

# Permitting decisions

## Refusal

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We have decided to refuse the variation for Bankwood Lane Waste Treatment and Processing Centre operated by Eco-Power Environmental Limited.

The location of the facility is Bankwood Lane Industrial Estate, Bankwood Lane, Rossington, Doncaster, DN11 0PS.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements.

### Purpose of this document

This decision document provides a record of the decision making process. It:

- highlights key issues in the determination
- gives reasons for refusal
- shows how all relevant factors have been taken into account
- summarises the engagement carried out because this is a site of high public interest
- shows how we have considered the consultation responses

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the refusal notice.

### Key issues of the decision

#### Structure of this document

Part A:	Administration issues
Part B:	Process description
Part C:	Reason for refusal
Annex 1:	Consultation responses
Annex 2:	Map showing location of the proposed Installation and surrounding area
Annex 3:	Approximate locations of planning permissions granted for new housing developments close to the Eco-Power Environmental Limited, Rossington site.

# Part A: Administration Issues

## Application history

This section includes administrative information relating to the application and information about the Applicant and the Installation.

The Application was for the following listed activities in Part 2 of Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2016 (“EPR 2016”) (SI 2016 No. 1154) as amended:

- Section 5.4 A(1)(a)(ii)

Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment;

- Section 5.4 A(1)(b)(ii)

Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.

The application was originally received by the Environment Agency (“the Agency”) on 16 May 2018. <sup>1</sup>A not duly made letter was sent to Eco-Power Environmental Limited (“the applicant”) on 19 June 2018 outlining further information required by 3 July 2018 to allow the application process to continue to consultation/determination stage.

The required information included:

- Updated Fire Prevention Plan to reflect the requested increased throughput and storage of waste
- Standalone management plans for odour, noise, dust and pests;
- Accident risk assessment (including flood risk);
- Evidence of technical competence including WAMITAB and continuing competency certification
- Identification of waste codes for specific treatment and/or transfer activities.

On 10 July 2018, the application was returned to the applicant as the information required had not been submitted. At this stage, it was agreed between the parties that the fee received could be retained pending the application being re-submitted in the next few weeks.

The application was re-submitted on 17 October 2018. On <sup>2</sup>12 December 2018, a not duly made letter requesting additional information was issued to the applicant.

The additional information included:

- Evidence of technical competence and ISO14001 accreditation
- A baseline soil and groundwater contamination report or acceptance of “zero contamination”
- Submission of application form, C3, for installations
- Amendment of application form, C4, to reflect waste activities to be carried out at the site
- Amendment of application form, F1, to reflect correct waste and installation activities, corrected costs and payment of a further £17,806.

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<sup>1</sup> Appendix 1: Not duly made e-mail dated 19 June 2018

<sup>2</sup> Appendix 2: Not duly made e-mail dated 12 December 2018

Prior to this being issued, the applicant had challenged the need for some of the information to be required at the duly making stage (i.e. proposing that it should be requested later in the permitting process)<sup>3</sup>.

The applicant submitted the further information required on 19 December 2018. We considered that a significant quantity of further information would be required during the determination via information notices (paragraph 4 of Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations (“the EPR 2016”).

Due to the amount of additional information that would be required during the determination stage, we considered whether we would:

- Return the application as “not duly made”

Or

- Have the application duly made and seek to obtain the additional information during the determination via information notices.

Following further discussion with the applicant to allow the application to proceed to determination where additional information would be provided, we agreed to work with the applicant and adopt the latter approach. The application was duly made on 21 December 2018<sup>4</sup>.

On 8 January 2019, the internal and external engagement/consultation process on the application commenced.

A letter was sent to the applicant on 16 January 2019<sup>5</sup> confirming that the application was considered to be of high public interest and explained how we would charge for the application.

The reasons for considering the application to be of high public interest were stated in the letter dated 16 January 2019 namely:

- Historic compliance and amenity issues with the Bankwood Lane Waste Treatment & Processing Centre;
- A high level of complaints from a significant number of people over the previous 12-18 months;
- Media interest in the site including MP/Councillor involvement and the likelihood of increased media and community interest in the site due to the proposal to significantly expand its operations.

The last consultation response was received on 7 March 2019. On 28 March 2019, the applicant raised concerns regarding the additional information the Agency had requested including the associated additional costs.

We responded to the applicant’s concerns on 10 May 2019 detailing our reasons for requesting the information and the reasons for the significant amount of time spent on the application<sup>6</sup>.

On 15 April 2019, the Agency issued a notice of request for more information under the provisions of Schedule 5 EPR 2016<sup>7</sup> (“Schedule 5 Notice”) requesting information which the Agency considered to be necessary to determine the application. Given the large amount of information

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<sup>3</sup> Appendix 3: Email dated 10 December 2018 from Ms C Boles

<sup>4</sup> Appendix 4: Email dated 3 January 2019 from the Environment Agency to confirm that the application was duly made on 21 December 2018.

<sup>5</sup> Appendix 5: Letter dated 16 January 2019 from the Environment Agency to Eco-Power Environmental Limited.

<sup>6</sup> Appendix 6: E-mail dated 10 May 2019 from the Environment Agency to Eco-Power Environmental Limited.

<sup>7</sup> Appendix 7: Schedule 5 Noticed dated 15 April 2019.

required, we agreed an extended timescale for the information to be provided until 15 October 2019.

On 1 October 2019, the applicant contacted the Agency to discuss a 10 week extension to the deadline for all responses to the Schedule 5 Notice from 15 October 2019 to 31 December 2019.

Further discussions took place between the Agency and the applicant which resulted in the applicant making a request on 11 October 2019 for an extension to the deadline in relation to questions 23 only in relation to the site drain layout. On 15 October 2019 we agreed an extension specific to question number 23 until 1 November 2019.

On 15 October 2019, the applicant submitted responses to the Schedule 5 Notice excluding the response to question 23 which was submitted on 1 November 2019.

On 31 January 2020<sup>8</sup>, the Agency wrote to the applicant to inform them that we had reviewed the information submitted in response to the Schedule 5 Notice dated 15 April 2019 and that we had identified substantial differences to the original application which would, in our opinion, require a new consultation process. We explained that any further work on the determination of the application would require a very significant number of further questions, possibly even a greater number of questions than had been asked in the previous Schedule 5 Notice, and this would result in additional costs to the applicant. We proposed a meeting at the Rossington site to discuss our concerns.

As a result of the lack of detail in the original management plans and the fact that a number of questions in the Schedule 5 Notice were replicated or at least very similar for each management plan, this resulted in new management plans being provided which themselves now required full scrutiny. In many ways, reviewing the response to the Schedule 5 Notice became, in effect, reviewing a completely new application.

On 6 April 2020, the Agency received a letter from Bankside Commercial Solicitors on behalf of the applicant<sup>9</sup> which stated that in view of their client's considerable concerns regarding the Agency's request for further information and the additional costs and delay, their client had sought advice from Queen's Counsel.

The letter also reminded the Agency about their powers to require new information under Paragraph 4 of Part 1 of Schedule 5 of the EPR 2016:

'First we would like to respectfully remind you that the Agency's powers to require new information under Paragraph 4 of Schedule 5 of the Permitting Regulations have to be exercised lawfully and therefore reasonably and proportionately for the purpose of determining the application before it.'

Furthermore, the letter contended that the application was limited in its scope seeking only to add:

- Waste drying to the permitted operations,
- Increase the waste throughput from 200,000tpa to 400,000tpa

And

- Enlarge the permit boundary to enable the increased throughput to be processed.

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<sup>8</sup> Appendix 8: E-mail dated 31 January 2020 from the Environment Agency to Eco-Power Environmental Limited.

<sup>9</sup> Appendix 9: Letter from Bankside Commercial Solicitors dated 6 April 2020.

It also noted that the application contained a commitment to limit the quantity of waste processed externally to the 200,000 tpa currently permitted and to process the additional 200,000 tpa inside a new purpose-built building.

Furthermore, the letter highlighted the proposed reduction in waste codes permitted to be accepted at the site from 203 down to 5 and noted that these were the five main waste types which the site currently accepts. It was contended by Bankside Commercial Solicitors that:

- This should reduce any environmental risks from the site.
  - Simplify the determination of the permit variation
- And
- Could not reasonably be seen as a fundamental change to the variation application.

The letter asked the Agency to provide a copy of any further intended request for information in advance of any rescheduled meeting so they could be reviewed for reasonableness and therefore lawfulness.

On 20 April 2020, further discussions were held between Clare Boles and the Agency during which the Agency requested a teleconference to discuss the application. Ms Boles stated that Bankside Commercial Limited were proposing to write a further letter to the Agency which was received on 24 April 2020<sup>10</sup>.

Based on the content of the letters from Bankside Commercial Solicitors, the Agency concluded that Eco-Power Environmental Limited believed that:

- They had responded fully and comprehensively to all previous requests for information
- That further requests for information would be largely unjustified
- That the changes made to the application as a result of the response to the initial Schedule 5 Notice did not materially alter the application other than possibly reducing its environmental risk

And

- Continued requests for information would cause unnecessary costs and delays to the applicant.

The Agency considers that the applicant has failed to fully address all the issues in relation to this application.

The Agency believes that should the application process continue, significant further information and wider consultation with the community would be required as a result of the changes to both the scope of the application and to the detail included in the content of the various amended management plans.

The information provided in the response to the Schedule 5 Notice:

- Does not demonstrate that the proposal was the Best Available Techniques (“BAT”).
- Does not appear to represent an acceptable risk to the environment
- Represents a substantial change to the original application.

The Agency determined the application based on the information provided by the applicant and consequently, we have refused the application to vary the permit.

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<sup>10</sup> Appendix 10: Letter from Bankside Commercial Solicitors dated 24 April 2020.  
EPR/EB3207LH/V005  
Date issued: 21/08/2020

On 22 May 2020, the Agency wrote to Ms Boles<sup>11</sup> to explain:

- That we were minded to refuse this application and will finalise our decisions as soon as practicable.
- That although the meeting at the Eco-Power Environmental Limited Rossington site scheduled for 26 March 2020 had been cancelled, we offered the applicant the opportunity to arrange a telecon to discuss our decision but with the caveat that this would unlikely resolve the fundamental issues that provide the basis of our refusal.

And

- The letter also noted that should the applicant wish to withdraw the application prior to the refusal decision being finalised, they should contact the Agency.

The applicant failed to contact the Agency to re-arrange the meeting.

On 27 May and 2 June 2020, Ms Boles spoke to Agency officers regarding the options of:

- The Agency refusing the application

Or

- The applicant withdrawing their application.

The Agency informed Ms Boles that if the application was withdrawn, there would be the opportunity for the applicant to enter into an enhanced pre-application process where the requirements to satisfy issuing a permit for the proposed operation would be detailed.

### **Details of Advertising, Consultation and Engagement**

We carried out consultation on the Application in accordance with the EPR 2016 and our statutory Public Participation Statement. We consider that this process satisfies, and frequently goes beyond the requirements of the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, which are directly incorporated into the IED, which applies to the Installation and the Application. We have also taken into account our obligations under the Local Democracy, Economic Development and Construction Act 2009 (particularly Section 23). This requires us, where we consider it appropriate, to take such steps as we consider appropriate to secure the involvement of representatives of interested persons in the exercise of our functions, by providing them with information, consulting them or involving them in any other way. In this case, our consultation already satisfies the Act's requirements.

The application was received and determined as a substantial variation to the existing Eco-Power Environmental Limited permit which was at that time held in the name of Attero Recycling Limited.

We advertised the Application by placing a notice on our website, which contained all the information required by the Industrial Emissions Directive, including informing the public where and when they could see a copy of the Application. The advert ran from 24 January 2019 with a deadline for responses to be submitted by 21 February 2019. We also placed an advertisement in the Doncaster Free Press on 24 January 2019.

We made a copy of the Application and all other documents relevant to our determination available to view on our Public Register at the Environment Agency, Lateral House, 8 City Walk, Leeds, LS11 9AT with a deadline for responses by 21 February 2019. Anyone wishing to see these

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<sup>11</sup> Appendix 11: Letter from the Environment Agency to Ms Boles dated 22 May 2020.  
EPR/EB3207LH/V005  
Date issued: 21/08/2020

documents could do so and arrange for copies to be made. We also placed a copy of the Application at the Holmescarr Library from 5 February 2019. We distributed a number of copies of the Application on CD to members of the public following requests.

We sent copies of the Application to the following organisations, which includes those with whom we have “Working Together Agreements”:

- Public Health England
- Director of Public Health, Doncaster Council
- South Yorkshire Fire and Rescue
- Health and Safety Executive
- Planning Department, Doncaster Council
- Environmental Health Department, Doncaster Council.

A summary of the consultation responses, the responses to the advertising of the application and how we have taken these into consideration is contained in Annex 1 of this document.

## Part B: Process description

The proposed boundary for the site encloses an area of approximately 3.15 hectares and is located to the north of the town of Rossington within the area administered by Doncaster Metropolitan Borough Council. The site boundary is located approximately 2 km north of the centre of Rossington and approximately 4.5 km to the south-east of the centre of Doncaster. The main access to the facility is via Bankwood Lane which enters at the southern boundary of the site. The approximate National Grid Reference for the site is 460630, 399120.

The Site is immediately bounded to the north by a railway siding, which runs along the southern bank of the River Torne. Land immediately to the west of the proposed boundary location is a historic coal mine pit and processing area which is currently being redeveloped for residential use. The southern boundary of the site is formed by the Rossington Drain. The M18 and the A6182 – Great Yorkshire Way pass to the north of the site.

There are a number of statutory and non-statutory habitats sites within the applicable screening distances from the facility:

- Special Area of Conservation – Hatfield Moor 9.4 km;
- Special Protection Area – Thorne and Hatfield Moors 9.5 km;
- Site of Special Scientific Interest – Potteric Carr 0.6 km;
- Local Wildlife Sites (within 2 km from the facility)
  - Holmes Carr Great Wood and Holmes Carr Little Wood
  - Rossington Brick Pond
  - Park Wood East
  - West End Wood
  - West End Pasture
  - St Catherine's Railway Embankments, Delves and Cuttings
  - Beeston Plantation (Potteric Carr)
  - Back Wood
  - Warren Wood (North)
  - Green Busks Wood
  - West Bessacarr Park
  - Doncaster Warren (Golf Course)
  - M18 Embankments
  - Hatchell Wood (East)
  - Hatchell Wood (West).

### Existing treatment operations

The applicant holds an existing environmental permit for a waste operation. The permit allows the operator to undertake treatment of a range of commercial and industrial wastes in a materials recycling facility. The main sources of wastes treated at the facility are materials from other waste transfer stations and recycling centres. The treatment processes undertaken consists of manual and automatic sorting, separation, screening, baling, crushing, shredding, compaction and blending of non-hazardous waste into different components for disposal (no more than 50 tonnes per day) or recovery.



A number of processes are carried out on site including:

- sorting and separating waste types both mechanically and by hand;
- recycling various waste types, including metals, wood, plastics and aggregates;
- shredding on-recyclable materials to recover the waste as fuel products;
- blending waste materials to produce usable products (e.g. soils or fuels);
- drying waste to improve fuel (SRF) quality; and
- baling of waste materials for exports as fuels (SRF/RDF).

All storage and treatment of wastes are required to be carried out inside a building or on an impermeable surface with a sealed drainage system.

There are particular limits on the quantities and/or storage and treatment of particular waste streams including intact and shredded motor vehicle tyres and batteries.

Permitted activities included:

- **R3:** Recycling/reclamation of organic substances which are not used as solvents
- **R4:** Recycling/reclamation of metals and metal compounds
- **R5:** Recycling/reclamation of other inorganic compounds
- **R13:** Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).
- **D9:** Physico-chemical treatment not specified elsewhere which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12
- **D14:** Repackaging prior to submission to any of the operations numbered D1 to D13
- **D15:** Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)

The permit for operation at the Rossington site (originally referenced as EAWML 43452) was first issued on 2 July 1999. A partial transfer (EPR/SP3990CM/T005) was issued on 16 June 2010. The partial transfer separated the activities carried out by Bankwood Processing Ltd who operate a waste transfer station and Britcare Ltd who operate a Healthcare and Clinical waste transfer station.

Further permit variations followed, the most significant of which (EPR/SP3990CM/V008 in September 2015) increased the site boundary, added additional waste codes to those permitted to be accepted on site, added baling to the permitted treatment activities and increased permitted annual waste throughput from 75,000 tpa to 200,000 tpa.

On 9 June 2016, the permit was transferred from Bankwood Processing Limited to Attero Recycling Limited.

### **Proposed treatment operations**

The purpose of the current permit variation application, EPR/EB3207LH/V005, was to increase the maximum annual waste throughput from 200,000 tonnes to 400,000 tonnes. The number of wastes, individual European Waste Catalogue Codes ("EWC"), to be accepted on site would remain the same.

Although the current permit allows the operator to accept 215 different waste codes onto site, the permit application however, included only 203 of these permitted waste codes.

If the permit application was varied this would mean that the daily capacity of the site would exceed the threshold limits applicable to two S5.4 waste treatment activities within the EPR 2016 which were outlined earlier in Part A of this document:

- S5.4 A(1)(a)(ii) – with a threshold of 50 tonnes per day and
- S5.4 A(1)(b)(ii) – with a threshold of 75 tonnes per day.

The site would become an Installation and consequently it would be regulated under the Industrial Emissions Directive.

To account for the double increase in annual throughput, the applicant also proposed to extend the permitted boundary. In addition, they proposed to develop the waste recycling operations and focus on producing Refuse Derived Fuel (“RDF”) and Solid Refuse Fuel (“SRF”). In so doing, the operator included a ‘Directly Associated Activity’ in the form of air drying of the SRF fraction of waste.

The annual quantities of products and wastes to be exported are anticipated to be approximately:

- 350,000 tonnes of SRF/RDF;
- 45,000 tonnes of recyclable materials (wood, plastics, paper/cardboard, metals, soils and hardcore (bricks & concrete));
- 5,000 tonnes of non-recyclable waste to landfill.

If the site produced 350,000 tonnes per year of RDF/SRF it would be treating approximately 960 tonnes of waste per day – very significantly above the thresholds for the two S5.4 applicable waste treatment activities noted earlier.

The drying operation will be carried out using 63 biomass virgin wood fired boilers (each with an individual thermal input of (0.91 MW) which will be located within a Dryer Building (Heater Building). The boilers are designed to produce hot water to be circulated through pipework to the heat exchangers transferring heat from water to air. The heated air will travel through steel ducting up to 36 drying containers which will hold the waste material. The passage of the heated air through the drying containers will dry the waste prior to release to atmosphere.

All of the existing waste operations currently carried out on site will remain unchanged under the proposed variation however, the applicant stated that the shredding and tromeilling operations would be relocated to a new Waste Processing Building to the west of the site enabling approximately 50% of current external waste processing operations to be carried out indoors.

The applicant also stated that the additional areas to be added to the permit boundary will have concrete impermeable surfacing installed before any waste storage or processing is carried out in those areas. A new weighbridge, site office and internal road will also be installed to enable the installation and implementation of a one-way system.

The applicant also proposed:

- To develop the area to the east of the currently permitted site for Heavy Goods Vehicle (“HGV”) parking. The intention was to create a level development platform surfaced with concrete impermeable surfacing and installation of any necessary drainage features.
- To provide a relocated rail loading area adjacent to the proposed HGV park. The rail link would be used to transport only those materials excavated from the former Bolland Skip Hire environmental permit boundary. The proposed rail loading area will consist of a

concreted area at the northern end of the HGV carpark which would be used to stockpile materials for loading onto trains.

- To construct a new single carriageway link road to the west of the site to connect with the existing roundabout off West End Lane eliminating the need for HGVs travelling to and from site to drive through the Bankwood Lane Industrial Estate. An internal, private access way would connect the Installation to the new road.
- That the hours of operation would be:
  - HGV and other traffic movements: 07.00 to 20.00 (7 days per week).
  - Operations within buildings: 24 hours (365 days per year).
  - External operations 07.00 to 20.00 Mondays to Fridays and 07.00 to 13.00 Saturday. No operations on Sundays or Public holidays.
  - Maintenance of plant etc. (external) 07.00 to 20.00 (7 days per week).
- As a result of these changes, there will be no point source emissions to water, sewer or land.

Following the response to the first Schedule 5 Notice dated 15 April 2019, the applicant made a significant number of changes to the application as follows:

- The number of wastes permitted to be accepted on site was reduced from 203 to 5;
- A point source emission of aqueous discharge to Rossington Drain was added;
- The storage of wastes within the Waste Processing Building was removed;
- The noise abatement bunding was changed;
- The site layout and storage locations for wastes was extensively rearranged
- Waste processing such as shredding/trommelling would continue to be carried on outside of buildings where previously the applicant had stated:

‘However, the shredding and trommelling operations will be relocated and housed within the new Waste Process Building’.

(Non-Technical Summary, Issue 1, October 2018).

In making these changes, the applicant also resubmitted new versions of management plans each of which showed significant changes and/or significant new levels of detail.

## Part C: Reasons for Refusal

### How we reached our decision

The Application has been refused. The reasons for refusal are:

- The Applicant has made significant changes to the original application and these changes constitute a new application;
- The Applicant has not demonstrated that the proposals reduce emissions and their impact on the environment through the use of Best Available Techniques;
- The proposed management and control of fires, odour, dust and litter are inadequate to minimise the potential for environmental impact; and
- The applicant has demonstrated poor operator competence as evidenced by incidents and non-compliance with conditions in existing environmental permit

This section of the document explains how we reached our decision regarding this application.

### **1. We consider changes made to the application as a result of the applicant's responses to the Schedule 5 Notice issued on 15 April 2019 to be of such a level to warrant further significant clarification (through further questioning), additional consultation and, in effect, to constitute what is essentially a new application.**

Our "Environmental Permitting: Core Guidance for the Environmental Permitting (England and Wales) Regulations 2016 (SI 2016 No. 1154)" (last revised March 2020) notes in Section 6.8 that:

'A regulator may accept changes to a duly made application where it considers it appropriate. This can include a proposed change in the operator of a new facility. Where the regulator considers the proposed change to be too significant, however, a new application will be required. The implications of changes to an application for the requirements of public participation should always be considered.....and might indicate either that a new application should be required or that there should be further consultation.'

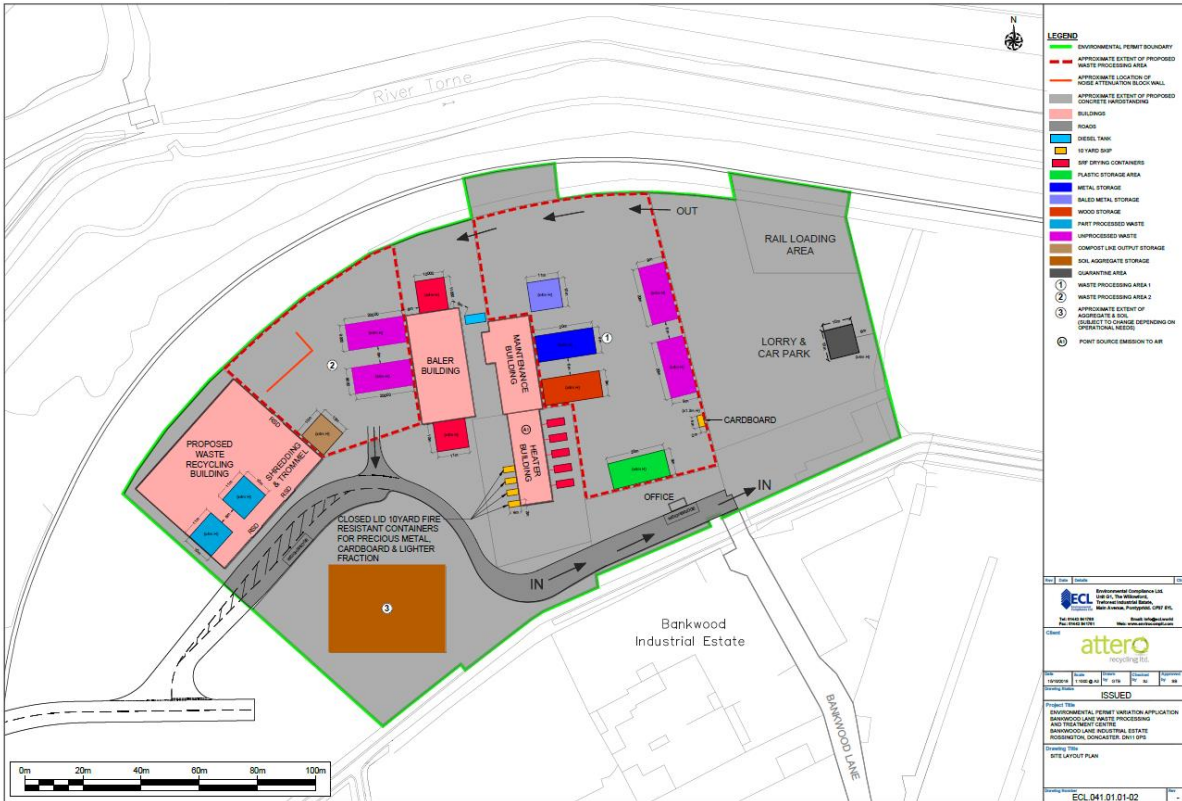
It is our view that the applicant's response to the Schedule 5 Notice issued on 15 April 2019 contains significant changes to the original application. In addition, there are a number of other proposed changes to the original application, which although not significant in themselves, when considered together do represent a significant change to the application originally submitted.

### **Site layout and infrastructure**

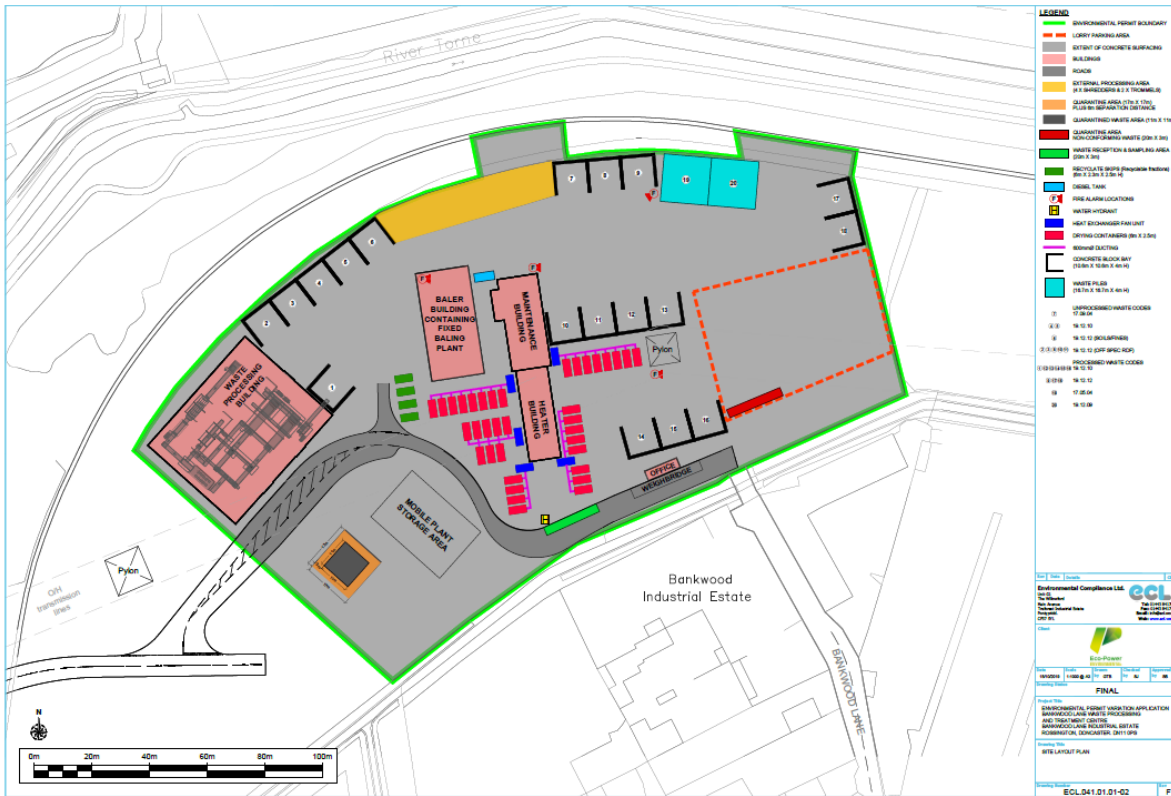
The applicant has made very significant changes to the site layout in particular regard to:

- Location of waste storage (processed and unprocessed)
- External waste processing area
- Layout of SRF drying containers
- Noise attenuation block wall
- Quarantine areas.

**Site Layout 1 – October 2018:**



**Site Layout 2 – October 2019:**



Each of these changes have an impact on potential environmental impacts from site operations such as:

- Dust and odour (location of waste storage and processing areas)
- Fire prevention and waste acceptance (quarantine areas)
- Noise management (removal of attenuation block wall)
- Air quality (SRF drying infrastructure).

Further clarification and potential consultation are required on these changes to the site layout.

### **Noise management**

The Noise Management Plan (“NMP”) (Version 1, October 2018) noted in Table 3 (NMP Risk Assessment and Control Measures) states:

‘All operations and processing activities are located within designated areas of the site and will take place whenever possible inside the existing building and proposed new building to reduce any noise and vibration emissions which may reach sensitive receptors. In addition, a noise attenuation block wall has been proposed as part of the site extension and development’.

There was no reference to the processing activities and equipment which were to be located outside and which were later referenced in NMP (Version 2, October 2019, Section 3.1.2) to include:

- 2 x Tana 440DT shredders with magnet separators
- 2 x Terex TD820 shredders with magnet separators
- 1 x Terex TT620 trommel and
- 1 x Doppstadt SM720 trommel.

The applicant no longer planned to construct the noise attenuation block wall as originally proposed. The applicant claimed that sufficient noise attenuation was provided within the revised site layout by the concrete waste storage bays and relocation of external activities to the north of the site further from sensitive receptors.

Question 27 of the Schedule 5 Notice dated 15 April 2019 required the applicant to submit a noise impact assessment ‘modelling’ against the requirements of BS4142:2014. The response to this question was submitted in May 2019, earlier than the submissions to the remaining Schedule 5 questions in October/November 2019.

The May 2019 response, which was reviewed by the Agency, referred to a number of bunds/noise attenuation walls both inside and outside of the installation that would mitigate the impact of noise emissions at sensitive receptors. We carried out an audit of the noise modelling and we concluded that, provided these walls and bunds were maintained, they would provide a degree of noise attenuation. We raised further questions with the applicant on the exact location of these bunds/walls and how their continued presence would be guaranteed – particularly those outside the site boundary.

When the responses to the remaining Schedule 5 questions were received in October/November 2019, the applicant had revised their noise modelling again to demonstrate that the changes to the site layout had resulted in a reduction in predicted noise levels at sensitive receptors and consequently the 5-metre noise attenuation bund was no longer required.

Consequently, this would result in the revised noise modelling requiring a further audit. However, the noise modelling files submitted by the applicant in October 2019 still contained the noise attenuation bund.

Since the issue of the NMPs in October 2018 and October 2019, construction has commenced on a new housing development in close proximity to the south west of the Eco-Power site. A number of these houses are now occupied. We noted that the impact of noise emissions at the new housing development had not been satisfactorily assessed when the revised noise impact assessment was provided in October 2019.

In view of the above inadequacy of the noise modelling and the new housing development, we considered that a further audit would be required to demonstrate that the proposed activities would not cause a significant adverse impact on receptors.

### **Discharges to Rossington Drain:**

The applicant stated in the Non-Technical Summary (Version 1, October 2018, Section 5.2) that

‘There will be no point source emissions to water, sewer or land associated with the proposed changes’.

In response to question 23 in the Schedule 5 Notice dated 15 April 2019, the applicant submitted ‘Surface and Foul Water Drainage Strategy’. This states in Section 4.2.1:

- It is therefore proposed to discharge surface waters to a watercourse, being the Rossington Drain located to the south of the development.
- It is proposed that the surface water generated within the development will be discharged to the ordinary watercourse of Rossington Drain, situated along the southern boundary of the site, having initially omitted the potential use of infiltration. This proposal has been submitted to the DEIDB [Doncaster East Internal Drainage Board] for further comment, however at the time of writing this report, no response has been received.
- Cumulative discharge of surface water to the watercourse (Rossington Drain) will be restricted to a rate equivalent or below the Greenfield Qbar run-off rate”.

Although this report also states:

‘There will be no discharge from these foul water sub-surface tank installations, with all foul water captured to be removed via tanker’,

We consider that the presence of a point source discharge to Rossington Drain is a substantial change from the original application.

The integrity and operation of site water management systems to adequately separate surface from foul water must be further scrutinised to ensure that these systems are suitably robust to ensure there is no risk of cross-contamination between surface and foul water. Further consultation would be required externally with Doncaster East Internal Drainage Board and internally within the Agency before this change in operation could be deemed acceptable.

Although this report states there will be a discharge to a watercourse, the comments in the Environmental Permitting Technical Requirements (EPTR) Plan (Version 2, October 2019) contradict this. In the EPTR document, the applicant states:

- “There are currently no emissions to water” (Section 5.3.1) and

- “There will be no changes to emissions to water associated with the proposed change” (Section 5.4.1).

Because of the contradiction in the plans and the significant changes made to all site management plans, each of the plans would now have to be reviewed as a new stand-alone plan – in keeping with the Agency’s view that the changes proposed to the application warrant its assessment as a brand new application.

### **Management plans**

As noted in the previous comments, all the management plans have been significantly reviewed and revised in response to the Schedule 5 Notice dated 15 April 2019. We consider that these revisions are so significant to the management plans that they represent in effect new documents rather than revised plans. Each of these plans would now require a full new audit as if they were new documents submitted in a new permit application.

For example, the size and complexity of the revised management plans can be compared with the original management plans submitted:

- Fire Prevention Plan (Version 1, October 2018) comprised 41 pages and 4 appendices
- Fire Prevention Plan (Version 2, October 2019) comprised 101 pages and 5 appendices.
  
- Pest Management Plan (Version 1, October 2018) comprised 14 pages and 1 appendix;
- Pest Management Plan (Version 2, October 2019) comprised 66 pages and 6 appendices.
  
- Odour Management Plan (Version 1, October 2018) comprised 18 pages and 1 appendix;
- Odour Management Plan (Version 2, October 2019) comprised 48 pages and 4 appendices
  
- Dust Management Plan (Version 1, October 2018) comprised 17 pages and 1 appendix;
- Dust Management Plan (Version 2, October 2019) comprised 51 pages and 5 appendices.
  
- Noise Management Plan (Version 1, October 2018) comprised 15 pages and 1 appendix;
- Noise Management Plan (Version 2, October 2019) comprised 21 pages and 2 appendices.
  
- EPTR (Version 1, October 2018) comprised 83 pages and 2 appendices;
- EPTR (Version 2, October 2019) comprised 87 pages and 4 appendices.

The updated management plans are not minor revisions of the original management plans submitted with the application – they are brand new documents requiring full audit as if they constituted a brand new application. It is highly likely that a full audit of these new management plans, would generate new questions or new requests for clarification/further information. This can be most efficiently addressed by viewing the response to the Schedule 5 Notice dated 15 April 2019 as a brand new application and progressing accordingly rather than attempting to draft a second Schedule 5 Notice which the applicant has stated is not justified.



## **Reduction in number of permitted wastes received on site**

The application submitted in October 2018 proposed no change to the number of permitted waste types from those in the existing permit. As previously noted, although the current permit allows the operator to accept 215 different waste codes onto site, the permit application only included 203 of these permitted waste codes. The Schedule 5 Notice dated 15 April 2019 included a number of questions relating to the management and control of specific permitted wastes, such as Question 9 on end of life vehicles.

In response to the Notice, the applicant changed the application to include the acceptance of only 5 permitted waste types as specified in the European Waste Catalogue (“EWC”) which are as follows:

- 17 05 04 Soil and stones
- 17 09 04 Mixed construction and demolition wastes
- 19 12 09 Minerals (for example sand, stones)
- 19 12 10 Combustible waste (refuse derived fuel)
- 19 12 12 Other wastes (including mixtures of materials) from mechanical treatment of waste.

Although waste code 17 09 04 is included in Table S2.1 (Permitted waste types) in the current Eco-Power Environmental Limit permit for Bankwood Lane Waste Treatment and Processing Centre, it was not one of the waste codes which was included in the original application for this permit variation. Waste code 17 09 04 did not appear in Table 5 (EWC Codes to be Accepted at the Installation” in application document Environmental Permitting Technical Requirements, Issue 1, October 2018.

The applicant noted that these five waste codes do represent the bulk of all wastes currently accepted on site although the permit may allow the receipt of up to 215 different waste streams.

Although the five waste types may be those which are currently most commonly accepted at the applicant’s site, it is the risks associated with the proposed increase in the annual throughput from 200,000 to 400,000 tonnes that must be fully assessed through the application process. A number of these waste streams have the potential to generate odour and dust emissions and increase the risk of fires, if not managed effectively. A number of the waste codes that were in the original application have either limited potential to cause environmental impact or have potential to cause a differing environmental impact.

The reduction in the number of waste codes accepted at the site by itself does not necessarily reduce the environmental risk from the facility.

For example, the generic risk assessment for Standard Rules Set number SR2008 No.2 (“Household, commercial and industrial waste transfer station (no building) (existing permits))” states:

‘The activities are not carried out predominantly using a limited number of the permitted waste types in a manner which significantly increases any of the risks compared to the generic operation of this type of facility for example predominantly storing wastes which present a significant increase in fire risk.’

The proposal to reduce the number of waste codes accepted by the applicant in this case and focus their operation on the production of SRF/RDF does increase the risk of fires on site.

## **Waste input and output by rail**

In October 2018, the applicant provided a Non-Technical Summary (Issue No. 1) with the application which stated:

‘A relocated rail loading area will be provided adjacent to the proposed lorry park. The rail is used to transport only those materials excavated from the former Bolland Skip Hire Environmental Permit boundary. The proposed rail loading area will consist of a concreted area at the northern end of the lorry park which will be used to stockpile materials for loading onto trains.’

It was evident from this statement that no waste would be transported to site by rail and no processed waste (from the activities of the operator) would be removed from site by rail. The risk assessments and management plans for environmental aspects such as odour and dust would therefore reflect only this very limited use of rail.

The Environmental Monitoring Programme (“EMP”) Version 2 states in Table 7 (Site Process Stages, Potential Emission Sources and Risk Levels) that the following wastes will arrive on site by rail:

- 17 05 04 (construction/demolition waste including soil/stones);
- 19 12 09 (minerals including sand/stones) and
- 19 12 12 (wastes from waste management facilities)

The following waste code will be removed from site by rail:

- 19 12 10 (RDF/SRF) and 19 12 12 (non-recoverable fractions)

The EMP notes that these wastes may be lightweight and friable and could potentially generate dust. It includes management systems to minimise dust in transit on the rail network and the mitigation measures around rail loading and offloading which requires further assessment. The Odour Management Plan (October 2019) does not address the use of rail transport although rail travel, loading and offloading may require additional or different odour controls than those required for road transport.

## **Conclusion:**

We have reviewed the changes made to the application as a result of the response to the Schedule 5 Notice, the revised management plans and the submission of new information such as the ECUS Limited report. We consider that these changes are significant and materially alter the nature of the original application. Consequently, we consider that a new application is required in accordance with Section 6.8 of the “Environmental permitting: Core Guidance” (March 2020).

**2. We consider that the applicant has not demonstrated that the proposed operations and infrastructure meet the criteria for Best Available Techniques (“BAT”). An installation permit can only be issued where we are satisfied that the applicant is applying BAT. This is one of the key requirements of environmental permitting and one of the key differences for an existing facility permitted for waste activities moving to an installation permit. It is not the case that existing standards permitted in a waste permit would be accepted in an installation permit where the more stringent requirement to demonstrate BAT applies.**

In determining the Best Available Techniques (BAT) that apply to the proposed Eco-Power Environmental Limited facility, its operation has been assessed against the following guidance documents:

Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment under Directive 2010/75/EU of the European Parliament and of the Council.

### **Treatment of waste outside of enclosed buildings**

BAT 14 of the Waste Treatment BAT Conclusions (BATc) states “In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below”.

These techniques are:

BATc 14a – Minimising the number of potential diffuse emission sources

BATc 14b – Selection and use of high integrity equipment

BATc 14c – Corrosion prevention

BATc 14d – Containment, collection and treatment of diffuse emissions

BATc 14e – Dampening

BATc 14f – Maintenance

BATc 14g – Cleaning of waste treatment and storage areas

BATc 14h – Leak detection and repair (LDAR) programme

The BAT Conclusions further states “Depending on the risk posed by the waste in terms of diffuse emissions to air, BATc 14d is especially relevant”.

The Agency considers that the nature and quantities of the wastes proposed to be accepted at the Rossington site and the waste handling, treatment and storage operations proposed to be undertaken demonstrate there is a significant risk posed by diffuse emissions to air and hence the Agency in its assessment of compliance to BAT standards regards BAT 14d to be not only “especially relevant” but also of key and primary relevance in this determination.

This is further justified by the number of complaints made by the local community relating to diffuse emissions to air and the representations received from our public consultation on this permit variation application. It is therefore our view that the treatment of all potentially dusty and odorous wastes within a building or similarly fully contained structure is required in order to demonstrate BAT as the facility moves from a waste operation to an installation.

The proposed operation does not meet that criterion as it would only enable approximately 50% of the current external waste processing operations (shredding and trommeling, magnetic separation and air separation) to be carried out indoors [Odour Management Plan, Section 1.2] and would require 200,000 tonnes per year of waste to be processed outdoors [Odour Management Plan, Section 2.2].

Although the applicant states the “proposals would result in significant environmental improvements to the existing on-site operations, by relocating some processes that are currently undertaken outdoors into a new purpose-designed building” [Odour Management Plan, Section

1.2], the equipment and activities remaining outdoors would still include four shredders with magnetic separators and two trommels [Emissions Management Plan, Section 2.2.5]. All of these activities outdoors are capable of causing fugitive dust and odour emissions. The operational controls on these activities are not, in our view, robust enough to control fugitive releases from outdoor treatment of waste (see section on individual environmental impacts).

There appears to be a fundamental lack of appreciation in the application that when the facility moves from a waste operation to an installation, all the activities covered within that installation must then meet the requirements of BAT – not solely the new or increased activities that take the operation over the permitting threshold into an installation. So the treatment of the proposed 400,000 tonnes/year of waste must meet BAT. It is not sufficient to meet BAT for the new additional waste tonnage (200,000 tonnes/year within a new building) and retain outdoor treatment of the 200,000 tonnes/year of waste for which the applicant is currently permitted.

This lack of appreciation is reflected in the letter received from Bankside Commercial Solicitors on 6 April 2020 (Appendix 7) which stated:

“The application included a commitment to limit the quantity of waste processed externally to the 200,000 already permitted to be treated externally and to process the additional 200,000 tpa inside a new, purpose designed building and processing plant”.

The applicant has not demonstrated that replicating the 200,000 tonnes of waste per annum that are currently processed externally is acceptable for future operation in an installation when there are compliance issues with the existing waste permit. This is evidenced by non-compliances raised by the Environment Agency over stockpile management (both in terms of quantity and duration on site), loose waste/litter both on-site and off-site and containment of fuel, antifreeze and odour neutraliser on site as recorded in compliance inspections on 13 February 2020.<sup>12</sup>

The Standard Rules permit SR2008 No.2 previously referenced, allowed for the treatment of waste outside of buildings up to a total annual capacity of 5,000 tonnes provided the operation was not within 200 metres of any residential dwelling or workplace. The applicant in this case is applying to treat 200,000 tonnes of waste outside of a building (40 times the maximum annual tonnage allowed in this Standard Rules permit) and within 125 metres of residential properties (the new housing development being constructed on the site of the former Rossington Colliery).

This Standard Rules permit applies only to existing permits. New applicants for a similar Standard Rules permit are directed to SR2015 No.8 (75kte household, commercial and industrial waste transfer station with asbestos storage). This Standard Rules permit states:

‘With the exception of specified waste, all bulking, transfer or treatment of non-hazardous waste must be carried out inside a building’ and “non-hazardous wastes can be bulked up for disposal or recovery elsewhere and can be manually sorted or separated for recovery but these rules will not allow any waste treatment activities such as screening and crushing”.

If treatment of waste outside of a building was previously permitted for the applicant, this would have been deemed appropriate for the scale of the operation and the management of the environmental risks at that time. This is no longer the case due to:

- Fires on site,
- Additional residential development in closer proximity to the site

And

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<sup>12</sup> Appendix 12: Compliance Assessment Report for the Compliance Inspection on 13 February 2020.  
EPR/EB3207LH/V005  
Date issued: 21/08/2020

- Compliance issues relating to storage of waste and stockpile management

The above issues indicates that this approach is not appropriate.

It is not necessarily always the case that the presence of a building ensures that the waste treatment activities are carried out in accordance with BAT. The construction, properties and operation of that building must themselves be of a standard to demonstrate BAT such as highlighted in BATc 14d:

- ‘maintaining the enclosed equipment or buildings under an adequate pressure’;
- ‘collecting and directing the emissions to an appropriate abatement system (see Section 6.1) via an air extraction system and/or air suction systems close to the emission sources.’

We are not satisfied that there is sufficient evidence presented in the application documents, including the individual management plans, that the building itself would satisfy these BAT requirements. For example, there is no indication given that the building would provide a negative pressure dust extraction system to collect dust.

Although the applicant has stated that:

“Fast acting roller shutter doors will be fitted to the waste processing building to minimise fugitive emissions released from the waste processing activities”.

(Emissions Management Plan, Table 10)

The fitting of PVC strip curtains to reduce emissions through doorways are only proposed as a potential preventative action following justified complaints being received over dust fallout (Emissions Management Plan, Section 9.2.3.1).

The internal layout of the Waste Processing Building, given in drawings such as Site Layout Plan (ECL.041.01.01-02) is not sufficiently detailed to allow an assessment to be made that the location of equipment, infrastructure, access and egress points and waste handling/treatment activities are suitable to minimise emissions of dust and odour to the external environment. There is no risk assessment or operational plan provided for the internal waste operations that would indicate they are carried out in a manner to minimise and control emissions.

The decision to enclose 50% of waste treatment operations within the building appears to be an arbitrary decision with no assessment given that enclosing this operation will sufficiently minimise emissions. Furthermore, the applicant has not demonstrated that the alternative measures to enclosed treatment for the remaining 50% of waste are capable of providing the same or better level of protection than a building or enclosure would.

In response to Question 40 in the Schedule 5 Notice dated 15 April 2019, the applicant has stated that:

“those wastes which have the potential to create diffuse emissions (e.g. wastes that are light and easily windblown, e.g. 03 01 05 (sawdust, shavings etc.) will be stored, treated and handled within the confines of the building, or will be stored in lidded containers”.

No evidence has been provided to demonstrate how and which wastes would be selected for processing inside and outside of the building. In fact, the waste used as an example of those to be treated within the building (waste code, 03 01 05) is not one of the five wastes codes for which the applicant has proposed following the changes to operations from the response to the Schedule 5 Notice.

The mechanisms that the applicant is proposing to demonstrate compliance to the Best Available Technique Conclusion Document (“BATc”) 14, detailed in response to Question 40 in the Schedule 5 Notice, are not in themselves robust or comprehensive enough to prevent, or if not practicable reduce diffuse emissions to air in the absence of enclosing all treatment activities within a building:

- *Minimising the number of potential diffuse emission sources* includes three proposals none of which actually minimises the number of sources although they may reduce the impact from those sources (limiting drop heights to 3.5 metres; limiting traffic speed on site to 5 mph; use of wind barriers (netting) surrounding the site in the direction of the prevailing wind/sensitive receptors).
- *Selection and use of high integrity equipment* is compromised by stating that some of the equipment on site is existing therefore the applicability of this BAT point is restricted.
- *Corrosion protection* is demonstrated by regular inspection of equipment and coating with corrosion inhibitor if required but this is a very limited potential source of emissions to air when compared against the treatment of 200,000 tpa of waste outside of a building.
- *Dampening* is demonstrated by use of water suppression to minimise fugitive dust emissions most likely by use of a mobile unit such as a bowser. This bowser and hoses (outlined in Emissions Management Plan, Table 4) will have a limited capacity (2,000 litres and daily maximum of 20 m<sup>3</sup>) and potentially limited reach. There is no indication that hoses and bowzers would adequately dampen waste piles of 4 metres high and no evidence that these hoses and bowser can reach all areas of the site where waste treatment, handling or storage may generate airborne emissions. The applicant has stated that:

‘the equipment outlined in Emissions Management Plan (Sections 2.2.5 and 2.2.6) all have dust suppression systems’

but the applicant has failed to provide information on how those systems would operate.

- *Maintenance* is demonstrated by planned preventative maintenance system to adequately maintain all environmentally critical equipment. Inadequately maintained equipment, such as the dust suppression systems on mechanical equipment, may certainly contribute to increased airborne emissions and this maintenance system is a key component of a management system to control airborne releases.
- *Cleaning of waste treatment and storage areas* is proposed to be achieved by good housekeeping measures employed across the site with the floors of all buildings and the waste treatment areas to be regularly cleaned. Although a cleaning schedule is proposed to be included into the site Environmental Management System (“EMS”), there is currently no demonstration of what “regularly cleaned” will look like in practice and no way of determining its adequacy for reducing airborne emissions. In the absence of a proposed cleaning schedule, we are unable to assess whether existing levels and standards of site cleaning will be maintained and these have been shown to be inadequate in preventing loose waste and litter on site and in trees off-site (as recorded in Environment Agency inspection of 13 February 2020). Appendix 12
- *Leak Detection and Repair (“LDAR”) programme* will involve a structured programme initially using sniffing to identify leaks in equipment and then potentially using a hand held analyser to measure concentration. There is no indication of what would trigger these testing regimes, what species would be tested for and what actions would be carried out to repair leaks or ensure better equipment integrity.

Whilst there is some evidence that the applicant will implement a number of activities and operations that will manage airborne emissions in a limited way, there is no evidence that these would have the effect of preventing, or where that is not practicable, reducing emissions to air as required by BATc 14 in the absence of a fully contained building for all waste treatment activities.

### **Control of odour sources (waste drying, storage and treatment)**

The two most significant sources of odour on the proposed installation will be:

- Odour emissions from the storage, handling and treatment of wastes predominately when carried out in the open air but potentially also when carried out indoors but without sufficient odour control systems; and
- The drying of waste outdoors in up to 36 drying container units which themselves are open to the atmosphere with the waste contained within large open pore mesh.

Neither of these operations fully meet the BAT requirements in Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) conclusions for waste treatment under Directive 2010/75/EU of the European Parliament and of the Council.

#### **(1) BATc 10 – BAT is to periodically monitor odour emissions.**

This BAT conclusion outlines that odour can be monitored using:

- EN standards (e.g. dynamic olfactometry according to EN 13725 in order to determine the odour concentration or EN 16841-1 or -2 in order to determine the odour exposure);
- When applying alternative methods for which no EN standards are available (e.g. estimation of odour impact), International Organization for Standardization (“ISO”), national or other international standards that ensure the provision of data of an equivalent scientific quality.

The Odour Management Plan (October 2019) states in Section 3.1 that:

“Olfactory monitoring (odour sniffing) will be undertaken at the site boundary and nearby receptor locations by site managers (or operatives not involved directly in operations e.g. drivers to avoid adaptation to the odour) on a daily basis with trained office staff completing surveys once a week to get different assessors with different olfactory acuities determining odour.”

It further notes that the odour monitoring locations are shown in Figure 6.

Section 2.1 (Definition of Odour Management Plan (“OMP”)) states that the OMP will include the following:

“A protocol for conducting odour monitoring. It may be complemented by measurement/estimation of odour exposure (e.g. according to EN 16841-1 or -2) or estimation of odour impact.”

The applicant has not proposed to carry out odour monitoring to a recognised EN standard or, in the absence of such standard, ensuring the provision of data of an equivalent scientific quality – as required by BAT 10.

**(2) BATc 14 – In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below:**

BATc 14a – Minimising the number of potential diffuse emission sources

BATc 14b – Selection and use of high integrity equipment

BATc 14c – Corrosion prevention

BATc 14d – Containment, collection and treatment of diffuse emissions

BATc 14e – Dampening

BATc 14f – Maintenance

BATc 14g – Cleaning of waste treatment and storage areas

BATc 14h – Leak detection and repair (LDAR) programme

In the case of odour management and control, BATc 14a is a relevant BAT point to consider.

### **BATc 14a**

Whilst BATc 14 requires the operator to use an appropriate combination of the techniques, the Environment Agency considers that it is not BAT to design and operate the facility in such a way that the implementation of one of the techniques cannot be achieved. In addition, we consider that the mode of operation is designed to be completely opposite to the intent of one of the techniques.

Rather than minimising the number of potential diffuse emission sources, the applicant is proposing to introduce up to 36 separate diffuse sources in the form of the individual drying container units. These will be open to atmosphere and have essentially five sides of the units from where odour will be released. Only the bottom of the unit in contact with the ground will not release diffuse odour. These units will be heated for waste drying purposes causing any odour generated to be dissipated further in hot air.

The operator has conducted an odour modelling assessment, however the Agency is not satisfied that the odour potential of the site operations has been suitably assessed. Only the odour from the drying operation has been modelled, not the odour resulting from waste storage, handling and non-drying treatment activities. As referenced further in the section on the environmental impact of odour, the Agency considers the designation of a low odour risk to site waste streams to be incorrect meaning that the odour from these wastes both individually and in combination with the odour from the drying process should be further assessed.

In the case of the modelling of odour from drying operations, the applicant has modelled only 7 point sources – having grouped numbers of drying units together in the manner outlined in Figure 7 of the OMP. The operator has also assigned an exit velocity, odour emission rate and odour emission height to these sources derived from operations at a different site, Headon Camp. The Environment Agency is not satisfied that the operator has fully justified the modelling of only 7 point sources and the use of data derived from the Headon Camp operations.

The Agency's auditing of the applicant's odour modelling submitted in the application notes that uncertainties in odour modelling are very high. We are not satisfied that the applicant has fully explained or justified how the groups of drying containers are housed to create a single point source per group. Our checks, which take into account geographical information systems and site layout, indicate that the point sources defined by the applicant may not be an appropriate representation of the odour emissions from the drying activities on the site. If the applicant had



modelled the individual drying odour sources (a total of 36 drying containers) and/or a higher odour emission rate, we believe the odour predictions could be significantly higher than those derived from the modelling submitted. The Agency is not satisfied with the justification for the number of odour sources modelled or their odour emission rates.

The Agency has carried out checks on the applicant's odour modelling nonetheless. During this check process, we have reviewed the locations of sensitive receptors included in the modelling and we have identified four additional human health receptors which we believe are justified due to the location of the site and the proposed activities to be carried out:

- Allotments 1 (NGR 460732 399124) located east at approximately 125 m;
- Allotments 2 (NGR 460804 398990) located south-east at approximately 235 m;
- Ground behind Legion House (NGR 460965 398655); and
- Doncaster Golf Club (NGR 461887 399249).

Our checks indicate that the hourly mean 98<sup>th</sup> percentile odour concentrations are above the indicative benchmark of 1.5 OUE/m<sup>3</sup> at human health receptors, Allotments 1, close to the facility. In Table 5 of the Odour Management Plan (October 2018), the applicant stated that:

“Where possible, waste will be stored within the site buildings and doors will be closed when not in use.”

This is no longer the case in the revised proposal. Waste will be stored outside of site buildings in 18 waste storage bays (plus two large piles for soils/stones). This further increases the number of potential diffuse emission sources which is not in accordance with BATc 14a.

### **BATc 14d**

The failure to operate the site in accordance with BATc 14 has already been established for the general principle of carrying out waste treatment and handling activities outdoors. This BAT requirement has already been discussed in detail in the BAT review of general waste handling and treatment outdoors.

BATc 14d is especially relevant to this application. We note that the proposed waste drying operation is to be carried out in 36 open mesh container units outdoors and is not in accordance with BATc 14d for containment, collection and treatment of diffuse emissions – in this case odour emissions.

Techniques suggested in BATc 14d are directly applicable to the waste drying operation and would deliver quantifiable benefits in reducing potential odours from site operation. The applicant has not provided any evidence to demonstrate why these techniques should not be implemented:

- Maintaining the enclosed equipment or buildings under an adequate pressure;
- Collecting and directing the emissions to an appropriate abatement system...via an air extraction system and/or air suction systems close to the emission sources.

### **Use of boilers to generate heat for SRF drying process**

The applicant proposes to use nine sets of seven Angus Orland Super 130 kW biomass boilers resulting in a total of 63 boilers. The aggregated net rated thermal input of the boilers equates to 8.19 MW. The applicant did not provide a justification explaining how the use of 63 biomass boilers

is the most efficient method of generating the heat required in accordance with indicative BAT requirements for energy efficiency in Section 2.7 of Sector Guidance Note S5.06.

In the Schedule 5 Notice dated 15 April 2019, the applicant was required to demonstrate why the 63 smaller boilers were more efficient than one or two larger boilers for drying the waste in particular considering:

- the energy consumption and associated emissions;
- the energy efficiency and
- which engine technology is the best option.

The applicant reported that biomass gasification boilers needed to be operated at, or close to, the maximum capacity to ensure efficient operation. The boilers on site were the largest log boilers available and would operate at 91% efficiency. The alternative was to have larger capacity wood chip or pellet boilers, but the applicant reported that these were no more efficient than the smaller log boilers. No information was provided by the applicant to compare the efficiency of smaller log boilers and larger wood chip or pellet boilers in the determination.

The applicant reported that a key factor in choosing multiple boilers was that the heat demand from waste drying operations would fluctuate. This meant that a large number of smaller boilers was most appropriate as boilers could be taken out of service when heat demand was reduced allowing the remaining boilers to operate at or close to maximum capacity and thus delivering more efficient operation. The applicant did not provide any information to demonstrate how or why the heat demand should fluctuate. In addition, the applicant did not demonstrate quantitatively that the use of larger boilers would not be as efficient as the use of smaller boilers in that scenario of fluctuating heat demand.

The applicant modelled the atmospheric emissions from the boilers assuming that only 80% of them would be operating at any one time as this was considered representative of the maximum site operating scenario. Had a permit been issued, only a maximum of 80% of the boilers would operate at any one time (50 or 51 units) as that is the scenario which the applicant was attempting to demonstrate would cause no impact on human health or ecological receptors. By placing constraints on the number of boilers that could operate at any one time, the applicant has significantly undermined their proposal that a large number of smaller boilers allows them flexibility to respond to fluctuations in heat demand by increasing or decreasing the number of boilers on line as required.

In their response to this Schedule 5 question on the use of small boilers, the applicant did not attempt to answer the questions on energy consumption and associated emissions or which engine technology would be the best option. In the absence of a comprehensive response to questions on the use of smaller boilers, the Agency is not satisfied that the applicant has demonstrated that the use of the larger number of smaller boilers is BAT when compared to the use of a smaller number of larger boilers.

In response to question 34 (on minimising unnecessary handling of waste) of the Schedule 5 Notice dated 15 April 2019, the applicant reported that:

“All bays are covered to prevent the ingress of water into the material and which will avoid additional drying”.

A further element of this question related to the comment in Section 4.9.2 of the Environmental Permitting Technical Requirements (EPTR) document (Version 1, October 2018) that:

“Any clean surface water runoff (e.g. rainwater) is contained within the bunded areas and is soaked up within the waste materials on site and/or evaporates.”

The applicant was asked to explain to which wastes this comment referred to. If it included waste that would later be dried to produce RDF/SRF, then the storage of those wastes would not be in accordance with BAT as additional drying would be required beyond what would normally be expected to improve the calorific value of the waste, due the waste being exposed to the elements. The applicant did not address this aspect of question 34 and the comment on waste materials soaking up water remains in the EPRT (Version 2, October 2019, Section 4.9.2).

There is therefore ambiguity in the application of how surface water, including rainwater running off the covers over the storage bunds, will be collected and managed to ensure BAT for both the management of surface water and ensuring waste has as little moisture content as possible before drying to minimise heat used in the drying process. The site drainage plan includes sumps to collect surface water but if they are effective and operational, there should not remain the requirement for waste materials to soak up clean surface water run-off.

Our review of the atmospheric dispersion modelling provided by the applicant has demonstrated that nutrient nitrogen and acid deposition Process Contributions (“PC”) are “not insignificant” at Potteric Carr Site of Special Scientific Interest (“SSSI”) and Predicted Environmental Concentrations (“PEC”) exceed the 100% threshold against critical loads with background concentrations already exceeding the critical load. The nutrient nitrogen and acid deposition PCs are greater than the 1% significance criteria at modelled locations D27, D28 and D29 and PECs exceed the 100% threshold against the critical loads.

The applicant’s modelling report noted that PCs for nitrogen deposition and acid deposition were up to 6.3% and 9.2% respectively. The modelling report then compared these against the 100% threshold and proposed that neither nitrogen deposition nor acid deposition was significant. The steps used by the applicant is only valid for habitats such as local wildlife sites and ancient woodlands. For SSSIs and European sites, the applicant should have compared the PECs against 100%. Because of existing high background levels (PEC is the summation of PC and background concentrations), the PEC would exceed the threshold of 100%.

We are not satisfied that the applicant has provided information to support the use of the large number of small boilers as being BAT as they have not demonstrated:

- The flexibility to meet fluctuating heat demand by increasing or decreasing the number of boilers on-line;
- That impact of nitrogen deposition and acid deposition from operation of these boilers is insignificant: and
- That the required heat could not have been generated using larger, more efficient plant.

## **Other BAT issues not resolved**

### **Waste pre-acceptance**

The applicant has submitted an Environmental Permitting Technical Requirements (“EPTR”) document (Version 2, October 2019). Within this document, Section 4.6 addresses “Waste Pre-Acceptance” and the applicant notes that they will put into place a fully documented waste pre-acceptance procedure (4.6.1).

There is an outline within Section 4.6 explaining how the pre-acceptance system will operate but there are criteria within the indicative BAT requirements of Sector Guidance Note S5.06 that are not addressed within Sector S4.6 such as:

- Waste hazards and sample storage/preservation within waste disposal enquiries;
- Demonstration of how reliable or representative is a sample; and
- Suitability of laboratory carrying out chemical analyses.

### **Waste acceptance**

The applicant has submitted an Environmental Permitting Technical Requirements document (Version 2, October 2019). Within this document, Section 4.6 addresses “Waste Pre-Acceptance” and the applicant notes that they will put into place a fully documented incoming waste acceptance procedure (4.7.1).

There is an outline within Section 4.7 explaining how the waste acceptance system will operate but there are criteria within the indicative BAT requirements of Sector Guidance Note S5.06 that are not addressed within Sector S4.6 such as:

- The nature and location of the sampling area in relation to the checking facility/laboratory;
- The nature of how and by whom samples of the incoming waste will be taken and whether the location is visible if sampling is not directly supervised by Eco-Power staff;
- The location of absorbents and spill kits in the sampling area;
- The management of wastes to ensure incompatible substances do not come into contact with each other for example within the sumps that serve the sampling/reception area and the quarantine areas.

### **Waste handling**

The applicant has submitted an Environmental Permitting Technical Requirements document (Version 2, October 2019). Within this document, Section 4.8 addresses “Waste Handling, Storage, Processing and Despatch”. Further information on waste handling is given in the applicant’s response to question 34 in the Schedule 5 Notice dated 15 April 2019. The applicant has not fully demonstrated in either of these documents that the methods outlined would have the effect of eliminating or minimising any unnecessary handling of wastes on site as required by BATc 4a of the BAT-conclusions document. For example:

- The response to question 34 (34.2.1) states that all untreated waste will be stored in Bay 7 which is located adjacent to the outside waste treatment area to minimise the distance waste has to be moved but 34.2.3 notes that wastes awaiting treatment are located as close as possible to the waste processing area (Bays 2-6). It is unclear if wastes are moved from Bay 7 to Bays 2-6 or if wastes are placed in whichever of bays 2-7 that are closest to where their processing will be carried out within the external processing area or the internal waste processing building;
- The response to question 34 (34.2.4) notes that, after drying, wastes are stored in the processed waste bays which are located close to the lorry parking area to facilitate onward transport. Bays 18-20 also contain processed material and are located close to the lorry parking area. Section 4.8.19 of the EPTR notes that wastes to be exported by rail are 19 12

10 (baled waste in containers) and 19 12 12 (qualifying fines to landfill). Bays 14-16 which contain processed 19 12 10 waste (outlined in site plan ECL.041.01.01-02) appear to be located furthest from the rail link.

**3. We have significant concerns regarding the proposed management and control of site operations and infrastructure to minimise the potential for significant environmental impact specifically in relation to:**

- **fire risk;**
- **odour management; and**
- **dust and litter management.**

Our concerns with respect to management of site operations are supported by actual recent incidents of fires, amenity complaints and permit compliance breaches specifically relating to stockpile management and waste storage at the site. As such we have a duty to protect the environment and ensure appropriate standards and management systems are in place prior to allowing such a significant increase to the scale of the activities on site.

**Odour management**

The applicant submitted Odour Management Plan (OMP), Issue 1, October 2018 (ECL.041.01.01/OMP) with the application. This was assessed against Environment Agency Guidance “Environmental Permitting: H4 Odour Management”. A large number of deficiencies were noted and these formed the basis for 11 specific questions in the Schedule 5 Notice dated 15 April 2019. Furthermore, compliance against BAT requirements (including those for odour) was also a significant factor in a number of additional questions in the Notice.

The applicant submitted a revised and updated OMP (A113987, Issue 1, October 2019) in the response to the Schedule 5 Notice. Although the revised document was more detailed than the previously submitted OMP, we identified significant deficiencies against our H4 Guidance.

The Agency considered issuing a second Schedule 5 Notice but in view of the considerable number of questions we deemed were necessary in relation to odour and other aspects, a second Schedule 5 Notice would have been a substantial document with potentially an even larger number of questions than those in the first Schedule 5 Notice. Consequently, the Agency decided not to issue a second Schedule 5 Notice but instead to make a decision on the basis of the information already submitted by the applicant.

The issues that remained over odour and which the Agency were unable to determine whether or not the applicant had a robust management and operational system to control odour are outlined below:

- Although the OMP identifies waste types with European Waste Catalogue codes, there is no detailed description of what these wastes consist of, such as their composition, level of contamination and percentage of putrescible material in each waste stream;
- The OMP states that the facility receives waste from a variety of sources, the main sources being other waste transfer stations and recycling centres. There is no detail provided on these waste sources such as the nature of the waste, the age of the waste and the criteria for determining if they are unacceptable;

- There is no evidence in the OMP of the contractual arrangements with waste suppliers and clear rejection criteria in the waste pre-acceptance and acceptance procedures;
- The OMP does not include details on raw materials used at the facility or odorous wastes, by-products or leachates produced by operations at the facility itself;
- The OMP does not include information on the odour characteristics of different waste types (what they smell like), their hedonic tone (whether they are offensive /not offensive), individual chemical constituents leading to specific odours and seasonal fluctuations in the waste that might impact on odour. Without this information, it is not possible to determine if the odour management on site are adequate to control site odours without any formal abatement system.
- The OMP identifies the odour risk for all waste types as “low” with no demonstration as to how that decision is reached. Further information on the risk classification and justification for these wastes would be required;
- The OMP designates certain receptors such as the car showroom are of “medium” sensitivity without adequate justification. We consider this type of receptor as having “high” sensitivity;
- There is very limited information in the OMP on preventative measures to control odour – for example, no sufficient detail is given on holding times or on the management of the cover to be used on waste piles; no information is given on how the reduction of evaporation from storage piles by reducing access to air by low surface area would operate; no detail is given on how conditions that encourage anaerobic conditions would be avoided; there is inadequate consideration of “first in/first out” or the prioritisation of wastes;
- The OMP proposes that odour monitoring would be limited to odour sniffing at the site boundary with no justification as to why monitoring of parameters that could lead to odour with trigger limits, inside the facility is not carried out. These parameters could include pH/temperature monitoring of stockpiles, recording the size and duration of stockpiles and visual assessment of drains;
- The OMP does not propose any odour abatement system in accordance with BATc 34 in the Waste Treatment BAT conclusions document. We consider the odour risk to be high at this site and would expect containment and abatement to be in place due to the sensitive location of the facility. The odour modelling carried out by the applicant only covered the drying of the waste rather than storage and handling and does not consider each waste drying unit as a separate odour source to be assessed.

We were unable to approve the OMP as acceptable to demonstrate the applicant would manage and control odour resulting from site operations.

### **Management of fire risk**

The applicant submitted a Fire Prevention Plan (“FPP”), Issue 1, October 2018 (ECL.041.01.01/FPP) with the application. This was assessed against Agency Guidance “Fire prevention plans: environmental permits”. We identified significant deficiencies and these formed the basis for 22 specific questions in the Schedule 5 Notice dated 15 April 2019.

In the response to the Schedule 5 Notice, the applicant submitted a revised and updated FPP (ECL.041.01.01/FPP, Issue 2, October 2019). Although the revised document was more detailed than the previously submitted FPP, we identified significant deficiencies against our FPP guidance.

The applicant also submitted Appendix II, a Fire Risk Assessment (“FRA”) carried out by JP Fire Risk Assessing and Training with the FPP. As the FRA was a constituent element of the FPP, we reviewed and assessed the FRA as part of the FPP (Issue 2).

We experienced some difficulties in reviewing the applicant’s FPP. Key elements of the FPP (as laid out in the guidance) were often found within the FRA rather than the FPP itself. For example, non-waste combustible materials were discussed within the FRA but no evidence was provided that the recommendations or proposals relating to these materials had been incorporated into the FPP. This was a recurring theme in that the applicant did not demonstrate that recommendations and proposals made in the FRA had been acted upon and addressed through the FPP.

This was of particular concern as the FRA had indicated:

- 4 Priority 1 matters which should require immediate attention;
- 6 Priority 2 matters which should be completed as soon as possible.

The issues that remained with respect to fire prevention and which resulted in the Agency being unable to determine whether or not the applicant had a robust management and operational system to prevent fires arising on site include the following (referenced as per the guidance stated). This is not an exhaustive list and other discrepancies between the FPP provided and the requirements of our FPP guidance were also highlighted in our audit.

## **Section 5 – Using the fire prevention plan**

**Condition** – The FPP guidance requires regular exercises to test how well the plan works and make sure that staff understand what to do. The plan should include how often these exercises are carried out.

The FPP must be a standalone document within the management system so that all staff can easily refer to it.

**Non-conformity** – The FPP states that fire drills (essentially emergency evacuation exercises) are held biannually. There is a Priority 1 finding in the FRA which showed that records of these drills were not available at the time of the audit. There is no evidence in the FPP that these drills are suitable to meet the requirement for regular exercises. The only actual exercise noted in the FPP is in Section 3.4.9 (Waste quantities, associated storage and quarantine area) where training will involve a practical exercise simulating a fire event and requiring staff to physically move waste to the quarantine area. There is no detail given on how often this training is carried out or how often these exercises are completed.

A number of key elements required by the FPP guidance (such as consideration of non-waste combustible materials) appear in the FRA which, although is an Appendix to the FPP, is essentially a review of fire systems at a moment in time and does not set out exact requirements to which staff must adhere.

Furthermore:

- There are findings recorded in the FRA which contradict what is stated in the FPP regarding the way the site is managed and operated to control fire risk and prevent fire;
- There are audit findings in the FRA which indicate significant non-compliance against the requirements of the FPP;

- There are numerous recommendations made within the FRA of a serious and significant nature to control risk without any indication in the FPP that these recommendations have been addressed.

## **Section 6.2 – Site plans and maps**

**Condition** – The site plans and maps should contain layout of buildings, drainage runs, storage areas with pile dimensions and fire walls and a compass rose showing north and the prevailing wind direction

**Non-conformity** – There are four site plans/drawings within the FPP:

- ECL.041.01.01-01 Site Location Plan
- ECL.041.01.01-02 Site Layout Plan
- ECL.041.01.01-03 Sensitive Receptor Plan
- ECL.041.01.01-04 Fire Prevention and Mitigation Plan.

The requirements of a site plan as laid out in the FPP guidance are to be found across a number of these plans. There are some requirements that are not indicated in any of the plans such as the drainage systems, access routes for fire fighting vehicles within the site and stockpile dimensions (only those for the non-combustible stones and soils are given).

The wind rose in drawing ECL.041.01.01-03 is based on information from Robin Hood Airport and that on drawing ECL.041.01.01-04 is based on information from High Bradfield Meteorological Station. These two wind roses are not the same.

An outline internal layout is given on plan, ECL.041.01.01-02, for the Waste Processing Building. It is lacking in detail and the location of wastes is not given. There is no internal layout given for the Baler Building, Maintenance Building and Heater Building. It is not possible to determine if the layout of the equipment, waste materials, chemicals and processing units is suitable to reduce the risk of fire in these buildings.

## **Section 7.5 – Hot works**

**Condition** – The FPP guidance states that staff and contractors should follow safe working practices, such as a permit to work system, when carrying out hot works such as welding and cutting.

**Non-conformity** – Table 5 (Preventative measures) states that:

“Any hot works/cutting tools will be carried out indoors and at a safe distance from combustible materials”

And

“The site operates a Permit to Work system to control high risk activities, such as hot works.”

The FRA states:

“Site wide welding, grinding, fabrication and repairs take place when required. Mainly in and around the workshop area” (Section 67).

This indicates that not all hot works are in fact carried out indoors as required by Table 5 of the FPP.



In addition, the FRA states, in relation to satisfactory arrangements in place for hot work, that:

“Arrangements are not being applied for the whole site, when repairs take place there are no adequate controls in place. Screens have been observed however, we have observed welding and grinding locations without screens” (Section 68).

As indicated in the section of this document on operator competence and compliance, the operator has a record of non-compliance against the requirements of their existing environmental permit. The findings of the FRA indicate a record of non-compliance against the requirements of the FPP.

### **Section 7.6 – Industrial heaters**

**Condition** – The FPP guidance states that there must be written procedures that set out the use and regular maintenance of industrial heaters.

**Non-conformity** - The FPP states that, if used, a safe use policy will be in place for portable heaters including keeping units to minimum and trained staff but the FRA states that heating in buildings is already provided by portable convection heaters. No written procedure is provided for their use and maintenance.

### **Section 7.8 – Ignition sources**

**Condition** – The FPP guidance states that naked flames, space heaters, furnaces, incinerators and other sources of ignition must be kept 6 m away from combustible and flammable waste.

**Non-conformity** – Drawing ECL.041.01.01-04 appears to indicate that there is no 6 m distance from the Heater Building, containing 63 wood-fired boilers, and the drying containers containing combustible waste, which are becoming more combustible by virtue of heating and removal of moisture.

As there are no drawings on the internals of the plant buildings, it is not possible to determine the exact location of the boilers, wood stock and any potentially flammable materials or wastes that might themselves be less than 6 m from the ignition sources in the building itself.

This is important as the FRA notes, in a Priority 1 finding, that:

“The main concerns regarding housekeeping was within the areas containing machinery or processes containing heat, in which the level of waste within the areas on the floor or around the equipment required attention to prevent accidental ignition.”

FRA Item 69 notes that:

“Flames from the boilers can occasionally lick out of the opening”.

In regards to these boilers, the FRA outlines a series of recommendations to prevent these units coming into close proximity to combustibles, gases, machinery and other flammable products including:

- Removing anything combustible away from the boilers and keeping clear at all times
- Reducing the amount of timber stored in proximity to lit boilers
- Removing gas cylinders and never placing them near any lit boiler unit.

There is no indication that these, or any of the recommendations in this area, have been completed and no evidence in the body of the FPP that there are sufficient controls in place to prevent these issues contributing to an increased risk of fire in the future.

## Section 8.1 – Manage storage times

**Condition** – The FPP guidance states that the plan must define the maximum storage time of all materials on site and how that will be controlled and monitored. It states that good stock rotation must be used for all stored materials and there must be a clear method to record and manage storage of all waste on site. The plan requires the operator to show how they will follow the “first in, first out” principle so that wastes are stored for no longer than 6 months.

**Non-conformity** - The FPP outlines pile sizes and locations with a maximum storage time of three months for processed and unprocessed wastes with an aim to process and export waste within one week. It states combustible wastes are stored for no longer than one week. No evidence is given on how this will be realised in practice.

Table 5 (Preventative Measures) states:

- “In order to ensure stockpiles are sufficiently rotated and waste storage time is minimised, site operatives will ensure that the oldest materials will always be removed or processed first.” There is no information provided to demonstrate how the operatives will know how to determine the oldest materials.
- “Stockpile volume, height and storage times will be minimised on site and hence stored materials will be rotated whilst held on site”. There is no information provided to demonstrate how minimising stock volume, height and storage times indicates that materials will be rotated on site.

Section 6.1.6 (Waste Acceptance) states that Eco-Power will:

- Record the time the waste has been on site enabling the implementation of the “first in, first out” principle. There is no information provided on how solely recording the time the waste has been on site will enable the “first in, first out” principle to be implemented. Despite the guidance stating the operator must “show” how they will follow this principle, the FPP does not show how this principle would be implemented in practice.

This is particularly important as the design of the cover across the roof of the waste storage bays means that access to these bays will be restricted and the opportunity to remove wastes from different areas of the bays will be more limited.

## Section 8.2 – Monitor and control temperature

**Condition** – The FPP guidance states that heat must be controlled to prevent self-combustion by means such as monitoring sub-surface temperatures and acting on trigger levels in relation to temperature.

**Non-conformity** – Table 5 in the FPP states that a temperature probe will be used to monitor the temperature of the waste within the drying units every three hours to ensure any significant rise in temperature is identified and drying operations halted to allow sufficient time for cooling if necessary.

This instruction does not:

- Demonstrate that sub-surface temperature measures from the centre of the unit will be taken;
- Include decisive trigger levels of temperature or temperature rise that will instigate mitigation measures;

- Define in detail the system for reducing the temperature of the waste to a suitable level before drying recommences.

Furthermore, there are many waste piles stored in bays outside of buildings which have the potential to generate heat leading to self-combustion – Table 5 in the FPP notes this by stating each bay will be fitted with a cover to protect the waste from direct sunlight in hot weather.

The FPP includes no monitoring of the temperature of the waste in these storage bays to control heat and prevent self-combustion.

This is particularly important as the design of the cover over the waste storage bays will effectively reduce access to the wastes stored within these bays potentially impacting on the ability to spread out wastes within the bay to identify and eliminate hot spots, dampen down wastes that might become hot and remove burning wastes quickly from the bays to a quarantine area.

The cover material used on the bays appears in Appendix II to the Emissions Management Plan to be fabric in design and no assessment is given on its ability to withstand heat or flames and whether in effect it could actually spread fire faster from bay to bay via the covers on top of them.

### **Section 8.3 – Waste bale storage**

**Condition** – The FPP guidance states that when waste is stored in bales the plan must show:

- what sampling and testing protocol will be used to assess a representative number of bales (minimum 10%) during monitoring;
- that representative temperature readings are obtained both from the centre of a bale and from bales within the centre of a pile;
- that the bales will be turned to make sure waste stays cold.

**Non-conformity** – Although the preferred procedure at the facility is for baled waste to be removed from site in a timely manner, there is no information in the FPP on when these bale monitoring requirements would come into force and how they would be operated on site.

### **Section 11.1 – Separation distances**

**Condition** – The FPP guidance states that there must be a separation distance of at least 6 m between waste piles and the site perimeter, any buildings, or other combustible or flammable materials’

### **Section 11.2 – Fire walls and bays**

**Condition** – The FPP guidance states that separation distances can be reduced by using fire walls and bays which must be designed to have a fire resistant period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.

**Non-conformity** - The FPP drawing, “Site Layout Plan” shows waste storage bays directly adjacent to the Waste Processing Building and the Maintenance Building. Although Section 3.3.1.2 (Waste handling and storage) in the FPP states that:

“The concrete bays are approximately 1 m thick and will act as fire walls between each waste pile. Therefore the stipulated minimum separation distances defined in the EA’s Fire Prevention Plan guidance are not required”.

There is no evidence provided that these walls have a fire resistant period of at least 120 minutes.

## Section 13 – Detecting fire

**Condition** – The FPP guidance states there must be procedures in place to detect a fire in its early stages so its impact can be reduced. The detection system should be proportionate to the nature and scale of the waste management activities and the associated risks.

**Non-conformity** – The FPP notes (within the FRA Section) that battery operated high decibel call points are installed in every area where they are deemed required in order to create fire points. This is because of the way the buildings are constructed and used. Reasons are given to demonstrate why other systems may not be appropriate such as:

- The boilers give off smoke which occasionally feeds back into their building which would cause many false alarms on windy days if smoke detection was installed.
- When hoppers are loaded, flames can be seen within the boiler unit which would activate a video detection system when not technically required.
- Aspirating systems would be able to effectively detect smoke and fire in the early stages but false alarms would be caused as smoke is generated from normal operations.

Whilst there may be operational issues with a number of these automated systems, there are significant fire risks within buildings such as wood-burning boilers, mechanical equipment such as separators and trommels and baling systems. The FPP does not demonstrate sufficiently that the method chosen to detect and respond to fire is proportionate to the scale of waste management activities carried out and their associated risks.

## Section 16 – Water supply

**Condition** – The FPP guidance states that there must be enough water available for firefighting to take place and to manage a worst case scenario.

**Non-conformity** – The FPP does not demonstrate that the water source being proposed for active firefighting will have the capacity to deliver the required volume of water. The FPP states that the volume of water required to fight a fire in the largest stockpile (worst case scenario) will be 540,000 litres over three hour (Section 6.5.3), available from a groundwater abstraction borehole located on site (Section 6.5.2) and capable of discharge at 4,000 litres/minute. There is no evidence provided that the borehole itself is capable of supplying the volume of water required. Routine abstraction from the borehole is less than 20 m<sup>3</sup>/day (Section 2.4.4).

The site is already an operational waste handling and treatment facility which has had, as previously noted, a very significant fire on 1 June 2019.

As a result of this, the Agency had required the operator to review and update the existing FPP to reflect any learning that had come out of the investigation into the causes of, and response to that fire.

The operator was instructed to submit a revised FPP for approval by the Agency. This FPP was submitted but was not of a quality that would allow the Agency to approve it.

A further revised FPP was submitted to the Agency on 1 June 2020 (one year after the fire) and this again failed to receive approval as it did not meet the requirements of the Agency's FPP guidance in a number of areas:

- 9.1 Maximum pile sizes
- 10.2 Waste stored in containers

- 11.2 Fire walls and bays
- 13 Proportionate detection system.

The Agency wrote to the applicant on 10 June 2020 requiring them to provide an updated FPP addressing the points raised by 12 pm on 10 July 2020.

The applicant submitted Version 3 of their FPP but again it did not meet our requirements and we notified them on 14 July 2020 that it had not been approved and further improvements were necessary.

Many of the shortfalls in the updated FPP submitted to reflect existing operational practices and address concerns arising from the fire in June 2019, were shortfalls that had been identified by us in the FPP that had been submitted with the application for this permit variation. We had raised a number of these concerns within the Schedule 5 Notice issued to the applicant on 15 April 2019. The applicant had not updated the FPP for existing practices to take into account those matters we had already raised, and of which they were already aware, in relation to this current application.

We were unable to approve the FPP as acceptable to demonstrate that the applicant had systems, operations and infrastructure in place to meet the three key criteria of the Agency's FPP guidance:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within four hours
- Minimise the spread of fire within the site and to neighbouring sites.

### **Control of dust emissions**

The applicant is proposing to carry out 50% of their waste treatment and 100% of their waste storage activities outside so there must be robust and proportionate measures to control fugitive emissions of dust from causing environmental impact off-site. This is particularly important as a number of the waste streams proposed for import and export have the potential to generate dust emissions if not adequately controlled.

### **Waste operations:**

The Emissions Management Plan ("EMP") (Version 1, October 2018) states in Table 3 (EMP Risk Assessment and Control Measures) that:

"All main operations and processing activities will be undertaken within the confines of the Installation and whenever possible inside the existing building and the proposed new building."

This is no longer the case as the treatment activities to be done outside include the use of four shredders and two trommels. The EMP (Version 2, October 2019) states these are fitted with dust suppression systems (2.2.5) but no description or adequate risk assessment is given on the operation or effectiveness of these dust suppression systems to control fugitive dusts.

There is no satisfactory justification within the EMP (Version 2) that adequate alternative measures are in place for activities outside of a building that will provide the same or better level of protection than a building or enclosure would offer.

The new waste processing building will be fitted with fast acting roller shutter doors to minimise fugitive emissions released from the waste process activities (EMP Version 2, Table 10). Other control measures that would be expected in such a building such as PVC strip curtains to reduce

emissions through doorways are proposed to be implemented only in response to substantiated external complaints over dust (EMP, Version 2, 9.2.3.1).

There are no references to the building having a negative pressure extraction system or building vents being fitted with filters to collect dust. Although a building is proposed in which to process 50% of the waste, there is no adequate design specification or risk assessment provided that would demonstrate that this building has been designed and would be operated in a manner that would adequately control dust emissions arising.

The Fire Risk Assessment provided as Appendix II to the Fire Prevention Plan notes in Section 106 that “The buildings have open frontage or parts resulting in any smoke dissipating away from the buildings.” Although it is not evident which buildings are being referenced by this statement, all four main site buildings, Waste Processing Building, Waste Baler Building, Heater Building and Maintenance Building contain either waste materials or waste processing activities where the confinement of these materials or activities within the building are essential to prevent dust emissions arising. This statement in the Fire Risk assessment casts doubts on whether the buildings are suitably sealed to prevent dust escape.

### **Waste storage**

The waste storage bays will be covered with a fabric material extending the entire length and width of the bays. If these coverings are installed and maintained adequately, they will reduce the risk of fugitive dust from these bays. No evidence is given in the site inspection plans or preventative maintenance plans that these covers will be subject to sufficient scrutiny to ensure their continued operational effectiveness. For example, they are not referenced in Appendix V to the EMP, “Planned Preventative Maintenance Regime”. The adequate maintenance and operation of these coverings is key to ensuring control of fugitive dusts as their installation will limit the practical ability of the operator to reach all wastes within the bays to douse the piles with water to prevent dust emissions arising.

The applicant proposes to store up to 1,116 m<sup>3</sup> of processed material in two piles to the east of Bays 7-9. These materials would be processed wastes with EWC codes 17 05 04 (soils and stones) and 19 12 09 (minerals for example sand and stones). These wastes have significant potential for dust generation and would not have the external bay covers that are proposed for wastes stored within dedicated bays (Appendix II, Emissions Management Plan).

The EMP (Version 2) does not sufficiently demonstrate that dust emissions arising from these particular stockpiles is adequately controlled. In EMP (Version 2) Table 12 (Contingency Plan to Control Fugitive Emissions), the action triggers are insufficiently defined (“extreme and/or prolonged dry weather”) and the contingency measures are insufficiently detailed “The site access road, highway and internal surfacing will be swept with a mechanical road sweeper as and when required or if dry conditions dictate to minimise emissions of dust.”

There is no evidence provided that the equipment to be used to dampen waste piles and roadways, handheld hoses and water bowsers, have the capacity to provide sufficient water or the site-wide coverage to reach all areas of site where water may be required for this purpose.

### **Rail Operation:**

Although the Non-Technical Summary (Issue 1, October 2018) stated the rail route for removal of waste from site would be used only for the existing historic waste remaining on site from previous operations by Bolland Skip Hire, the EMP Version 2 states in Table 7 (Site Process Stages,

Potential Emission sources and Risk Levels) that other wastes will both arrive on site and be removed from site by rail:

- 17 05 04 (construction/demolition waste including soil/stones); 19 12 09 (minerals including sand/stones) and 191212 (wastes from waste management facilities) will arrive by rail;
- 19 12 10 (RDF/SRF) and 19 12 12 (non-recoverable fractions) will leave site by rail.

The EMP notes that these wastes may be lightweight and friable or of high density and, to prevent dust emissions arising, would be transported in enclosed shipping containers with the level of storage below the level of the container to minimise wind-whipping or be transported in bales. Although the risk of dust emissions arising from rail transport is discussed and control measures put in place, there is insufficient discussion and mitigation measures for the unloading of these potentially dusty materials from the rail transport or their loading onto the rail transport.

#### **4. We have significant concerns over operator competence as evidenced by incidents of poor performance and non-compliance with conditions in the existing environmental permit.**

##### **Permit Compliance – EPR/EB3207LH/T001 (EAWML 43452). Land at Bankwood Lane Industrial Estate, Bankwood Lane, Rossington, Doncaster, South Yorkshire.**

On 9 June 2016, the Environmental Permit EPR/EB3207LH/T001, was transferred to Attero Recycling Limited (Company No. 08593843). On 24 May 2019, an administrative variation was completed to change the permit holding company's name, to Eco-Power Environmental Limited (being the same legal entity with the same company number).

This permit allows the storage and processing of listed waste types, subject to the conditions and associated documents specified within. Compliance with this permit is assessed through a combination of site inspections /audits and the review of relevant documentation. These actions are captured in Compliance Assessment Reports ("CAR"), which are sent to the operator, following visits/work to assess operations, against the requirements of the Environmental Permit.

##### **Environment Agency non-compliance recording mechanism**

Non compliances with permit conditions, are categorised into four risk categories (1-4). These represent the reasonably foreseeable impact, or in the case of conditions relating to amenity, the actual impact of these non-compliances. Risk is assessed on a case by case basis and takes into the proximity of sensitive receptors, including housing.

Risk category 1 – Associated with a major actual or potential impact on human health, quality of life or the environment.

Risk category 2 – Associated with a significant impact on human health, quality of life or the environment.

Risk category 3 - Associated with a minor impact on human health, quality of life or the environment.

Risk category 4- Associated with no impact on human health, quality of life or the environment e.g. late waste returns.

Each risk category recorded attracts a score:

- Category 1 = 60 points
- Category 2 = 31 points
- Category 3 = 4 points
- Category 4 = 0.1 points

These scores are accumulated in the compliance (calendar) year and are added together to generate a compliance band:

- A = 0 points
- B = 0.1 to 10 points
- C = 10.1 to 30 points
- D = 30.1 to 60 points
- E = 60.1 to 149.9 points
- F = more than 150 points

Sites in compliance bands A and B have demonstrated an expected level of permit compliance.

Sites in compliance bands C and D must improve in order to achieve permit compliance.

Sites in compliance bands E and F must significantly improve in order to achieve permit compliance.

**Compliance history with Environmental Permit – EAWML 43452 – EPR/EB3207LH/T001**

A summary of the accumulated points and corresponding compliance bands are provided in the table below.

Year	Points	Compliance Band
2015	82.2	E
2016	32.3	D
2017	102.3	E
2018	8.4	B
2019	12.2	C
2020	55.1 (as of 30/06/2020)	D (as of 30/06/2020)

To reflect the added regulatory effort required for poorly performing sites, their annual subsistence charge is amended in the following year (as a percentage of a baseline figure). The changes being:

Band A - 95%

Band B - 100%

Band C - 110%

Band D - 125%



Band E - 150%

Band F - 300%.

## **2020 Nature of non-compliances**

### **Recent site Inspections**

An unannounced site inspection was conducted on 13 February 2020. On arrival, Regulated Industry Officers were initially informed that they would not be able to access the site, as Her Majesty's Revenue and Customs ("HMRC") were undertaking an audit and no personnel were available to escort them around the operational yard. Having persisted on requesting access to be provided, an operative was eventually able to walk the officers around the permitted area.

Despite the visit being restricted to a physical inspection and no scrutiny of operational documentation and records, nine non-conformances were identified. Using our principles of consolidation, this resulted in two category 3 (minor foreseeable impacts) and a category 2 (significant foreseeable impact) breaches being recorded on that day.

The non-conformances related to excessive quantities of waste not stored in accordance with operator's Environmental Management System or Fire Prevention Plan; waste being stored outside the permitted boundary and liquids not benefiting from secondary containment. The combination of the vast quantities of combustible wastes and their prolonged retention times, presented a significant risk of fire.

The operator was given until the 23 April 2020 to bring the waste piles into compliance. Telephone contact was maintained with the site following the restrictions during the COVID-19 pandemic, with photographs supplied by the operator to demonstrate that an area of waste had been cleared. The operator had attributed this to restrictions imposed by the COVID-19 pandemic which had reduced the amount of new waste arriving on site allowing them to process more of the existing waste on site and reduce existing stockpiles.

Due to the number of amenity complaints being received by the Agency, attributing amenity issues to the Eco-Power site (Odour, noise and gulls), Regulated Industry Officers revisited the site on 21 May 2020. This inspection did not identify any amenity issues but did confirm the overall reduction in quantities of waste present. However waste was still found not stored in accordance with the approved FPP as well as waste stored outside the permitted area. In addition, the inspecting officers identified breaches relating to site security and the integrity of fencing designed to prevent litter escaping the site. Four category three breaches of permit conditions were recorded for this visit. The Agency sent a formal warning letter to the company on 24 July 2020<sup>13</sup> addressing the breaches of the February and May 2020 site inspections.

### **Quarterly returns & control on throughput**

Condition 4.2.2 of the Environmental Permit held by Eco-Power Environmental Limited requires that:

*'Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.'*

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<sup>13</sup> Appendix 13: Warning Letter from Environment Agency to Eco-Power Environment Limited dated 24 July 2020  
EPR/EB3207LH/V005  
Date issued: 21/08/2020

Since 2015, two thirds of the quarterly returns (14/21) have not been submitted on time, and in some instances over 6 months late. The operator has consistently accumulated breaches of permit conditions for this aspect of submitting returns. We issued a Regulation 36 Compliance Notice on 11 June 2020, requiring returns relating to July-September 2019, October-December 2019 and January-March 2020 to be submitted. The January-March 2020 return was not submitted until 15 July 2020 – two days after the compliance deadline we imposed on the operator.

As well as throughput, these returns should also assist the operator in managing the quantity of waste stored on site at any given time. These returns show that from a throughput of c60,000 tonnes in 2015, 2016 saw an input of nearly 250,000 tonnes of waste, some 50,000 tonnes over the permitted limit. 2017-2019 saw an input of waste to the site each year of 197,312 tonnes, 198,658 tonnes and 199,925 tonnes respectively. The outputs of waste for these same years were 397,791 tonnes, 347,358 tonnes and 383,933 tonnes. The individual quantities of wastes input to and output from the Bankwood Lane Waste Treatment and Processing Centre for these years are included in Table 1.

Based on the figures provided by the operator, there has therefore been a net reduction in waste on site of 533,187 tonnes over this three year period. An adjacent area of land is being cleared of historic waste left by another company, but is of insufficient area (approximately 10,100 m<sup>2</sup>) to have generated this quantity of material. Using the densest waste material conversion factor of 1.5 tonnes per m<sup>3</sup> for sub soil & similar materials prescribed by HMRC, provides a volume of 355,458 m<sup>3</sup>. This would have been to a depth of 35 metres if spread evenly over the land being cleared.

**Table 1**

Input and Output of Wastes at Bankwood Lane Waste Treatment and Processing Centre for period 2017 - 2019

EWC Code */Yr	Input wastes			Output wastes					
	19 12 12	17 09 04	20 03 01	19 12 12	19 12 10	19 12 02	19 12 04	19 12 07	19 12 01
2017	180,703.11	14,990.14	1,618.2	359,857.47	35,581.81	396.18	131.66	1819.02	5.24
2018	178,700.04	18,209.72	1,748.49	288,115.8	52,884	70.58	167.32	6121	-
2019	184,735.11	14,035.18	1,155.74	349,742.1	24,829.38	-	-	9361	-

\*EWC (European Waste Catalogue) code waste types:

17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03.

19 12 01 paper & cardboard

19 12 02 ferrous metal

19 12 04 plastic and rubber

19 12 07 wood other than that mentioned in 19 12 06

19 12 10 combustible waste (refuse derived fuel)

19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

20 03 01 mixed municipal waste

The waste returns breakdown of this 2017-2019 period, shows that the site already operates on the basis of accepting a limited number of waste types (3). The application proposes removing 20 03 01 - mixed municipal wastes (amongst others) as a permitted waste type. This represents less than 1% of the annual throughput.

It is proposed that operations will concentrate on 19 12 12 (up to 325,000 tonnes a year), a waste code which encompasses a wide range of waste materials, that have been through a mechanical sorting process at a waste facility. This can range from granular fines material (including from construction & demolition waste or municipal waste) to aggregates and other waste rejected materials from waste sorting facilities. The material must not have hazardous properties but may have an organic content.

### **Fire prevention plan**

The most significant breaches recorded against the permit (Category 2) since its transfer have related to excess quantities of waste being stored on site and in a manner failing to adhere to requisite Fire Prevention Plans having been produced by the operator (Most recently recorded Category 2 non-compliance during February 2020 inspection). (Appendix 12)

On 1 June 2019, there was a fire incident on site from waste in storage and this was reported to the Agency by South Yorkshire Fire & Rescue Service. An update from an attending fire officer three hours later indicated that the fire would be likely to take a further 4-6 hours to be extinguished. Subsequently Compressed Air Foam ("CAF") was required to be applied to control the fire. Regulated Industry Officers attended the site at 13:00 by which time the fire had been contained but was still smouldering.

The fire was categorised as a Category 3 incident, with prevailing winds being from the north north east, blowing smoke away from the nearest housing at that time. A new housing estate is currently being constructed and occupied to the South West of the Eco-Power site, such that should a fire now occur with the same weather conditions, this new housing would be directly down wind.

A follow up audit conducted on 19 June 2019 identified that the approved FPP for the site was not being followed nor was the revised un-approved version. Neither version complies with current standards. The audit specified that an updated FPP should be produced and approval obtained from the Agency. The plan should then be implemented by the operator.

A revised FPP was submitted to the Agency in October 2019 but was rejected as being inadequate following assessment. The FPP did not meet the objectives of the Agency's FPP guidance of:

- Minimising the likelihood of a fire happening;
- Aiming to extinguish a fire within 4 hours;
- Minimising the spread of a fire within the site and to neighbouring sites.

The FPP did not therefore adequately identify and minimise the risks of pollution from fire. The operator was informed on 26 November 2019 of our decision.

In all, ten non-conformances were identified that required action as follows:

- It did not consider any non-waste materials stored on site e.g. gas cylinders, combustible liquids and chemicals.

- The maps provided did not contain locations of hydrants and water supplies, the layout of the buildings on site, prevailing wind direction or scale of the maps.
- The frequency of inspections/maintenance, who the qualified electrician is or any written procedure for maintenance was not included.
- It did not detail how stock rotation would be effectively managed following a ‘first in, first out’ principle.
- No techniques were provided to mitigate against the effects of hot weather on waste piles on site.
- No details were given for the maximum dimensions of the waste piles or storage bays or their volumes.
- The submitted FPP did not state if waste was stored in containers, nor if any waste containers are accessible to be extinguished in the event of a fire.
- The FPP did not state if End of Life Vehicles (scrap cars) are accepted onsite or how they would be stored [being a waste type listed within the permit].
- The FPP did not state if composting takes place on the site and if so the procedures for managing the process.
- It also failed to state whether the requisite 6 metre separation distance between individual waste piles or between waste piles and the site perimeter/buildings or other non-waste materials would be maintained. Nor did it detail if fire walls would be used in place of separation distances and if so, their specifications.

Following issues cited with the availability of the consultant given the responsibility of amending the FPP, a revised submission was not made until the end of May 2020. We assessed this version of the FPP and identified fundamental omissions, namely:

- No details were given for the maximum dimensions of the waste piles or storage bays or their volumes.
- The submitted FPP did not state if waste was stored in containers, nor if any waste containers are accessible to be extinguished in the event of a fire.
- It still failed to state whether the requisite 6 metre separation distance between individual waste piles or between waste piles and the site perimeter/buildings or other non-waste materials would be maintained. Nor did it detail if fire walls would be used in place of separation distances and if so, their specifications.

As a consequence, notification that the FPP could not be approved was confirmed to the operator on 16 June 2020.

### **National Incident Recording System (“NIRS”)**

The National Incident Recording System (NIRS) is Agency’s incident recording system, whereby members of the public, business or other authorities, may report environmental incidents, 24 hours a day and 365 days of the year to ourselves. Each NIRS report is given a unique incrementing reference number or where it relates to amenity issues at a regulated site, each element reported will be provided with a reference and counted as a separate incident, for example, a member of the public reporting dust and a foul smell coming from operations at a permitted facility, would generate two incident numbers.

From 14 April to 30 June 2020, we have logged 141 NIRS reports in relation to permitted facilities in the Bankwood Lane area of New Rossington. The majority of these, reporters have attributed the issues to the operator. The reports are related to odour and dust but also noise and the nuisance caused by birds (gulls). It is important to note however, that at this present time, substantiation of the source has not been possible.

Historically, the area (within 1 km of site) has recorded a number of NIRS reports:

2015: 20  
 2016: 94  
 2017: 290  
 2018: 110  
 2019: 50

The volume of reports does however demonstrate the importance of having a robust Environmental Management System (EMS) and procedures that can appropriately control potential emissions such as odour, dust, flies and noise. During May 2020, New Rossington received the fifth most recorded NIRS reports for a location across the whole of England. Therefore any proposed changes to any waste operation, require a great deal of scrutiny.

**Eco-Power Environmental Limited - involvement in running another waste facility.**

The Environmental Permit is held by Transwaste Recycling and Aggregates Limited at a facility on Gibson Lane, in Melton in East Yorkshire. It is understood that the operator undertakes an element of operations within the facility ('sheds 2 & 3), under a Memorandum of Understanding with the permit holder. It is in this area of the site that a fire occurred on 26 November 2019. Officers were informed it stemmed from a drying belt during the commissioning of the Solid Recovered Fuel ("SRF") shed.

Following an inspection in February 2020, due to the fire risk concerns of the excessive quantity of waste material present and the manner in which it was stored (within the area operated by Eco-Power Environmental Limited), a Regulation 36 notice was issued under the Environmental Permitting (England and Wales) Regulations 2016. This was served against the Environmental Permit holder (Transwaste Recycling and Aggregates Limited). This Notice was complied with. [For comparison to the performance of Eco-Power's New Rossington site, the performance bandings for this Transwaste site since 2018 reads as follows:

Year	Points	Compliance Band
2018	129.2	E
2019	230.2	F
2020	31	D (as of 30/06/2020)

## Annex 1 – Consultation Responses

### Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, newspaper advertising, and the way in which we have considered these in the determination process.

#### Responses from organisations listed in the consultation section

<b>Response received from</b>
<b>Public Health England</b>
<b>Brief summary of issues raised</b>
<p>The consultee raised the following points of concern:</p> <ol style="list-style-type: none"><li>1. Surface water run-off from site as the applicant had noted the site was not connected to the sewer or surface drainage system. The consultee stated there was insufficient information to be able to assess the impact.</li><li>2. Odour from the site as, within the odour management plan, odorous material if received would be kept within one of the buildings but the fate of putrescible waste was not clear.</li><li>3. Fire prevention plan – the consultee recommended that one be developed in association with the Environment Agency so that the Plan would be robust in the event of an incident.</li></ol> <p>The consultee, based on the information contained in the application, had no significant concerns regarding the risk to the health of the local population from the installation provided it was well run and stayed within its environmental permit regulations.</p>
<b>Summary of actions taken or show how this has been covered</b>
<ol style="list-style-type: none"><li>1. The Agency requested in the Schedule 5 Notice (questions 23 &amp; 24) that the operator provide further details on surface water management and demonstrate that areas containing wastes on site would be served by a fully impermeable sealed drainage system. The operator submitted in November 2019 a report, “Surface and Foul Water Drainage Strategy” by Ecus Environmental Consultants.</li></ol> <p>We reviewed this document and are satisfied with the measures proposed to reduce risks to groundwater. The operator is now proposing a discharge for clean surface water to Rossington Drain and we note that further liaison with, and confirmation from, the Internal Drainage Board would be required as they manage this watercourse. The operator also noted that a series of sumps would be installed across the site to collect water and that foul water would be removed from site by tanker.</p> <p>We do not accept the operator has fully demonstrated that the operation of the site and its infrastructure will adequately separate clean surface water from contaminated surface water. We do not accept that the operator has fully demonstrated that the discharge of surface water to Rossington Brook would be acceptable.</p> <p>We have refused the permit variation application.</p> <p>As the Ecus report on management of surface water and the discharge to Rossington Drain</p>

are further additions to the application as a result of the operator's response to the Schedule 5 Notice, we would have been requesting further information on how these would have operated if we had not decided to refuse the application and were continuing the determination process.

2. The Agency requested in the Schedule 5 Notice (questions 63 to 73) that the operator provide significant further information on the management of odour arising from waste storage, handling and processing on site. The operator has stated that, although the maximum storage time for wastes on site will be three months, they would export all wastes to be processed and exported within one week.

They would minimise the residence time of potentially odorous wastes on site and, should wastes arrive with excessive odour, they would either be put into the quarantine area or rejected from site (Odour Management Plan, Section 3.0). No further details are given on how this would operate and there is no reference to managing putrescible wastes on site in the Odour Management Plan.

Although 50% of waste will be processed within a new building, all waste (unprocessed and processed) will be stored outside of buildings.

The Agency has decided to refuse the permit variation application and one of the reasons for this is the management of the site to prevent unacceptable levels of odour arising (Part C2 and Part C3 of this document).

3. The Agency audited the Fire Prevention Plan submitted by the operator in the application of October 2018. We found very significant deviations from the level of detail required in our guidance and we requested further information from the operator in the Schedule 5 Notice (questions 1 to 22). Following submission of a revised Fire Prevention Plan (including a fire risk assessment) in October 2019, we carried out a further audit where we identified further key deficiencies (examples of which are included in Part C3 of this document).

We have not approved the Fire Prevention Plan and have refused the permit variation application.

<b>Response received from</b>
<b>Director of Public Health – Doncaster Council</b>
<b>Brief summary of issues raised</b>
The consultee raised the following points of concern: <ol style="list-style-type: none"><li>1. Their endorsement of the findings of the Public Health England finding over the need for a fire management plan;</li><li>2. Their endorsement of the findings of the Public Health England finding over the need for greater clarity on waste that is likely to decay;</li><li>3. Odour from the site that increase with a northerly wind;</li><li>4. Litter from the site that increases with a northerly wind;</li><li>5. Flies from the site that increase with a northerly wind.</li></ol> Given these concerns, the consultee asked whether a full Health Impact Assessment was

considered necessary.

**Summary of actions taken or show how this has been covered**

1. As outlined in our response to the comments from Public Health England, we have not approved the revised Fire Prevention Plan from the operator (see also Part C3 of this document).
2. We have not accepted the operator's submission on the nature of odour arising from individual waste streams and the operator's assignation of odour risks to these waste streams. We have not approved the operator's Odour Management Plan or accepted the assumptions or conclusions within their odour modelling report.
3. The Agency requested in the Schedule 5 Notice (questions 63 – 73) that the operator provide significant further information on the management of odour arising from waste storage, handling and processing. We are not satisfied that the additional detail provided addresses fully our concerns and we have not approved the Odour Management Plan (Issue 2, October 2019).
4. The Agency requested in the Schedule 5 Notice (questions 74 – 76) that the operator provide significant further information on the management of litter arising from waste operations on site. We are not satisfied that the additional detail provided addresses fully our concerns and we have not approved the Emissions Management Plan (Issue 2, October 2019).
5. The Agency requested in the Schedule 5 Notice (questions 54 – 56) that the operator provide significant further information on the management of waste storage, handling and processing operations on site to minimise the generation of flies. We are not satisfied that the additional detail provided addresses fully our concerns and we have not approved the Pest Management Plan (Issue 2, October 2019).

We have decided to refuse the application for permit variation at this stage and therefore we have not progressed the suggestion from the consultee of carrying out a full Health Impact Assessment.



<b>Response received from</b>
<b>Planning Department – Doncaster Borough Council</b>
<b>Brief summary of issues raised</b>
<p>The consultee raised the following points of concern:</p> <ol style="list-style-type: none"> <li>1. Clarification is required in relation to the 1.2 million litres of diesel to be used on site and whether this relates to plant used to move waste around the site or to the use of fixed generators;</li> <li>2. There are existing issues with regard to the current permit relating to: <ol style="list-style-type: none"> <li>(a) littering,</li> <li>(b) lack of dust suppression,</li> <li>(c) odour,</li> <li>(d) noise.</li> </ol> </li> </ol> <p>Rossington Parish Council had considered all matters relating to this application and also wished to comment (note that, although these comments were included in the response from Doncaster Council Planning Department, they are recorded separately in this document as a separate response from Rossington Parish Council).</p>
<b>Summary of actions taken or show how this has been covered</b>
<ol style="list-style-type: none"> <li>1. The updated Environmental Permitting Technical Requirements document (Issue 2, October 2019) stated “It is also estimated that 1,200,000 litres of diesel will be consumed per annum for the operation of plant and electrical generators”. If further determination had been carried out on the application, we would have requested the operator to separate out the individual usage of diesel between plant operation and generation of electricity. We have decided to refuse the application at this current point in the determination process.</li> <li>2. Issues with the operator’s compliance with their existing permit conditions are addressed in Part C4 of this document including concerns on odour, noise, dust and litter.</li> </ol>

### **Representations from local MP, councillors and parish/town community councils**

<b>Response received from</b>
<b>Rossington Parish Council</b>
<b>Brief summary of issues raised</b>
<p>The consultee raised the following points of concern:</p> <ol style="list-style-type: none"> <li>1. The poor management of existing stockpiles of waste on site;</li> <li>2. The ability of the operator to manage the increase from 75,000 to 200,000 tonnes per annum authorised in a previous permit variation;</li> <li>3. The timeliness of operator submission of their waste tonnage returns;</li> </ol>

4. Presence of pests such as rodents and flies attracted by the waste operations;
5. Odour from site operations and vehicles;
6. Litter blowing from the facility into hedgerows, trees and watercourses;
7. Only 50% of the proposed activity being carried out indoors;
8. The use of 63 biomass boilers burning 12,000 tonnes of wood pellets to dry waste before it leaves site;
9. The use and storage on site of 1.2 million litres of diesel fuel on site per year;
10. The generation of 20 tonnes of ash to go to landfill;
11. The use of the rail route to remove only existing older wastes from site rather than newly processed wastes which would reduce the number of road vehicles transporting wastes;
12. The amount of recycled material and landfill waste that can be stored on site and to what timescales;
13. Inadequate dedicated lorry or employee parking.

#### **Summary of actions taken or show how this has been covered**

- 1-3. The ability of the operator to manage the existing permitted quantities of waste on site (including their compliance with existing permit conditions such as managing stockpiles of waste on site and submission of tonnage returns) is addressed in Part C4 of this document. We have audited the operation of the site regularly and have required the operator to address issues where they have not been in compliance with permit conditions.
- The competence of the operator and their compliance against existing environmental requirements is a key issue in our decision to refuse the current permit variation application.
4. The issue with pests (such as flies, rodents and seagulls) at the existing site is considered in Part C4 of this document which addresses compliance of the operator against existing permit conditions. We have audited the Pest Management Plan (Issue 2, October 2019) submitted by the operator and we have not approved it as the operator has not demonstrated that robust management systems are in place to minimise the risk of pests.
5. The issue with odour at the existing site is considered in Part C4 of this document which addresses operator compliance against existing permit conditions. We have audited the Odour Management Plan (Issue 2, October 2019) submitted by the operator and the modelling of odour presented by the operator in the current application. We have not approved either as we do not accept the operator has demonstrated that robust management systems are in place to minimise the risk of odour and we do not accept the levels of odour and subsequent risk that the operator has assigned to differing waste streams.
6. The issue with litter arising from operations at the existing site is considered in Part C4 of this document which addresses operator compliance against existing permit conditions. We have audited the Emissions Management Plan (Issue 2, October 2019) and we have not approved it as the operator has not demonstrated that robust management systems are in place to minimise the risk of litter.
7. Approximately 50% of operational activities will be carried out within the newly constructed waste processing building with other operational activities (such as shedding and trommelling) and all waste storage carried out outdoors. We have assessed this against the

requirements of BAT (Best Available Techniques) and have decided that the treatment of waste outside at this facility is not BAT. Further details on our decision on this matter are to be found in Part C2 of this document.

8. We required the operator to demonstrate that up to 63 small biomass boilers represented BAT when compared against a smaller number of larger boilers (Schedule 5 Notice, question 50). We do not accept that the operator has sufficiently demonstrated that to be the case. Further details on this are included in Part C2 of this document.
9. The operator has stated that the 1.2 million litres of diesel to be used at the facility each year will be used for plant operation and generation of electricity. Diesel will be stored in a 40,000 litre tank which is bunded to contain 110% of the capacity and lined with an impermeable liner which is impervious to diesel. This will be located between the maintenance and baler buildings.
10. We requested that the operator review all wastes generated on site (including ash from operation of the biomass boilers) with a view to minimising the quantities generated or reducing their impact on the environment (Schedule 5 Notice, question 48). The operator has indicated that the biomass boiler ash would be non-hazardous and there may be opportunities to explore in using it as replacement for primary aggregates or within landfill engineering projects.
11. The application for permit variation stated that only existing historical wastes would be removed from site via the rail link. Further information received from the operator in response to the Schedule 5 Notice indicated this is not the case and future unprocessed and processed waste streams would arrive on site and be removed from site via the rail link.
12. The operator has stated that the maximum amount of waste to be stored on site at any one time would be:
  - 5,566 tonnes (including 35 tonnes of recyclable materials stored in skips).
13. The operator has stated that additional lorry parking would be available on site as a result of the current permit variation ensuring such vehicles do not have to park on access roads to the facility.

## **Representations from individual members of the public**

The consultation responses received were wide ranging and a number of the issues raised were outside the Agency's remit in reaching its permitting decisions. Specifically, questions were raised which fall within the jurisdiction of the planning system, both on the development of planning policy and the grant of planning permission.

Guidance on the interaction between planning and pollution control is given in the National Planning Policy Framework. It says that the planning and pollution control systems are separate but complementary. We are only able to take into account those issues, which fall within the scope of the Environmental Permitting Regulations.

A total of 22 responses were received from individual members of the public. Many of the issues raised were the same as those raised by other statutory consultees such as the Planning Authority and Parish Council and have been considered previously. Only those issues additional to those already considered are listed below. We have also included and responded to additional concerns outside the scope of this determination to clarify matters for the public.

<b>Brief summary of issues raised</b>
Use of raw materials (namely biomass/wood for boilers).
<b>Summary of actions taken or show how this has been covered</b>
The operator states that it is anticipated that a maximum of 12,000 tonnes per annum of biomass/wood will be consumed by the site. Virgin wood, free from chemicals or finishes, has been selected as the biomass fuel as it is a sustainable and renewable energy source. The virgin wood is sourced from suppliers of wood fuel who are registered on the Government's Biomass Suppliers List, thereby demonstrating that the fuel meets the Government's sustainability criteria.

<b>Brief summary of issues raised</b>
Water pollution risks from site operation.
<b>Summary of actions taken or show how this has been covered</b>
The operator states that clean surface water will be discharged to Rossington Drain. Potentially contaminated water on site will be retained in sumps installed across the site and disposed off-site by tanker. Further demonstration by the operator that operational and infrastructure systems are sufficient to ensure there is no risk of cross-contamination of water and no risk of discharge of contaminated water to Rossington Drain would have been required if the determination process on this application was to continue.  This demonstration has not been requested as we have refused the permit variation application.

<b>Brief summary of issues raised</b>
Timing of application (including the scheduling of commencement of acceptance of increased tonnage on site).
<b>Summary of actions taken or show how this has been covered</b>
The acceptance of increased waste tonnage on site could only commence when a varied environmental permit authorising this additional tonnage has been issued.  The Environment Agency has determined the permit application and has refused the application. The increased waste tonnage is not therefore authorised.

<b>Brief summary of issues raised</b>
Material falls from wagons driving through Rossington Village taking waste to and from the operator's premises.
<b>Summary of actions taken or show how this has been covered</b>

We have required the operator to demonstrate that they will manage waste arrival and despatch in a manner to minimise litter or dust arising. They have confirmed in their Emissions Management Plan (Table 10) that “All road vehicles transporting waste will be enclosed/sheeted as necessary to minimise fugitive emissions of dust and litter.”

**Brief summary of issues raised**

Local residents have attended numerous meetings about works on the Bankwood Estate but do not feel their concerns are listened to by either the Environment Agency or Doncaster Borough Council.

No person from either body has been to their homes to experience the dirt and noise they state they are subject to.

**Summary of actions taken or show how this has been covered**

The Agency reviews all concerns raised during the consultation process for this permit variation application and considers them fully within the determination process. All concerns and our responses to them are listed in this document. Agency personnel are available (during normal pre-Covid19 periods) to visit the property of a complainant if required. All complaints received from local residents are logged and investigated by the Agency.

**Brief summary of issues raised**

The attitude of the company towards the local impact they are causing. The belief that no notice will be taken of this negative impact on residents because previous expansions of the site were permitted and previous complaints were not addressed.

**Summary of actions taken or show how this has been covered**

The environmental permitting determination process requires the applicant to demonstrate that there are operational systems and infrastructure in place to eliminate or minimise any local impact caused by their proposed operation. The Agency has assessed their application and decided that the operator has not demonstrated sufficiently that this is the case.

The Agency has also considered previous complaints from local residents and previous compliance of the operator against existing permit conditions in the determination process and these are one of the reasons that the application has been refused (as outlined in Part C4 of this document).

Planning permissions and issues not pertinent to environmental permitting determination process - These issues are not impacted by the proposals in this application, however they have been specifically addressed to provide clarity to the public.

<b>Brief summary of issues raised</b>
The applicant has committed to constructing a link road to the facility for vehicular access. This construction of the link road would mean no wagons loaded with waste would travel through Rossington village. That commitment was dependent on the Environment Agency granting a permit authorising the increased waste throughput.
<b>Summary of actions taken or show how this has been covered</b>
We have determined the application from the operator and refused the issue of a variation to the permit. The Agency has no legal mechanism to require the operator to construct the link road should they decide not to proceed with its construction now the permit application has been refused.  The construction of the link road is a matter to be resolved between the operator and Doncaster Borough Council.

<b>Brief summary of issues raised</b>
There is a significant increase in the operating hours of the site to the detriment of the health and wellbeing of existing and future residents in the areas of noise; obnoxious smells; fumes; dust; litter; excessive vehicle movements.
<b>Summary of actions taken or show how this has been covered</b>
The setting of revised operating hours is a consideration for the planning authority and is not addressed as part of the environmental permitting process.  The issue of noise, odour, fumes, dust and litter within the facility have been assessed by the Agency and we have decided to refuse the operator's application.

<b>Brief summary of issues raised</b>
The attitude of persons working for the operator towards local residents such as allegedly shooting paintballs at them while they were speaking about the site development with Sheffield radio and shouting at and belittling them in public.
<b>Summary of actions taken or show how this has been covered</b>
The actions of persons outside of the permitted facility who may work for the operator are not a consideration for the Agency during permitting process.

<b>Brief summary of issues raised</b>
Waste is being transported from all parts of the country to the site in unmarked vehicles with allegations of vehicles with foreign number plates travelling to the site. Vehicles working outside of permitted hours.
<b>Summary of actions taken or show how this has been covered</b>
The use of unmarked vehicles and foreign number plated vehicles delivering waste to the site is not within the remit of the Agency in our permit determination process. The enforcement of operational permitted hours is the responsibility of the planning authority.

<b>Brief summary of issues raised</b>
The appropriateness of the facility's size, location and operating hours compared with both the waste tonnage to be accepted and the location of sensitive receptors. The location of the site due to its proximity to existing and future housing developments.
<b>Summary of actions taken or show how this has been covered</b>
Whether a site is appropriate for its size and location is a consideration for the planning authority.

<b>Brief summary of issues raised</b>
The issue of planning permission granted to the operator for both the previous expansion of the site from 75,000 tonnes/year to 200,000 tonnes/year and their current proposed expanded operation to 400,000 tonnes/year at Bankwood Lane Waste Treatment and Processing Centre.
<b>Summary of actions taken or show how this has been covered</b>
The issue of planning permission to the operator is a consideration of the planning authority and is not considered by the Agency during determination of a permit variation application.

<b>Brief summary of issues raised</b>
The spreading of silage on "the old top pit" which may contribute to foul odours.
<b>Summary of actions taken or show how this has been covered</b>
The compliance of the operator against existing permit conditions has been included as one of the reasons for refusing the current permit variation application (Part C4 of this document). There is no evidence in this assessment of silage being spread by the operator. There may be silage spread by other occupiers of the Bankwood Lane Industrial Estate under deployment licences but it is not pertinent to the determination of the current permit variation application.

<b>Brief summary of issues raised</b>
Council tax should be reduced for households living close to the Bankwood Lane Industrial Estate.
<b>Summary of actions taken or show how this has been covered</b>
The raising of council tax is a consideration for Doncaster Borough Council.

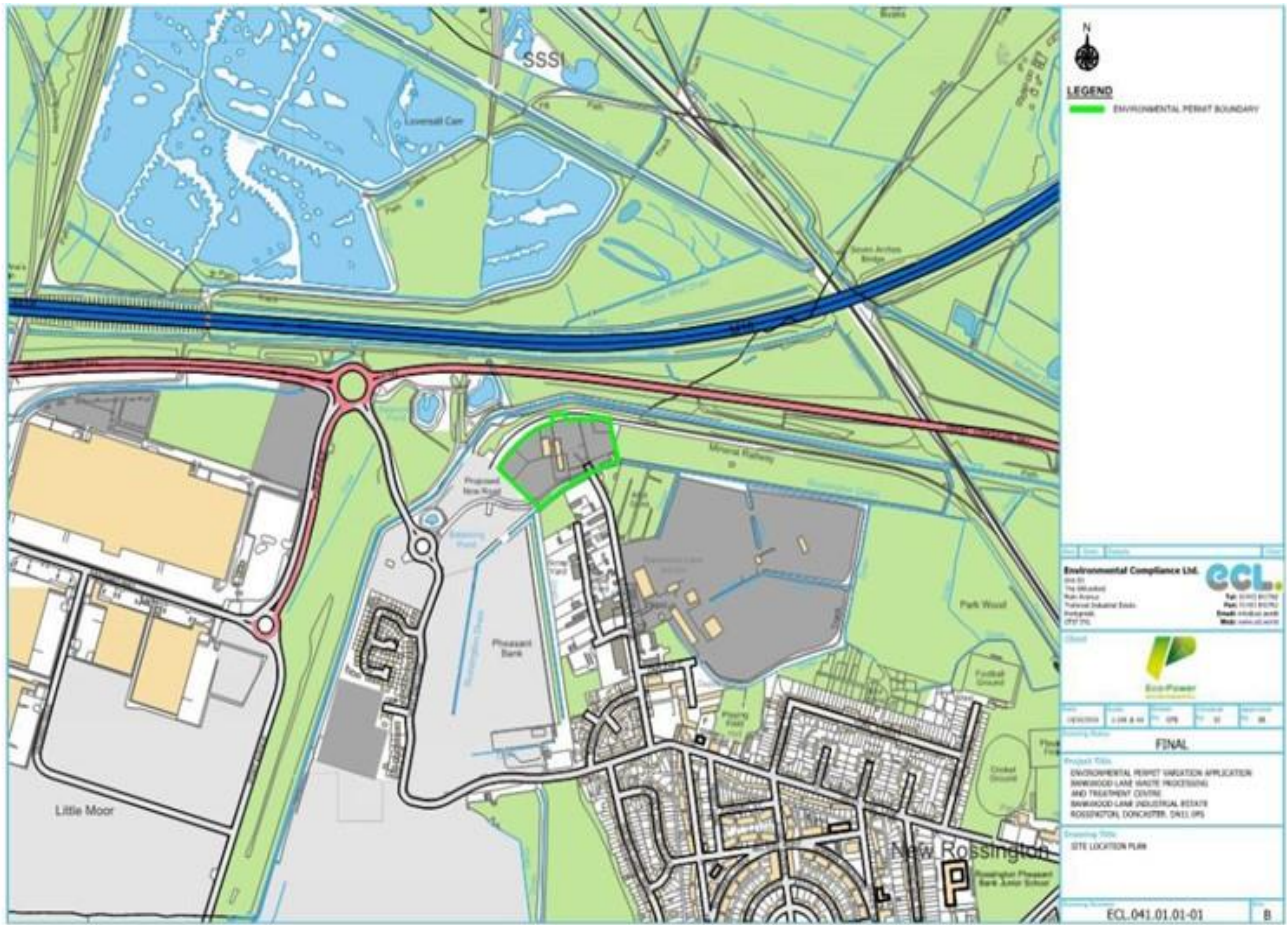
<b>Brief summary of issues raised</b>
Traffic movements to and from the operator's premises, speed of vehicles, parking of vehicles on roadways outside of the operator's premises and damage to kerbs on roads.
<b>Summary of actions taken or show how this has been covered</b>
Vehicle access to the installation and traffic movements (including unauthorised or inconsiderate parking) are relevant considerations for the grant of planning permission, but do not form part of the Environmental Permit decision making process.  The operator has committed to an internal site speed limit of 5 miles/hour whilst vehicles are on the operator's site (Emissions Management Plan, Table 10).

<b>Brief summary of issues raised</b>
Compliance with the planning condition previously imposed on the operator to erect a fence around the temporary lorry park to protect local residents from dust caused by the lorries.
<b>Summary of actions taken or show how this has been covered</b>
Compliance with planning conditions is the responsibility of the planning authority and not pertinent to the remit of the Agency determination of the application for permit variation.

<b>Brief summary of issues raised</b>
The proposed lorry park is to be constructed on greenbelt land.
<b>Summary of actions taken or show how this has been covered</b>
Planning permission for the construction of the lorry park, including consideration of the nature of the land to be used, is the responsibility of the planning authority.



# Annex 2 – Map Showing Location of Proposed Installation and Surrounding Area



### Annex 3 – Approximate locations of planning permissions granted for new housing developments close to the Eco-Power Environmental Limited, Rossington site.

