### **Newhurst ERF Agenda Document**



# Newhurst Energy Recovery Facility Local Liaison Committee (LLC) Meeting Monday 4<sup>th</sup> April 2022 from 1730 to 1930 Agenda

### PLEASE NOTE THIS MEETING WILL BE IN PERSON AT THE NEWHURST SITE

Apologies: Mrs M Tappenden, others to be noted at the meeting.

1.	Minutes of the previous meeting	All
2.	Matters arising not on the agenda	All
3.	Team Introductions & recruitment update	Covanta/Biffa
4.	Construction update	Covanta/Biffa
5.	Planning Update	Covanta/Biffa
6.	Date of next meeting	Chair
7.	АоВ	All

# NEWHURST ERF LOCAL LIAISON COMMITTEE (LLC) MEETING NOTES MEETING HELD 4<sup>TH</sup> APRIL 2022, 1700 (IN PERSON AND BY ZOOM)

### In attendance:

Cllr Jane Lennie (JL)

Coun. Christine Radford

Cllr Peter Grainger (PG)

Shepshed Town Council

Leicestershire County Council

Shepshed Town Council

Mr. Peter Cunnington (PC)

Ms. Landy Yang

Mr. Kenneth King

Local Resident
Local Resident

Councillor Max Hunt Leicestershire County Council

Mr. David Spencer (DS) Covanta Mr. Craig Burdis (CB) Covanta

Dr David Best (DPB) Independent Facilitator

Mr. Peter Wood Local Resident
Mr. G Newborough Local Resident
Mr. John Orchard Covanta/Biffa
Mr. Mark Needham Local Resident

Mrs. Ann Green Charnwood District Council (EHO)

Mr. Jim Thompson Covanta/Biffa

**Apologies for absence:** Mr Charlie Harris (replacing Mr Revill), Mrs. Mary Tappenden, Mrs Julia Howard, Ms Jane Hammersley, Ms Becky Knighton, Mr Alan Twells, Coun. John Savage.

**Disclaimer:** Membership of the LLC does not imply either support for, or objection to, the Newhurst Energy Recovery Facility (ERF) development. Rather it is an opportunity to facilitate the flow of information between the developer and local communities and vice versa.

### 1. Welcome

- 1.1. David Best welcomed members to the meeting. He welcomed Mr Newborough and members introduced themselves. Mr Jim Thompson was introduced as the newly appointed Facility/Plant Manager for the Newhurst site.
- 1.2. A copy of the papers circulated with the agenda is available on the Newhurst ERF website.
- 1.3. DPB stated that the meeting would be recorded to help prepare the meeting notes, but the recording would be deleted once these were approved at the subsequent LLC meeting. The transcript would not be published.

The community engagement page of the site is here:

### 2. Minutes of the Previous Meeting.

2.1 These had been previously circulated. These were approved and have been posted to the website in the usual way.

### 3. Matters Arising not on the agenda.

There were none.

### 4. Construction Update.

**Mr. Burdis** presented the construction update, using a slide deck which has since been put on the web site and the link to which is <u>here</u>:

### 4.1 Key points:

- 4.1.1 Progress was more visible as the cladding and roofing of the building was undertaken and the condensers were now under construction as could be seen. The three storms recently had caused some minor delays, but progress was now on track.
- 4.1.2 Detailed design, procurement and manufacturing are now 98% complete (January 96%) Turbine and stack, as well as condensers are now installed
- 4.1.3 Construction is now 71% complete (January 53%) and on time.
- 4.1.4 The Boiler pressure tests were completed in February and were satisfactorily passed. In response to a question from Mr. King, Mr Burdis reported that the Boiler was designed to operate at a pressure of 85Bar but had been tested to 145Bar and that there were emergency by-passes if the pressure exceeded design limits. Mr Newborough asked about the monitoring of corrosion rates in the boiler, turbine, and pipework. Mr Thompson stressed that this monitoring was part of the routine maintenance and related activities in the plant and that if needed the boiler and turbine could be taken offline without difficulty if needed.
- 4.1.5 Approximately 600 operatives are now working on site, and this is likely to be the peak number of operatives expected to be on site at any one time. Some 100 contractors were now at work on the electrical and related installation work. The numbers would begin to reduce slowly as work packages begin to be completed
- 4.1.6 The next major milestones will be the start of cold commissioning which is scheduled to begin around July 2022. Work on cladding and related external works is continuing.
- 4.1.7 The progress made can be seen in the photographs included in the Construction update deck of slides that is available via the website Community Engagement pages.
- 4.1.8 The Covid 19 Action plan remains in place and is working effectively to prevent and manage incidence of the virus. Less than ten cases have been recorded since before Christmas helped by the fact that the majority of the work is outside, reducing the spread of the virus.

- 4.1.9 Next three months planned activities:
  - Erection of the Building Envelope will continue including steelwork and cladding.
  - M&E Contractors will continue with installation of the Combustion equipment, Flue Gas Treatment and Water Steam Cycle equipment.
  - Electrical and Piping subcontractors will continue with installation.
  - Installation of the Turbine Generator to continue.
  - Energisation of the 132kV grid connection.
  - Recruitment of O&M staff ongoing.
- 4.1.10 Electricity energisation is being planned for April/ May time, and so all the actions necessary for that are now being carried out.

# 4.2 Questions on Construction Update.

- 4.2.1 In relation to previous questions on the scale of the plant in relation to the design, photo montages are included in the construction update deck and show that the plant is built as designed.
- 4.2.2 Mr Cunnington enquired if the architects were the same as those employed elsewhere. They were and the plant was similar in design to others. Mr Burdis commented that the design was in his view rather better than some others that he was familiar with.
- 4.2.3 **Mr Grainger asked if all systems were duplicated for safety. Mr Burdis** explained that there were no single points of failure, but that since the plant was a single line operation with one boiler and one turbine, the plant was designed such that either or both could be taken offline as needed without detriment to the safe operation of the plant.
- 4.2.4 Councillor Lennie asked if the heat export was agreed (See also planning update below). Mr Orchard explained that a feasibility study had just been completed but was not yet published into the potential customers for heat and how this might be provided. Since it was a condition of the permission to develop the site that a route for heat offtake should be provided, this topic was under active development. As recorded in the notes of the January meeting, local links, and initiatives, and for example the heat offtake arrangements, would be the responsibility of a Portfolio Director who is to be appointed to develop and manage these activities over the life of the facility.
- 4.2.5 **Mr. Newborough** asked if there would be remote monitoring of the plant operation and specifically the turbine. **Mr Thompson** explained that the control centre of the Plant would be equipped to monitor all systems on site and that it would be possible to see this facility once the cold commissioning was complete.

4.2.6 **Mr King** asked if there were any areas of the plant which represented an Electromagnetic Radiation (EMR) risk. **Mr Thompson** explained that there were reference studies which classified EMR risk from such plants and that any areas of Newhurst which presented such a risk, which was expected to be very low, would be clearly delineated.

### **4.3 Environmental Permit Pre-Commissioning Conditions**

4.3.1 **Mr Burdis** reported on the Environmental permit pre-commissioning conditions which are detailed in the update deck with the status and responsibility against each one. Members of the Committee are encouraged to review these and forward any questions to **David Best**.

### 4.4 Recruitment update.

- 4.4.1 **Mr Thompson** described the organisation structure of the Newhurst operation of which he is now the manager. **Ms. Laura Curtis** had been recruited as operations Manager, and was the first female Operations Manager in the UK, and had been promoted from her role at the Rookery South plant. **Mr Dwight Lewis** had been appointed as Maintenance Manager.
- 4.4.2 There is a team of 28 Operations staff under Laura Curtis. In the operations areas,6 shift managers and a day supervisor will oversee the 28 operations staff. Dwight Lewis will manage a team of 12 Maintenance staff, organised in Electrical and Mechanical sections, plus a Planner and an Inventory Controller. There are also a Site Administration, Health and Safety, HR and Environmental Management supported in all by a team of four staff. **Mr Burdis** commented that Mr Thompson would, over time, replace him as the point of contact for the Committee, as construction came to a close and operations began
- 4.4.3 Members of the teams were being recruited by **Jim**, **Laura**, and **Dwight** with HR support, so that by September some 90% of the staff would have been recruited. At present shift Managers are being recruited and in May all six would be in place. The focus was on building a diverse workforce in terms of new starters, more experienced staff, and wherever possible recruits from the immediate area of the plant where the skills or new entrants to the industry could be found. So far recruits had been found from Shepshed, and Loughborough and some interest had been expressed from other sites in the area such as Ratcliffe on Soar power station.
- 4.4.4 Significant classroom and hands on training periods were planned for new staff, and the shift patterns were being worked on for the operations and Maintenance areas. Out of hours, and on Sunday, the plant would be staffed by three operators but with full staffing from Monday to Saturday during the working day.

### 5. Planning update

- 5.1.1 A site visit had been arranged for Ms Becky Knighton who had taken over from Daniel Galpin of Leics. CC Planning department. This took place on the 23<sup>rd</sup> February, David Best also attended.
- 5.1.2 The planning update was presented by Mr Spencer in Mrs Tappenden's absence. The report is on the web site <u>here</u>.

The status of the heat offtake (referred to earlier in the meeting is noted below, a submission was made to LCC on 16th March 2022 to address Condition 29 of the planning permission. Condition 29 states:

29. The development shall not begin operating unless and until a route to the boundary of the site capable of accommodating pipework for heat off-take purposes has been identified and has been approved in writing by the Waste Planning Authority. The route shall thereafter be reserved for this purpose.

The route identified is from the plant to the site entrance. The submission can be viewed at the following link: Planning application 2020/0072/02/CS/29 | Leicestershire County Council (planning-register.co.uk)

As noted above a feasibility study into the interested parties, and the feasibility of supplying heat had been completed and was being reviewed. This work was continuing. **Councillor Hunt** requested that a standing item on this work should be included on the agenda until the route, and any agreement on heat offtake, was determined

5.1.3 It had been discovered that the superficial layers of the site were mildly alkaline not acid as had been assumed. This being the case the landscaping scheme for part of the site was being revisited to ensure that the planting scheme was adjusted to take account of this difference in soil pH. **Mr Wood** asked if the whole area of the site including the original Hanson Quarry would be included and landscaped as one. **Mr Orchard** explained that the Scheme under the planning permission required the entire site to be dealt with not just the areas of the Newhurst developed site. There are two separate landscaping schemes that have to be approved under the planning permission; one for the Energy from the Waste (EFW) area and a second for the wider quarry area. The area of the old quarry is outside the EFW area and is the responsibility of Biffa, a different entity from the developer of the Newhurst facility. However, both schemes would be subject to aftercare requirements and would effectively be treated as a single landscape.

The scheme for this work, would be completed and agreed in time to meet the deadline set in the planning consent.

5.1.4 Discussion took place about the trespass occurring on the site especially in the lagoon and quarry area to the east of the M1. It was stressed that although this was a recurrent problem as much as could reasonably be done to deter trespassers was being done. The situation was being kept under review.

# 6. Questions received previously

No questions had been received.

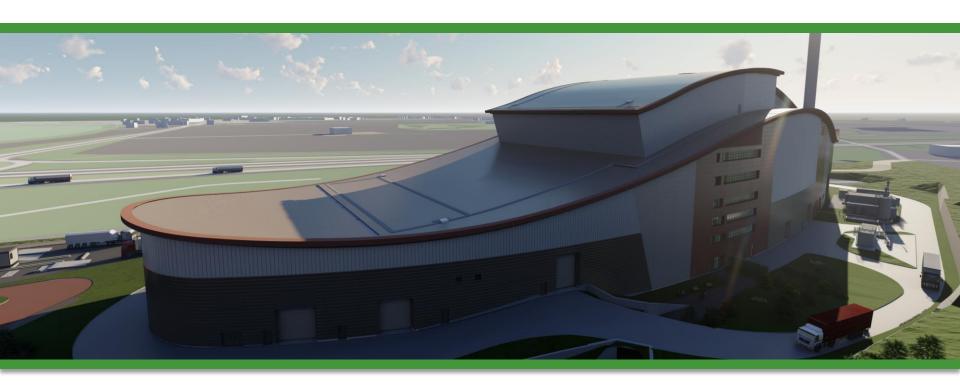
### 5. Any other business

**Mr Burdis** reported that a contract had been agreed for the removal and use of the Air Pollution Control Residue (APC). This dry deposit would now be collected from the site to a facility to be converted into a building material, which meant that close to 100% of the waste and by product would be fully recycled.

# 6. Date of the next meeting.

The next meeting will be held on **July 4**<sup>th</sup> **at 1700, 2022.** The format of the meeting would be agreed closer to the date.

**Postscript** Subsequent to the meeting Mr Burdis conducted a tour of the site for some members of the Committee. This tour was agreed to be extremely useful in informing the members of the layout and potential operation of the site.



# Newhurst ERF Local Liaison Committee Project Update April 2022



# **Newhurst Energy Recovery Facility**

	Newhurst
Location	Shepshed, Leicestershire
Capacity (gross)	350 ktpy; ~42 MW
Financial Close	February 11, 2020
Engineer, Procure, Construct (EPC)	Hitachi Zosen INOVA (HZI)
Operator	Covanta
Scheduled Completion Date	Q2 2023



Design (98% complete) and Procurement & Manufacturing (98% complete) progressing on time

All main components now delivered to site

Construction (71% complete) progressing on time

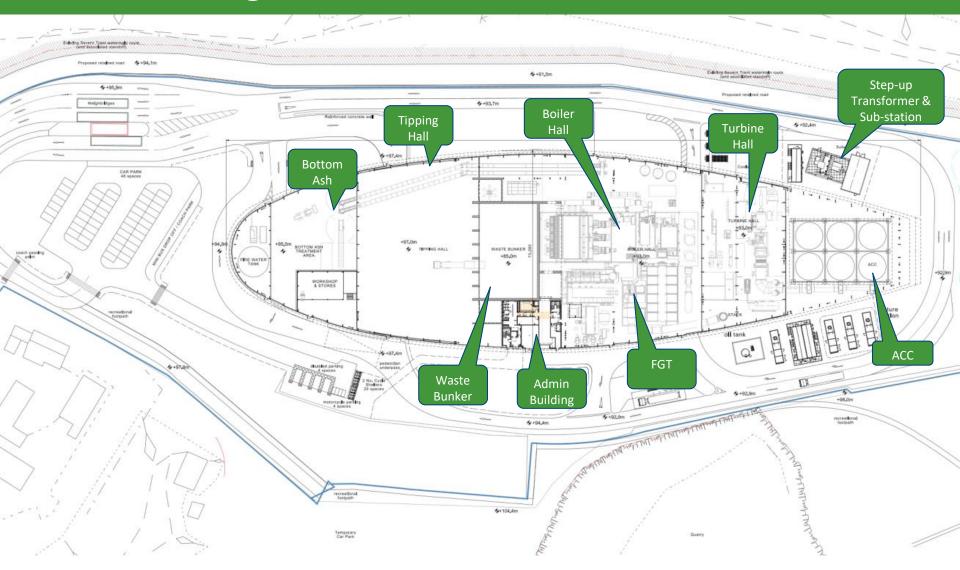
Boiler Pressure Test successfully achieved in February 2022

Building steelwork and cladding of building envelope continues

Around 600 operatives currently working on site

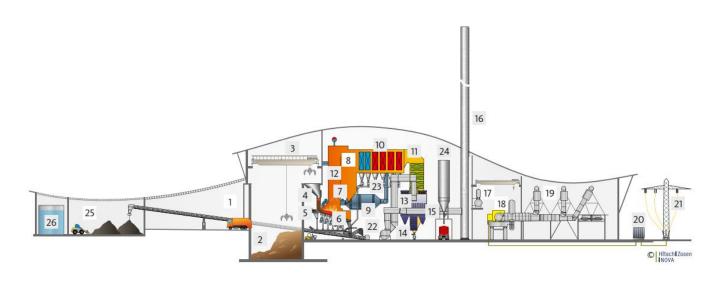


# **General Arrangement**





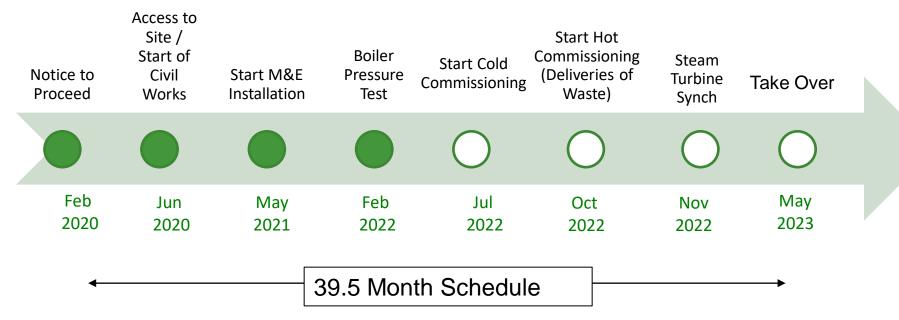
# How does it work?



Waste Delivery and Storage	Combustion and Boiler	Flue Gas Treatment	Energy Recovery	Residue Handling and Treatment
1 Delivery hall	4 Feed hopper	12 SNCR DyNOR®	17 Feed water tank	22 Bottom ash extractor
2 Waste bunker	5 Ram feeder	13 Fabric filter	18 Steam turbine	23 Boiler ash discharge
3 Waste crane	6 HZI Grate	14 Induced draught fan	19 Air cooled condenser	24 Residue silos
	7 Secondary air	15 Flue gas duct	20 Transformer	25 Bottom ash area
	8 Four-pass boiler	16 Stack	21 Electrical power	
	9 Primary air		distribution	26 Fire water tank
	10 Superheater			
	11 Economiser			

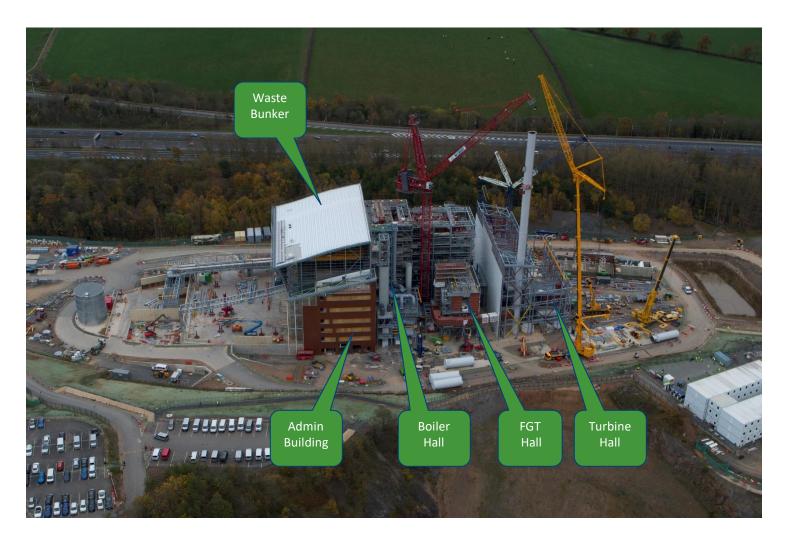


# **Project Timeline**





# January 2022





# **April 2022**





# Progress Photos – April 2022









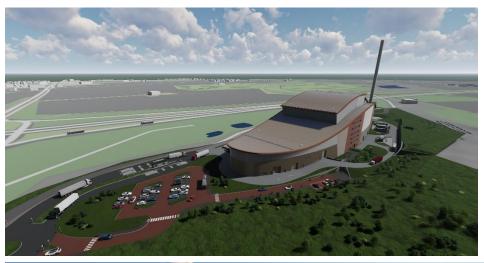


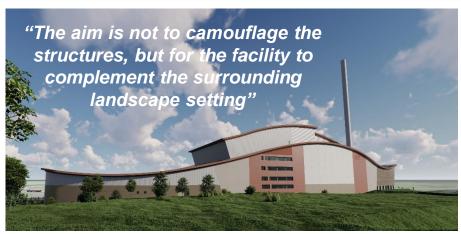






# What will it look like when it is built?











# **Planned vs Reality**









# 3 Month Lookahead

- Erection of the Building Envelope will continue including steelwork and cladding.
- M&E Contractors will continue with installation of the Combustion equipment,
   Flue Gas Treatment and Water Steam Cycle equipment.
- Electrical and Piping subcontractors will continue with installation.
- Installation of the Turbine Generator to continue.
- Energisation of the 132kV grid connection.
- Recruitment of O&M staff ongoing.
- Any questions?



# **Environmental Permit Pre-Commissioning Conditions**

Condition	Summary of pre-operational condition	Status / Responsibility
PO1	Prior to commencement of commissioning, submit	CEL have completed document, ready for issue to the EA (via
	Environment Management System for approval by EA.	Biffa).
		Submission to EA – April 2022.
PO2	Prior to commencement of commissioning, submit	Draft report under review by CEL before issue to EA.
	report describing options for heat utilisation including	Submission to EA – April 2022.
	CHP and district heating.	·
PO3	Prior to commencement of commissioning, submit	CEL have completed document, ready for issue to the EA (via
	protocol for sampling of incinerator bottom ash for	Biffa).
	approval by EA.	Submission to EA – April 2022.
PO4	At least 4 months prior to the commencement of	Awaiting revision from EPC Contractor following comments.
	commissioning submit commissioning plan for	Submission to EA - April 2022.
	approval by EA.	'
PO5	No later than one month after completion of the final	Approved by EA. Closed
	design submit Computational Fluid Dynamics (CFD)	
	report to EA demonstrating achievement of 850°C for	
	2 seconds in the combustion chamber/ furnace.	



# **Environmental Permit Pre-Commissioning Conditions**

PO6	At least 3 months before the commencement of	EPC Contractor preparing document.
	commissioning for EA approval a methodology to	
	demonstrate 850° / 2s residence time in furnace.	
PO7	Submit to the EA for approval, confirmation of which	Closed.
	option will be implemented, including details of the	
	incinerator technology configuration and a review of	
	the air dispersion modelling.	
PO8	Prior to the commencement of commissioning submit	Awaiting revision from EPC Contractor following comments.
	a written report to the EA for approval, commissioning	Submission to EA - April 2022.
	plan and monitoring procedure for the odour	F .
	abatement system.	
PO9	During commissioning, carry out tests to demonstrate	EPC Contractor to carry out tests during commissioning and
	whether the furnace combustion air will provide the	prepare report.
	required air flows to ensure that negative pressure is	
	achieved throughout the reception hall. Demonstrate	
	whether air is pulled through the reception hall and	
	bunker area into the furnace and activated carbon filter	
	odour abatement system with dead spots minimised.	
PO10	At least 3 months prior to the commencement of	Draft report under review by CEL before issue to EA.
	commissioning, submit updated Fire Prevention Plan	Submission to EA – April 2022.
	(FPP) to EA for approval.	•

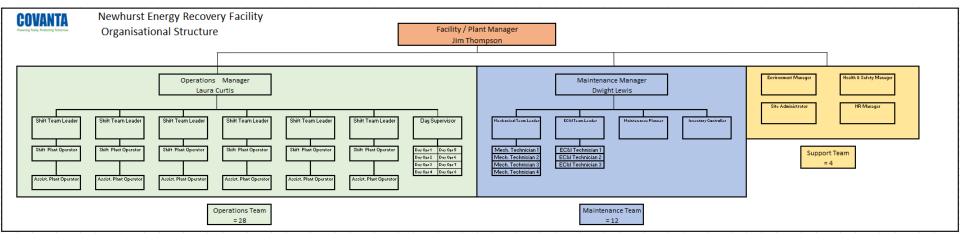


# **Environmental Permit Pre-Commissioning Conditions**

PO11	Prior to the commencement of commissioning, submit to the EA for approval an updated Noise Impact Assessment (NIA) to reflect the final, designed	· · · ·
PO12	Prior to the commencement of commissioning, submit to the EA for approval the waste acceptance procedure to be used at the site.	CEL have completed document, ready for submission.
PO 13	Prior to the commencement of commissioning, submit to EA for approval a protocol for monitoring soil and groundwater.	Protocol prepared by Environmental Consultants, currently under review by CEL.



# **Recruitment Update**





# NEWHURST LIAISON MEETING 4<sup>TH</sup> APRIL 2022 PLANNNG REPORT

### Site Visit:

Craig Burdis and Mary Tappenden hosted a site visit by Becky Knighton (LCC) on 23<sup>rd</sup> February. David Best was also in attendance.

### **Heat Offtake Condition:**

A submission was made to LCC on 16<sup>th</sup> March 2022 to address Condition 29 of the planning permission. Condition 29 states:

29. The development shall not begin operating unless and until a route to the boundary of the site capable of accommodating pipework for heat off-take purposes has been identified and has been approved in writing by the Waste Planning Authority. The route shall thereafter be reserved for this purpose.

The route identified is from the plant to the site entrance. The submission can be viewed at the following link:

<u>Planning application 2020/0072/02/CS/29 | Leicestershire County Council (planning-register.co.uk)</u>

### **Landscaping Conditions:**

Due to an identified change in site conditions, a further submission of details is required to address Conditions 2 and 3 of the permission re on site landscaping around the plant. The conditions state:

- 2 The Ecological and Landscape Management and Mitigation Plan strategy for the application site shall be undertaken in accordance with the details approved by the Waste Planning Authority on 2nd June 2015. The Management Plan and strategy shall be implemented in full in accordance with the agreed program.
- A detailed landscape scheme shall be submitted to the Waste Planning Authority by 31st December 2020 in respect of the area of the former car park to the west of the ERF Building and the new car park area to the north of the ERF Building. The scheme should provide a schedule of species, nursery stock specification, plant distribution and grass seed mix/specification and include native species, a net gain for biodiversity, species rich grassland, and plant protection and aftercare. The scheme should have regard to and complement the approved Ecological and Landscape Management and Mitigation Plan for the site.

The approved landscaping scheme for the site (Condition 2) was based on a concept of creating a mosaic of acid grassland and heath. This type of landscaping requires acid soils as a substrate (pH lower than 7). The Newhurst site was all hard surfaced before construction began and it was not possible to sample soils. It was assumed (not unreasonably) that the soils would be acidic, based on the location in the Charnwood Forest and the fact that the adjacent quarry is dug into acidic igneous rock.

Now that the development is at an advanced stage, HZI has commissioned a soils survey on site to confirm the soil types in preparation for delivery of the scheme. The survey demonstrated that the soils are alkaline with a pH ranging between 8-9. This is because there

was a thick layer of clays underlying the hard surface of the site and the material which is to form the substrate for landscaping is clay rich (i.e. alkaline). Creation of an acid-based restoration scheme will not be possible or appropriate.

HZI's landscape architect has produced a revised draft for the site landscaping scheme which takes account of the alkaline soil type. The scheme is currently with the ecologists at SLR Consulting for their review and comment. Once the scheme is ready, it will be discussed with LCC's Landscape Architect and Ecologist before submission for approval.

The scheme required by Planning Condition 3 (is the landscaping of the former car park area) will be incorporated into the same submission.

# **Aftercare Condition:**

Condition 31 states:

31. Following the reclamation of any part of the site in accordance with the approved reclamation scheme the reclaimed land shall be treated and managed over a period of five years in accordance with an aftercare scheme which shall be submitted to the Waste Planning Authority by 31st December 2024. The scheme shall provide a strategy for the five-year aftercare period and shall specify the steps that are to be taken to bring the newly restored land to the required standard for the approved biodiversity-led after-use.

This scheme refers to the land within the Newhurst Quarry boundary but outside of the red line ERF planning permission boundary. The scheme is the sole responsibility of Biffa and will be prepared in good time to meet the deadline set by the condition (31/12/2024).

Mary Tappenden 29<sup>th</sup> March 2022