees are planted to the west of the stack on the top of the banking to help blind the exhaust stack from the neighbours view and we hope that you'll include this as a condition in any decision on this application.

## **OTHER REPRESENTATIONS**

In excess of 7 letters of objection have been received from local residents. They raise issues in respect of:

- potential noise impacts, particularly in times of low background noise and from HGV movements;
- visual impacts of the proposals particularly the stack (especially during operation) and acoustic fence; and need for visual mitigation either on or off site;
- need to ensure that the existing stack is demolished;
- air quality impacts arising from release of pollutants particularly carbon monoxide, particulate matter and VOCs; and potential dust impacts;
- concern over height over stack and adequacy of dispersion of pollutants given elevation of surrounding houses;
- impact on water resources
- safety of vulnerable road users from HGVs;
- impacts on biodiversity;
- queries the sustainability of the proposal;
- contrary to planning policy for rural areas and renewable energy;
- queries adequacy of methodology and conclusions of modelling;
- concern over effectiveness of pollution controls and extent of monitoring.

## **OFFICER APPRAISAL**

### **Sustainable waste management**

Waste management legislation and planning policy outlines a number of common themes which reflect the approach of the revised Waste Framework Directive. These include:

- management of waste in priority order of prevention, preparing for re-use, recycling, other recovery and disposal as a last option (waste hierarchy);
- the principles of proximity and self-sufficiency in waste management;
- developing an integrated network of waste disposal installations to enable waste to be disposed of, or be recovered, in one of the nearest appropriate installations, by means of the most appropriate methods and technologies; and
- helping to secure the recovery or disposal of waste without endangering human health and harming the environment.

This application proposes to recover energy from waste wood generated by the existing factory and the sister plant using a CHP facility. The CRWLP seeks to facilitate the maximum recovery of waste material where this is the most sustainable option; and states that favourable consideration should be given to proposals which capture both heat and power.



Likewise the recent consultation draft update to PPS10 re-emphasises the importance of using waste as a resource and encourages the use of heat as a source of energy, where energy from waste development is being considered.

The Government recognises a number of benefits that energy from waste can bring in terms of contributing to UK energy and carbon targets; minimising waste to landfill; and enabling businesses to exploit the value in their waste by using residual waste for heat and power (Government Review of Waste Policy 2011) (WPR)). It also acknowledges that different waste streams are often best dealt at different levels of the waste hierarchy due to economic, social and technical reasons. However the recovery of energy should not diminish efforts to first maximise the amount of waste being managed higher up the waste hierarchy such as through recycling; and thus energy from waste should support, rather than compete with other more sustainable options. Indeed the revised Waste Framework Directive allows for deviation from the waste hierarchy where it can be clearly demonstrated that there is a better environmental outcome from doing so; as the aim is to get the most energy out of residual waste, rather than getting the most waste into energy recovery.

In terms of the ability to manage the waste higher up the waste hierarchy, the applicant states that the wood cannot be re-used due to the nature of the residual wood that remains from the processing activities on site. With regards to recycling it, the applicant states that it cannot be recycled due to various practical and legal constraints. They also note that much of the feedstock sourced from the Astley plant is currently transported to an energy plant in south-west Scotland; increasing transport costs long term will impose a financial constraint and will not be consistent with waste producers' aims to meet carbon emission limits. It also does not serve local needs and places the burden of recovery on other regions which does not accord with the approach of planning policy for sustainable waste management.

It is noted that the applicant is proposing to use grades B and C waste wood from the existing factory and the sister plant as feedstock in the CHP. The WPR identifies that there is a need to address waste streams which have a high carbon impact (such as waste wood), and highlights that the Government is considering restricting waste wood from landfill in the future. Recent Defra research (2012) also identifies that recovery and reprocessing rates for grades C and D waste wood are not well established; and 39% of waste wood is still disposed of at landfill which constitutes 2.2m tonnes per year. The applicant states that there is a clear need for this facility as it will assist in meeting the requirements of the revised Waste Framework Directive by diverting 45,000 tonnes of waste wood from landfill and help to achieve 'zero waste economy'. They also note that the recent restriction on using waste wood in animal bedding, composting and other applications will increase the potential for wood waste to be disposed of at landfill unless options for more sustainable waste management are provided for.

Policy 34 of CRWLP does not support applications for thermal treatment for the management of waste unless it makes provision for energy recovery; and uses a waste stream that has already been subject to source separation. Whilst the preference would be to manage waste wood higher up the waste hierarchy; the scheme nonetheless allows the recovery of energy and management of waste at the point of processing, with the resultant energy fed back into the existing facility creating a sustainable use of a residual waste product without the need for additional movement of waste to 'feed' the facility. It also enables avoids the need to haul waste over long distances to an alternative facility and allows low grade waste wood to be

diverted from landfill which is one area of waste management yet to be fully addressed. This therefore accords with policies 1 and 34 of CRWLP, along with the approach of WLP, and PPS10.

## **Renewable energy**

The NPPF establishes a presumption in favour of sustainable development (paragraph 14) and one of the core planning principles is the support of a low carbon future. The NPPF identifies the role that planning can play in helping to secure reductions in greenhouse gas emissions and supporting the delivery of renewable and low carbon energy. It encourages the co-location of potential heat customers and suppliers, and maximising renewable and low carbon energy development whilst ensuring that adverse impacts are addressed. In particular the NPPF makes it clear that applications for energy development should not be required to demonstrate the overall need for renewable or low carbon energy; and broad support should be given to such schemes where the impacts are deemed acceptable (paragraph 98).

There are various legislative requirements governing renewable energy and climate change. The Climate Change Act established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% by 2050; and in 2007 direct greenhouse gas emissions from waste amounted to nearly 23 million tonnes of carbon dioxide equivalent, of which 90% were from landfill. The UK is also legally required to source 15% of its total energy from renewable sources by 2020 (EU Renewable Energy Directive) which will require an annual output of around 227 TWh (terawatt hours) of renewable energy by 2020. To meet this target the Government has estimated that renewable sources will need to contribute at least 32% of the UK's electricity, with one-third of this coming from biomass, and at least 12% of the UK's heat requirements.

In respect of the 2.2m tonnes of waste wood currently landfilled in the UK, recent research identifies that recovering energy from this would generate 2,600GWh of electricity and save 1.15 million tonnes of carbon dioxide equivalent emissions (WRAP 2012). In respect of this application the CHP plant will have an output capacity of 4.8MWe, which equates to the supply of energy to the grid equivalent to the annual usage of over 11,000 households. The applicant also notes that the scheme will provide the following benefits:

- a UK derived energy source;
- greater fuel security and energy independence;
- protection from fossil fuel price fluctuations, especially for energy intensive industries such as the wood treatment plant;
- helps the UK to have a diversified energy generator and move away from concentration on coal, gas and nuclear energy;
- helping to build up a greater distributed energy network to lessen dependence on a small number of very large centralised plants
- contribute to reduction in carbon dioxide emissions
- energy produced within the Bosley CHP facility would not be intermittent in nature or subject to the vagaries of the weather like most other renewable energy,

On the basis of these points and given that NPPF makes it clear that there is no requirement to demonstrate an overall need for renewable energy schemes; it is considered that the application complies with the approach of NPPF and Government policy on renewable energy and climate change, along with policy

### **Alternative sites – Compliance with Policy 5**

For development not located on preferred sites in CRWLP, Policy 5 requires applicants to demonstrate that:

- I. the preferred sites are either no longer available or are less suitable than the site proposed; or
- II. would meet a requirement not provided for by the preferred sites; and
- III. the proposed site is located sequentially to meet the development needs within the Regional Spatial Strategy.

In response to this policy the applicant has assessed in land use planning terms all potentially suitable sites for a CHP facility; and identifies that of the 13 preferred sites identified in the Cheshire East Authority boundary, 11 of these are not allocated for 'thermal treatment'; the category within which a waste wood biomass CHP plant would broadly fall. The remaining two sites at Cledford Lane in Middlewich and Pym's Lane in Crewe have been assessed on a number of criteria including current land uses; proximity to the fuel source; traffic implications; and potential for co-location of activities; and discounted as follows:

#### Cledford Lane Site (Preferred Site WM5)

The applicant makes the cases that

- This is a Greenfield undeveloped site located in a semi-rural location on the outskirts of Middlewich which currently has no associated traffic movements;
- Despite being located slightly closer to Astley plant, would overall, introduce the potential of significantly more HGVs on the highway network;
- Impacts would arise from both construction-related traffic and operational associated with fuel delivery, staff movements and export of residual pollutant materials.
- No co-locational land-use opportunities

#### Pym's Lane Site (Preferred Site WM16)

Site discounted on the basis that:

- Site is partly unavailable for development, currently being used by a housing association and council depot
- Site is further from Astley waste arisings than either application site or WM5, resulting in further HGV movements than would arise from the application site due to origins of the waste being generated;
- Partly a Greenfield site which has no associated vehicle movements.
- No co-locational land-use opportunities

Overall the applicant states that the application site provides an opportunity to manage waste where it arises in addition to being located on an industrial site which carries out activities complementary to the proposed development offering co-locational advantages which are not offered by the other two preferred sites. It provides the source for a proportion of the fuel, and the remainder would be transported utilising the empty vehicles returning from the Astley plant, thereby removing the need for additional vehicle movements. It is also located on an existing industrial site in a location that is well screened from public view. Additionally, the majority of the plant associated with the development is to be located within an existing building. As such the scheme is considered to accord with policy 5 of WLP and the approach of PPS10.

## **Countryside beyond the Green Belt**

Policy GC5 of MBLP precludes developing in countryside beyond the Green Belt unless it is essential for agriculture, forestry, outdoor recreation or for other uses appropriate to a rural area. Whilst the development does not fall under the criteria listed in this policy, the development utilises the existing factory site and thus is not new development in the countryside in that regard.

The proposed development seeks to utilise an existing building to house the necessary plant and machinery required to operate the facility. As stated previously, there is a need to increase the height of part of the existing building and provide a stack for the facility. Given that site accommodates an existing industrial facility with an array of different sized buildings and plant, these changes should be assimilated into the industrial complex without detriment to the surrounding area. As such it is not considered that the scheme would conflict with the approach of the policy in this regard.

## **Noise and disruption**

### Noise

Policy 23 of CRWLP does not permit development which would give rise to unacceptable levels of noise pollution; and PPS10 states that planning should help secure waste management provision without endangering human health or harming the environment and constraints to be considered include the likely impacts of waste management facilities on the local environment and on amenity. Equally in respect of renewable energy schemes regard should be given to any noise impacts which could result in undue loss of amenity to local residents or which would have a significant adverse effect on the character of the area or its intended land use (Policy DC62 of MBLP).

The noise assessment identifies that the two main sources of noise are likely to be from the evaporative cooling towers (located externally) and the turbine (located inside the building). Given the background noise levels; the noise levels generated by the scheme are assessed as being at a level where mitigation is necessary to sufficiently attenuate the noise emissions from the proposed plant. The noise assessment recommends that the cooling towers be fully contained by louvered panels; with further acoustically treated louvers applied to the mechanical vents in the existing building. The louvered panel would need to meet specified attenuation levels and would reduce noise levels to a maximum of 39 dBA which reflects existing background levels and as such the impact is considered to be of 'marginal significance'. In respect of noise impacts from vehicle movements, the Environmental Health Officer considers that these are unlikely to cause significant noise impacts.

The noise assessment considers the night time impacts to potentially have the most significant impact as this is when background levels are lowest and the potential for disturbance is greatest. Following initial concerns raised by the Environmental Health Officer over the noise impacts during the night-time, the applicant proposes an acoustic barrier to further mitigate the noise impacts at the most sensitive receptors. A 2m high close boarded fence is proposed to be installed along the eastern site boundary with Tunstall Road on the existing 12m high earth bank. The acoustic barrier would increase the height of the mound

from 12 metres high to 14 metres high and would achieve a 8-10dB of attenuation; thereby addressing the tonal content of potential noise emissions.

In view of the mitigation proposed, the Environmental Health Officer considers that the scheme would not present any adverse noise impacts at sensitive receptors and raises no objection subject to a range of planning conditions securing the following:

- Provision of the acoustic fence;
- Maximum noise levels for all fixed and mobile plant to not exceed 34db LAeq;
- Restriction on HGV movements to 08:00 – 18:00 hrs Monday to Friday; and 08:00 – 13:00 hrs Saturday;
- Control on hours of operation for piling activities and construction works;
- Piling method statement;

The Environmental Health Officer also recommends a Construction Environmental Management Plan (CEMP) be secured by planning condition which would address the environmental impact in respect of noise and vibration on existing residents during the demolition and construction phase. The CEMP would identify mitigation in respect of noise and disturbance during construction phase including:

- piling techniques;
- vibration and noise limits;
- monitoring methodology;
- screening;
- detailed specification of plant and equipment to be used; and
- construction traffic routes.

Subject to the above planning condition, being secured, the scheme would not result in any unacceptable levels of noise pollution and would therefore accord with policies 23 of CRWLP, DC62 of MBLP and policy SE12 of CELPS as well as the approach of NPPF and PPS10.

## **Air Quality**

Policy 12 of CRWLP requires an evaluation of the likely impacts of the proposed development; including measures to avoid, reduce or remedy any unacceptable impacts. Where the proposal would have any unacceptable impacts, the application will not be permitted. In respect of renewable energy schemes, Policy DC62 of MBLP requires regard to be given to whether the process involved would cause undue loss of amenity to nearby residents by reason of matters including air pollution and odour; whilst policies 24 of CRWLP does not support development which would have an unacceptable impact on the amenity of nearby residents or the occupiers of land due to air emissions including dust. This approach is reflected in policy SE12 of CELPS.

It is noted that the scheme would require an Environmental Permit, and as such would be required to be operated so as to prevent pollution through the use of measures to prohibit or limit the release of substance to the environment to the lowest practicable level. It also ensures that ambient air and water quality meet standards that guard against impacts to the environment and human health.

Where there is both an application for planning permission and a permit submitted, EA guidance states that planning authorities should be confident that the development will not result in unacceptable risks from pollution when considering if the development is an appropriate use of the land; but should not focus on controlling pollution which will be addressed by the Environmental Permitting Regime. Likewise PPS10 and NPPF state that planning authorities should work on the assumption that the relevant pollution control regime is properly applied and enforced; and should focus on whether the development is an acceptable use of the land' and the impacts of those uses on the development of the land. Despite this, air quality remains an important material consideration in respect of this scheme.

#### Emission of airborne pollutants

Wood burning plants have the potential to cause local emissions of airborne pollutants, most notably fine particulates, Nitrogen Oxides (NO<sub>2</sub>), Sulphur Dioxides (SO<sub>2</sub>) and potentially emissions of heavy metals. In addition there is potential for local dust to be generated from activity on the site (such as fuel deliveries / export of ash from the site and handling / storage of raw materials on site) and it is noted that there is a history of dust complaints from existing activities at the plant. The topography of the site in a valley setting will also affect the normal dispersion of airborne pollutants and could have the potential to cause higher ground level concentrations than would otherwise occur; and it is noted that the site is located approximately 80m from sensitive receptors.

A dispersion modelling assessment has been submitted to determine potential impact of airborne pollutants. This identifies that comprehensive flue gas treatment would be incorporated into the scheme; however there will still be residual emissions which will be discharged through the stack. The assessment considers the minimum stack height necessary to achieve adequate dilution and dispersion of emissions; based on predicted levels of ground level nitrogen dioxide concentrations arising from a range of stack heights and taking into account factors such as local meteorology, topography and the effect of buildings on the site. A minimum stack height of 30m was determined as necessary; and with this in place, no exceedances of air quality levels at any ground level locations surrounding the plant were predicted and impacts at sensitive receptors were assessed as negligible.

The Environmental Health Officer initially raised concerns regarding the influence of topography on the dispersion of pollutants given that there are receptors at a higher base elevation than the stack. In response the applicant notes that terrain is only one of a number of factors which influences stack height calculations, which include stack exhaust parameters such as flow rate and temperature, meteorological parameters and the building height. They also noted that a number of conservative assumptions were made in the dispersal modelling, which are likely to result in a considerable overestimation of resulting ground level pollutant concentrations and thus add conservatism to the derived stack height. As a result, this confirmed to the satisfaction of the Environmental Health Officer that the topography has been adequately assessed.

#### Dust

The existing site presents potential dust impacts due to the nature of its current operations which include wood chipping/shredding, external stockpiling of wood chippings/shavings/dust prior to drying, and the movement of wood products; reflective in the history of dust complaints received. The dust impact assessment submitted notes that the potential for impacts on surrounding receptors will be highest during drier, windier conditions when wind

direction is orientated from the site operations towards the receptor; and due to the predominant wind direction, the greatest potential for dust impacts are likely to arise at locations to the north and east of the site. It also notes that the proposed site is separated from the surrounding area by woodland, which could provide a barrier/screening effect to any dust emission that may occur from site operations.

The dust impact assessment identifies that the overall significance of unmitigated dust impacts at sensitive ecological and human receptors is predicted to be negligible. It also identifies that good practice site management will assist in minimising potential for fugitive dust emission during operation of the plant. This includes:

- waste wood being delivered to the site pre-processed and therefore requiring no shredding or chipping.
- Wood and reagent/raw materials delivered to site by enclosed tanker/covered/sheeted lorries.
- Ash will be exported from site in enclosed containers/vessels.
- All handling of waste wood/raw materials and reagents undertaken inside an enclosed building.
- Waste ash stored in an enclosed hopper, prior to export from site.

As a condition within the permit, the plant will require a Written Management System (WMS) to be in place, part of which will detail any management procedures to prevent fugitive emissions including dust. The WMS will have to comply with EA guidance or other recognised Environmental Management System guidance.

It is acknowledged that the scheme will use waste heat to dry wood dust. This would offer a benefit to potential dust impacts as it is proposed to store this wood dust inside the building prior to being dried. At present, the wood dust is stored externally and therefore the potential for dust emission will be greatly reduced as a result of this proposal compared to the current situation problems experienced on site.

The Environment Agency and the Environmental Health Officer have assessed air quality impacts of the scheme. The conclusions of the dispersal modelling assessment are accepted by the Environmental Health Officer and no objections are raised subject to the scheme being constructed, operated and maintained in accordance with the parameters and controls established in the supporting assessments; and subject to planning conditions being secured in respect of:

- Sheeting/enclosing of vehicles carrying wood;
- No processing of waste wood;
- All handling and storage of waste wood fuel and ash to be undertaken within an enclosed building;
- Ash to be stored in an enclosed hopper prior to export.

The comments from the EA also confirm that the Environmental Permit will include necessary conditions to satisfy relevant legislation. As part of the discussions on the Environmental Permit with the EA, the technical specification of plant used to control emissions will be agreed, including the required abatement plant and control of emissions to air and water to ensure the site operates at BAT (Best Available Technique) for their process. Compliance

with agreed limits will have to be demonstrated through continuous and periodic emissions monitoring, the scope of which will be agreed with the EA at the permitting stage.

Public Health England (PHE) have also been consulted to ascertain whether the location of a CHP in such close proximity to sensitive receptors would raise any concerns. In respect of health considerations, the implications of a waste management process on human health is the responsibility of the pollution control authorities; however planning operates in the public interest to ensure that the location of the proposed development is acceptable and health can be material to such decisions. PPS10 looks to the relevant health authorities to advise on any implications to human health.

In their comments on this application PHE make reference to their updated position statement on municipal waste incinerators which confirms that PHE have *'reviewed research undertaken to examine the suggested link between emissions from municipal waste incinerators and effects on health. Whilst it is not possible to rule out adverse health effects from modern well run waste incinerators with complete certainty, any potential damage to the health of those living nearby is likely to be small, if detectable. This view is based on detailed assessments of the effects of air pollutants on health and the fact that modern well managed municipal waste incinerators make only a very small contribution to concentrations of air pollutants'*.

PHE have stated that based on the dispersion modelling assessment, this installation does not present any obvious cause for concern in regards to a significant health risk to local receptors from emissions providing it is well run and managed. They also note that the application for the Environmental Permit will contain more detailed information on how the installation will operate, its emissions and methods of emission control.

On this basis, the guidance of PPS10 and NPPF should be applied and we must therefore work on the assumption that the relevant pollution control regime is properly applied and enforced. It should be noted that the EA will not issue an Environmental Permit unless they are fully satisfied that the installation will be operated appropriately and will meet the requirements of the relevant legislation. With regards to the degree to which the scheme would have an unacceptable impact on the amenity of nearby residents or the occupiers of land due to air emissions including dust; based on the findings of the technical assessments and the views of the Environment Agency, Public Health England and the Environmental Health Officer it is considered that any potential air quality impacts could be adequately controlled through conditions on the dual planning and permitting regimes; and as such would comply with policies 12 and 24 of CRWLP; policy DC3 of MBLP, policy SE12 of CELPS and the approach of PPS10 and NPPF.

## **Highways**

The importation of waste wood feedstock for the CHP would not generate any additional HGV movements as 130 HGV movements a week are generated to the Astley plant in delivering materials and the scheme would utilise the empty HGVs on their return journey. Additional HGV movements would be required for the removal of residual ash residue produced by the process and the delivery of raw materials and reagents to the site. This would generate approximately 2 HGV movements every four days. In addition a further 30 staff car movements would be generated (15 in and 15 out); however the applicant states that due to



the three shift patterns these movements would be spread across the day and would be a worst case scenario as some staff may car share.

In terms of access, the doors will be appropriately located in the building to allow ease of unloading for vehicles delivering fuel to the site. The main door will be located to the north of the extended building, thus enabling vehicles arriving to unload to do so out of the way of other site traffic and reducing the potential for conflict between vehicles and pedestrians.

Sufficient parking for site staff and visitors is available on the existing car park that serves the wider timber processing site. No objections are raised by the Highways Officer as the traffic generated by the proposed CHP plant is considered to have a minimal impact on the road network. Given the level of movements generated, and the views of the Highways Officer, it is considered that the scheme would not result in detrimental impacts on the local road network or road safety and as such would accord with policy 28 of CRWLP, policies DC3 and DC6 of MBLP, along with the approach of NPPF and PPS10.

### **Landscape and Visual**

The site is located 2km to the east of the Peak District National Park and is within the boundary of the Peak Park Fringe Local landscape Designation Area (formerly known as Area of Special County Value). The Landscape Officer notes that this is a transitional landscape adjacent to the Peak District National Park, retaining many of the special qualities associated with the National park, and has a distinctive landscape of stone walls, steep slopes and recognisable skylines.

The proposals would increase the ridge height of an existing building from 7.7m to 13.4m; and also propose the construction of a 30m high exhaust stack in the southern corner of the wood treatment site. Other built elements include the external water storage tanks at 10m height, cooling towers of 8.3m and a particulate bag filter 8.7m.

As such a landscape and visual assessment (LVA) has been submitted which identifies that the landscape in the surrounding area is of high value however due to the dominance of infrastructure, industrial uses in the area including the existing factory and large scale agricultural activity, the sensitivity of the wider landscape to the proposed development is moderate.

The magnitude of change, in terms of the landscape character of the local study area, has been judged as small adverse because the proposals predominantly entail the alteration of existing features, consistent with the existing established condition and new features (in terms of the cooling towers and water storage tanks) will not be evident beyond the site boundary. Furthermore there will be no loss of key landscape features. In terms of the proposed stack, the upper half of the chimney will be evident in some locations within the local study area. As the existing chimney is also evident and there are numerous large scale agricultural buildings and pylons in relative proximity the presence and scale of this feature is not particularly uncharacteristic.

Likewise in respect of the wider landscape, the magnitude of change has been judged as negligible because from many locations, the proposed alterations to the existing built fabric and addition of the cooling towers and water storage tanks will be barely perceived as they are located within the enclosed valley and screened by the mature vegetation. Given the vast

scale of the valley area and proximity of other built structures (electricity pylons), it is considered that the stack will not be a visually discordant element which significantly alters the current condition of this working landscape.

In respect of visual impacts, the site has an enclosed and private character as views are contained by steeply rising wooded topography. Therefore in the LVA identifies the magnitude of change for visual receptors as negligible to minor adverse. It does note that the main visual impact will be centred on the closest visual receptors at Tunstall Road, Bosley Methodist Church, and Lower Key Green Farm due to the visibility and proximity of the stack. A series of photomontages have also been produced which identify that the impacts of the scheme on the wider landscape will be negligible as it will cause a barely perceptible change in appearance.

Again, at Bosley Methodist Church and cemetery the visual effects of the development are apparent and are assessed as potentially causing a noticeable and clear deterioration in appearance in winter. The LVA notes however that this is the only receptor identified as experiencing adverse effects of notable importance; and these receptors play only a smaller part in the wider visual amenity of the locality, which are generally not adversely affected by the proposals at all. Therefore, on the whole, the LVA concludes that the effects of the development on the visual amenity are judged to be of negligible importance.

The Landscape Officer broadly agrees with the conclusions of the LVA and considers that the topography and existing buildings and vegetation mean that the built development will not have a significant landscape effect, nor will they appear incongruous. They do however note that for some visual receptors closest to the site, the impacts could be greater and the effects could be adverse. However overall, the general effect is assessed as negligible and whilst the stack would be visible to the closest receptors, given that there is already a stack located on the site it is not unrepresentative or incongruous in that location. It is also noted that the Landscape Officer raises no objection to the scheme.

Given the scale of the stack, mitigation will be difficult to achieve however the Landscape Officer considers it important to ensure that the final finish and colour of the stack are agreed by means of a planning condition. In addition, following concerns raised by local residents regarding the proposed acoustic fence, the applicant has agreed to the provision of a 'green screen' which will provide the necessary acoustic properties whilst appearing more natural to the local landscape; the final design details of which could be agreed by planning condition. On balance, given the conclusions of the LVA and the views of the Landscape Officer, it is considered that the scheme will not result in any significant detrimental impacts on landscape and visual amenity, and as such accords with the provisions of policy 14 of CRWLP, policy NE1 of MBLP, policy SE4 of CELPS and the approach of NPPF and PPS10.

## **Ecology**

The proposed development is located within the boundary of the River Dane (Site of Biological Importance (SBI)/Local Wildlife Site).

The River Dane SBI was designated due to the presence of semi-natural woodland, heathland, unimproved grassland and the river itself. The Nature Conservation Officer advises that none of these habitats are present or will be directly affected by the proposed development. The dispersal modelling assessment has also considered the impact of the

CHP plant, including the emissions of nitrogen and acid deposit, on the adjacent sensitive ecological sites including the SBI and the South Pennine Moors Special Area of Conservation (SAC)/Special Protection Area (SPA). The modelling identifies that impacts are predicted to be insignificant at all non-statutory and statutory sites in accordance with the relevant guidance.

The Nature Conservation Officer advises that there are unlikely to be any significant protected species issues associated with the proposals. On this basis, and given that the scheme would partly utilise an existing building on a previously developed site, it is not considered that there would be any unacceptable impacts on nature conservation assets and would therefore comply with policy 17 of CRWLP, policies NE11 and NE12 of MBLP, policy SE3 of CELPS along with the approach of PPS10 and NPPF.

### **Water Resources and Flood Risk**

A small part of the existing site access road at the junction with Tunstall Road is located within Flood zones 2 and 3 on the Environment Agency's indicative flood zone maps. The majority of the site is however outside of the flood plain and substantially elevated from the River Dane by approximately 12m.

The NPPF requires LPAs to ensure that flood risk is not increased elsewhere in new development, and only consider development appropriate in areas at risk of flooding where, informed by a site-specific flood risk assessment following the Sequential Test, it can be demonstrated that:

- within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to justify a different location; and
- development is appropriately flood resilient and resistant, including safe access and escape routes where required, and that any residual risk can be safely managed, including by emergency planning; and it gives priority to the use of sustainable drainage systems.

In this case the proposal is located on an existing area of hardstanding on the main factory site. The scheme will not increase the site's overall footprint, will not increase the amount of surface water runoff already generated and will not cause any loss of natural flood plain. Importantly, the Environment Agency advised at the pre-application stage that a flood risk assessment was not required as the flood maps only show a relatively small part of the access road being in the flood zone, and the flood maps are only indicative. They considered that the access/egress and evacuation details for the site could be adequately addressed in a site emergency plan. A flood emergency plan has been submitted with the application and this details the actions to be undertaken by the occupants/users in the event that flooding is expected. The Technical Guide to the National Planning Policy Framework (paragraph 9) states that those proposing developments should take advice from the emergency services when producing an evacuation plan for the development. As such it is considered that a condition could be imposed requiring the final flood emergency plan to be approved in liaison with the emergency services. No objections are raised by the Environment Agency with respect to flood risk.

Despite the proximity to the River Dane, it is considered that good site management procedures can be implemented to ensure that there are no adverse impacts arising from

contamination to watercourses. As the site will be subject to an Environmental Permit, the potential for pollution to water will be addressed and controlled as part of that regulatory regime, to ensure there are no significant adverse impacts on the watercourse. The condensate generated by the process will be discharged into the River Dane however this will require a separate Discharge Consent from the Environment Agency and as such this will contain the necessary controls to limit emissions. There will be no other liquid discharges arising from the scheme apart from clean surface water collected by the existing drainage system serving the site. With regards to drainage it is noted that no concerns have been raised by the Environment Agency. Equally any requirement for water abstraction to serve the facility would be considered under separate legislation regulated by the Environment Agency. On this basis, it is considered that the scheme would not give rise to any unacceptable impacts on water resources or from risk of flooding and as such would comply with policy 18 of CRWLP, policies DC17, DC19 and DC20 of MBLP, policy SE13 of CELPS, along with the approach of the NPPF and PPS10.

### **CONCLUSIONS AND REASON(S) FOR THE DECISION**

Section 38(6) of the Planning and Compulsory Purchase Act 2004 provides that where regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts, the determination must be made in accordance with the plan unless material considerations indicate otherwise. This decision has also had regard to the National Planning Policy Framework and Planning Policy Statement 10: Planning for Sustainable Waste Management.

The application and supporting documentation considers the potential constructional /operational; long and short term; temporary and permanent impacts of the development and where appropriate identifies mitigation sufficient to minimise the impacts. The documentation concludes that the development does not give rise to any unacceptable significant impacts.

The proposed development, as set out within the committee report, has been carefully considered against adopted planning policy and national guidance, taking into account all other material considerations. It is considered that the proposed development would not have an unacceptable detrimental impact upon the wider environment and that any negative impacts identified could be overcome by suitably worded conditions or would be controlled by other legislation. It is considered that the supporting information submitted with the application demonstrates that the proposed development would not cause unacceptable significant harm to the local environment in terms of highways and traffic, landscape and visual impacts, noise and air quality, nature conservation and water resources. It is not considered that the proposed development would cause unacceptable harm to the amenities of local residents.

As such, the proposal accords with the provisions of the PPS10 and the NPPF; policies within the Cheshire Replacement Waste Local Plan, the Macclesfield Borough Local Plan and the emerging Cheshire East Local Plan Strategy.

### **RECOMMENDED:**

**That the application be APPROVED subject to the following:**

- 1. Standard conditions**
- 2. Sheeting of all vehicles transporting material**

3. No processing of waste wood
4. All handling/storage of wood and ash within enclosed building
5. Ash stored in enclosed hopper
6. Details of acoustic barrier
7. Acoustic barrier to be installed prior to operation of the facility
8. Noise levels
9. lighting scheme
10. Control on number of vehicle movements
11. Restricted times for HGV movements
12. Piling method statement
13. Restricted hours for use of piling
14. Construction environmental management plan
15. Restricted hours of construction activities
16. Stack design details
17. Foul and surface water drainage scheme
18. Control of fuel types
19. Scheme for control of dust
20. Flood emergency plan

In the event of any changes being needed to the wording of the Committee's decision (such as to delete, vary or add conditions/informatives/planning obligations or reasons for approval/refusal) prior to the decision being issued, the Planning and Interim Place Shaping Manager has delegated authority to do so in consultation with the Chairman of the Strategic Planning Board, provided that the changes do not exceed the substantive nature of the Committee's decision.

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