Application Reference: EPR/XP3198EF/V007, CRM:0831111
Operator: Mill Farm Recycling Limited
Facility: Mill Farm, Stone Road, Chebsey, Stafford ST21 6NX

Introduction

This document has been prepared to respond to a Duly Making information request received on 03 November 2025 via email. The responses to questions are provided below.

Operating Techniques

1. *Provide an air emissions assessment for all emissions to air, provide all emission points on a site plan and explain how the boilers are operated at 0.5MWth capacity or provide end of waste evidence for the drying floor process.*

   The application confirms there are 3x biomass boilers at 1MWth, stated to operate at 0.5MWth. The application confirms the boilers burn non-waste wood to provide heat to the farm buildings and the 6 drying floors to be used within the waste operation process.

   The application states wood dried on the drying floors is a product but still no quality protocol or end of waste criteria agreement has been provided.

   The process flow provided states the dried wood then leaves site for use as animal bedding under a waste exemption.

   This suggests that this is waste and not a product. The biomass boilers providing heat for this waste drying process are part of the waste operation process and must treated as such.

The submitted permit variation application 'EPRXP3198EF_V006_Mill_Farm_Recycling_Normal Variation July 2025' included the following supporting documents:

- An Air Quality Impact Assessment (AQIA) (ETL956_AQIA_V1.1_Mill Farm_July25);
- The AQIA model files;
- An H1 risk assessment (ETL956_H1_V1.1_Mill Farm_July25); and
- The H1 tool (H1 Tool v9.2_Ainsworth_30July)

The AQIA considered emissions from the four-point sources on Site: two dust extraction units and the two diesel generators which power them.

Heat from three biomass boilers adjacent to the site, not within the permit boundary, is used primarily to dry wood products on six drying floors. Dispersion of emissions from the three boilers has been modelled to provide a best estimate of background concentrations. The six drying floors are operated commercially and principally dry products (not waste) for third parties. The materials that are dried comprise of virgin fine chip, logs, woodchip, grain and straw.

The six drying floors have been included within the enlarged permitted area because a small proportion of the material dried is waste, namely animal bedding, destined for the poultry sector. This poultry bedding is derived from non-hazardous waste wood which is dried to reduce the risk

of pathogens within the material. This material is currently a waste and is dispatched and used by farms under Waste Exemptions. The Operator is preparing an end of waste application for the bedding material which is dried given it is of very high quality and meets the specification of the end user prior to drying it is considered to be an opportune material to be marketed as a product. Given the material could be dried in any one of the 6 available bays the activity has been included within the permit application as 'Drying of wood products within 6 No. dedicated drying bays'. This is included in Table 1 of the Non-technical Summary and referred to in Part C4 Question 1a.

The tonnages of all materials dried waste and non-waste are recorded. Annual tonnage figures show that 18.7% of the material dried on the drying floors is waste material compared to 81.7% being non-waste materials.

It is asserted that whilst the heat from the boilers is used to dry waste material, this is a small proportion of the overall heat use from the boilers and as such, the boilers are not a Directly Associated Activity to the waste activity in that they do not meet part 2A (ii) of the limb test in RGN 2[1] which states:

"A2.19. In summary, criterion (2A) has two requirements: (i) the activity must serve the STU; and (ii) where the activity also serves another industrial unit or units, the STU must be the principal user of the activity."

2. *Provide and clarify the interaction between the waste operation and waste exemptions registered under WEX459253. Are these waste exemptions using waste from the waste operation process.*

Exemptions held at Mill Farm

Previously the recycling and farming operations at Mill Farm were integrated under one company Partnership. The Mill Farm Partnership previously held the following Exemptions:

T5 – Screening and blending waste

T6 – Treating waste wood and plant material

T4- Storing and treatment

T10- sorting waste for recovery

S1 - Storing waste in secure containers

S2 – Storing waste at a secure site

The permit variation application seeks to ensure that all onsite activities listed above are correctly captured under the Site based permit.

Mill Farm continues to operate as a separate farming entity and has therefore re-registered on 22/06/2025 under Registration Number WEX459253 the following Exemptions to be carried out on the farm not within the permit boundary:

D1 – Deposit of waste from inland waterways

U1 – Use of waste in construction

[1] https://www.gov.uk/government/publications/rgn-2-understanding-the-meaning-of-regulated-facility Accessed 13 November 25

U10 – Spreading of waste to benefit agricultural land

U13 – Spreading plant matter to provide benefits

U14 – Incorporating ash into soil

U8 – Using waste for a specified purpose

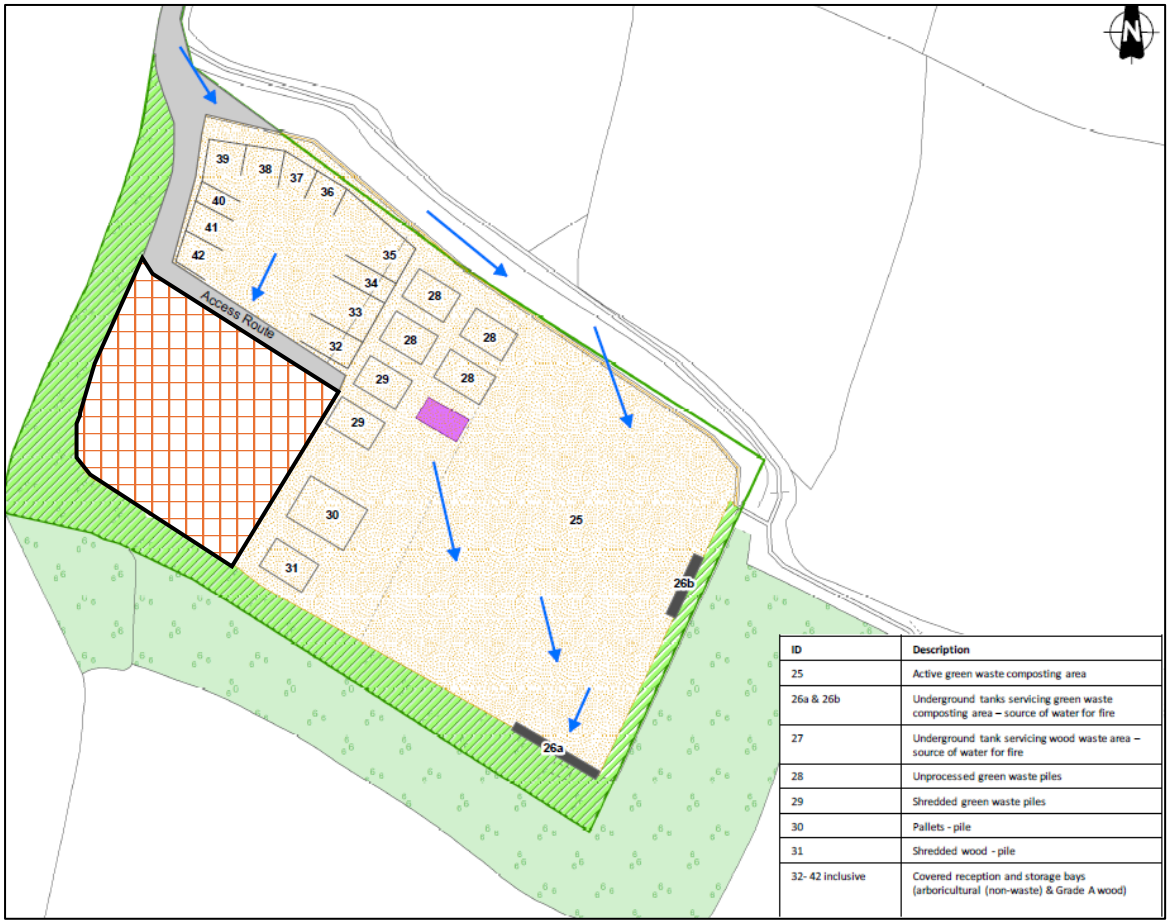
These actions were confirmed following a meeting with the EA Local Area Officer 27/03/2025.

Form C2

3. *Provide clarification on status of impermeable surfacing in place currently and if this is to change.*

We understand that this observation relates to the Surfacing & Drainage Plan - Lower Yard (ETL956 SDP EPR08 V1.0 Page 2 of 2). The concrete area shown on this plan is now completed except for the area shown in hatched orange in the southwest corner of the Lower Yard, as per Figure 1 below. This area is scheduled to be concreted in better weather conditions during 2026.

Figure 1: Area to be concreted during 2026



4. *Air quality assessment has been provided and refers to ADMS modelling and model files. Provide air dispersion modelling data input files.*

Perhaps the files were not uploaded correctly but hopefully will now be accessible on the link provided. Please refer to file references:

- An Air Quality Impact Assessment (AQIA) (ETL956_AQIA_V1.1_Mill Farm_July25); and
- The AQIA model files.

Form C4

5. *Provide assessment of the waste operation against appropriate measures non-hazardous and inert waste, demonstrating how these measures are met. Provide documents MIL-OD-01 EMS Manual V6, MIL-SOP-02, MIL-SOP-06 and MIL-OD-19.*

MIL-OD-01 EMS Manual V6 was submitted as part of the permit variation application 'EPRXP3198EF V006 Mill Farm Recycling Normal Variation July 2025'

The Wood Waste Acceptance & Rejection Procedure (MIL-SOP-02), Spillage Procedure (MIL-SOP-06) and Waste Minimisation Plan (MIL-OD-19) have been developed, and final versions have been submitted as supporting documents to this response.

6. *Provide paragraph in NTS or within appropriate measures assessment regarding the dust extraction systems. How they work, why they are effective and the best technique to use for this operation.*

Dust extraction

In accordance with Appropriate Measures 6.2[2], the HASS dust filtration system incorporates a fabric filter to remove dust.

Section 2.3 of the submitted Dust & Emissions Management Plan (MIL-OD-10), V1.0, July 2025 includes a description as follows:

Control of Emissions from the Wood Processing Buildings

The wood treatment equipment housed within the 2 No. wood processing buildings were manufactured by HAAS and supplied by a UK based company CRJ Services Ltd (CRJ). The Operator has a contract with CRJ who carry out annual inspection and maintenance of the HAAS wood treatment equipment including the dust abatement plants. They also provide a call out service should there be any mechanical failures that the Operator is unable to rectify. Critical spares are kept on site, such that the downtime of machinery is limited.

[2] https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities

The wood processing equipment is enclosed and within buildings. The doors to the buildings are only opened to allow ingress and egress of vehicles. When the doors are open the building is under negative pressure to reduce dust emissions from the door openings.

Milling Hall

There is a dedicated dust extraction unit on the Milling Hall Building, which can treat up to 27,000m³/h of air from the building. There is a single point source emission from this extraction unit at 12m high. The maximum dust concentration as specified by HAAS who manufactured and installed the extraction unit as 3mg/m³.

Bedding Plant

The building containing the bedding plant equipment also benefits from a dust extraction system which can treat up to 15,000m³/h of air. There is a single point source emission from this extraction unit at 6.7m high; the outlet is directed downwards via a curved section. The maximum dust concentration as specified by HAAS who manufactured and installed the extraction unit as 5mg/m³.

Further detail on the dust extraction system is shown below and will be replicated under 'Control of Emissions to Air' in an updated version of the Non-technical Summary[3].

The basic layout of both baghouse filter systems is shown in Figure 1 below:

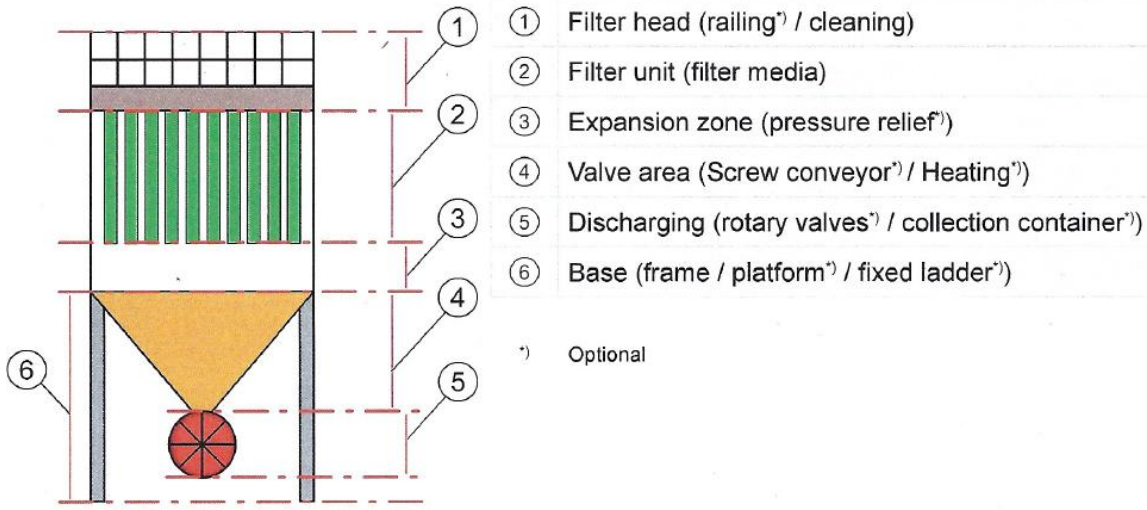


Fig. 4-1: Functional units of a baghouse filter system (schematic)

Note the filters systems installed both have the following features:

- Valve area - hopper with a screw conveyor
- Discharging area - rotary valves.

The detailed specifications of the 2 No. filter systems are detailed in Table 1 below:

[3] Non-technical Summary, V1.1, Earthcare Technical Limited, Nov 25 (ETL956 MIL V006 NTS V1.1 Nov 25)

Table 1: Filter system specifications

Filter system	**Maximum air volume for treatment (m^3/h)**	**Filter surface area (m^2)**	**Air-to-cloth ratio ($m^3/m^2/h$)**	**No. of filter bags**	**Length of bag filters (mm)**	**Filter media specification**	**Cleaning system**	**Height of discharge point (m)**	**Maximum dust concentration (mg/m^3)**
Milling Hall	27,000	243	111	121	4,000	Polyester Needle Felt (PE/NF) 550g/m^2	RECO JET system	12	3
Bedding Plant	15,000	150.8	150	100	3,000	PE/NF 500g/m^2	RECO JET system	6.7	5

There is a fan which exhausts filtered air to atmosphere from the duct which rises vertically to roof ridge level. The duct incorporates an attenuator.

The fabric filters undergo cleaning using JET cleaning technology which allows for continuous operation of the abatement systems. A pressure difference monitor is integrated into every JET system. It monitors the pressure difference between the raw and pure gas side of the filter thus determining whether cleaning of the filters is required.

During JET cleaning, cleaning impulses are triggered by pressure differences by a controller in the compressed air container sector. The compressed air blasts through the filter bag from the inside to the outside and, for a short time, puts it under pressure. This means for a short time it is inflated; the direction of flow is inverted and the caked dust clinging to the bag is freed and falls into a dust collection container.

In addition, there is a system timed to shake the filters every 5 minutes thus optimising the release of dust from the filters into the collection system.

The filter bags have snap rings at the upper end that are clicked into the perforated filter plates. The filter bags are stabilised by support cages that are fitted as standard.

The Maintenance Plan (Appendix A) applicable to both systems comprises checks with frequency ranging from daily to yearly. The majority of the maintenance tasks are carried out in house by trained personnel. However, there is also an annual full inspection of the system which is carried out by CRJ Limited who installed the equipment. Note the manufacturers are R & R Beth.

7. *Explain how you will manage the following waste codes EWC 02 01 03, 03 01 05 (particle board included) and 20 02 01 and what you expect coming in with these codes. These codes can contain more than non-hazardous wood.*

Please refer to the Wood Waste Acceptance & Rejection Procedure (MIL-SOP-02) included as an additional supporting document which details that:

Acceptable materials for the Wood Waste Operation are Grade A wood only, namely:

- *Packaging waste, scrap pallets, packing cases and cable drums.*
- *Process off cuts from the manufacture of virgin/sawn timber and untreated board products.*

A load must be rejected if it is found to include any treated wood namely:

- *External cladding*
- *Barge Boards, Fascias and Soffits*
- *External joinery*
- *External doors*
- *Decking*
- *Fence posts and panels*
- *Domestic furniture made from solid wood.*
- *Chipboard, MDF, Plywood*
- *Flat pack furniture made from board products*

- *Agricultural fencing*
- *Telegraph poles*
- *Railway sleepers*

EWC 02 01 03 & EWC 20 02 01 may be oversized virgin timber from the green waste composting operation.

EWC 03 01 05 may be process off cuts from the manufacture of virgin/sawn timber and untreated board products.

8. *Confirm if your compost meets specifications for end of waste criteria as per compost from waste: resource framework*

It can be confirmed that the compost produced by Mill Farm Recycling Limited in accordance with Environmental Permit ref EPR/XP3198EF/V003 complies with the requirements of the end of waste criteria as per the Compost from Waste: resource framework (CRF),[4] including all requirements additional to those set out in the previous Compost Quality Protocol. The Scheme documents have been updated accordingly. Particularly with respect to the pertinent changes from the Compost Quality Protocol, in Section 3.1 of the CRF:

- There is a contract of supply in place with Sustainable Woodchip Limited for the total tonnage of compost produced circa 6,000 tonnes per annum.
- Compost may be stored for up to 6 months, but this is rare.

And with regards to 5.3. Spreading to land: compliance with nutrient management plans when compost is supplied to agriculture the Contract of Supply agreements have been updated to state:

- t*hey must have a nutrient management plan (NMP) before use*
- *they must apply compost in line with the NMP, along with any other organic manures and manufactured fertilisers, at rates that do not exceed soil and crop need*
- *they are responsible for following their NMP – if they do not do this, the Environment Agency may take enforcement action*
- *where there is no soil and crop need for compost, it is considered waste and they must follow waste management controls*

[4] https://www.gov.uk/guidance/compost-from-waste-resource-framework Accessed 13 November 2025

Appendix A - Maintenance Plan for Dust Abatement Systems

Maintenance plan

HAAS

Auftragsnummer: 23203860

Date: 07.11.23

Plant component/ designation	Short discription of the overhaul	Personnel	Maintenance cycle	Unit of the maintenance cycle
Plant combination RTFAE440S-JET-FS				
PLANT COMBINATION				
Complete system	Check for leakages in the system and function of the system	Qualified personnel trained by the operator	1x	Daily
Complete system	Full inspection of the system	R&R-Service personnel	1x	Yearly
FILTER				
Filter unit	Check the pressure difference between pure and raw gas	Qualified personnel trained by the operator	1x	Weekly
Filter unit	Check the pure gas area for dust deposits and damages on the bags	Qualified personnel trained by the operator	1x	Monthly
Filter unit	Use the level limit switch to control the product discharge with regard to backlog or bridging	Qualified personnel trained by the operator	1x	Daily
Filter media	Check for blockages, damages and tight fit	Qualified personnel trained by the operator	2x	Monthly
Rupture discs	Visual inspection of general condition, damages and rust	Qualified personnel trained by the operator	1x	Yearly
Pipe fastening / pipe connention	Visual inspection of general condition and damages	Qualified personnel trained by the operator	1x	Weekly
SCREW CONVEYOR				
Screw conveyor complete	Check the sub-assenbly for external damages, leaks and function	Qualified personnel trained by the operator	1x	Daily
Screw conveyor complete	Complete overhaul	R&R-Service personnel	1x	Yearly
screw conveyor helix housing / helix	Inspect the sub-assemblies for wear and damages	Qualified personnel trained by the operator	1x	Monthly
Interior sub-assemblies with dust contact	Inspect all components for dust deposits and caked material (clean if necessary)	Qualified personnel trained by the operator	1x	Monthly
Flange bearing	Check the sub-assenbly for quiet running, wear and signs of overheating	Qualified personnel trained by the operator	4x	Yearly
Gear motor	Check for oil and oil level, running noises, room of move; visual inspection for leaks; visual inspection of the electrostatic sprocket.	Qualified personnel trained by the operator	2x	Yearly
Gear motor	Touch up or renew anticorrosive paint.	Qualified personnel trained by the operator	depending on external factors	
Gear motor	Change the rotary shaft seal.	Qualified personnel trained by the operator	2x	Yearly
ROTARY VALVE				
Rotary valve complete	Check the sub-assenbly for external damages, leaks and function	Qualified personnel trained by the operator	1x	Daily
Rotary valve complete	Full inspection and re-greasing the flange bearings	R&R-Service personnel	1x	Yearly
Rubber sealing lips	In the event of wear replace the rubber seal lips	Qualified personnel trained by the operator	1x	Monthly
Cell wheel housing	Inspect the sub-assemblies for wear and damages	Qualified personnel trained by the operator	1x	Monthly
Rotor	Inspect the sub-assemblies for wear and damages	Qualified personnel trained by the operator	1x	Monthly
Rotor reinforcement	Inspect the sub-assemblies for wear and damages	Qualified personnel trained by the operator	1x	Monthly
Interior sub-assemlies with dust contact	Clean clining material from all components	Qualified personnel trained by the operator	1x	Monthly
Flange bearing	Check the sub-assenbly for quiet running, wear and signs of overheating	Qualified personnel trained by the operator	4x	Yearly
Gear motor	Check for oil and oil level, running noises, room of move; visual inspection for leaks; visual inspection of the electrostatic sprocket.	Qualified personnel trained by the operator	2x	Yearly
Gear motor	Touch up or renew anticorrosive paint.	Qualified personnel trained by the operator	depending on external factors	
Gear motor	Change the rotary shaft seal.	Qualified personnel trained by the operator	2x	Yearly