# Mill Farm Recycling Limited

Green Waste Composting Facility and Grade A wood processing

Environmental Management System Manual Version 6

July 2025

| REVISION | DATE | DETAILS |
|---|---|---|
| 01 | | Draft |
| 02 | September 2017 | Submission alongside permit |
| 03 | November 2020 | Updates with latest information |
| 04 | March 2024 | Updates in line with site changes |
| 05 | December 2024 | Updates to add in relevant information as required with removal of T6 exemption from June 2025, relevant information is now included within. |
| 06 | July 2025 | Full review and updated format |

## Abbreviations

| | |
|---|---|
| AD | Anaerobic Digestion/er |
| AQMA | Air Quality Management Area |
| AW | Ancient woodland |
| CQP | Compost Quality Protocol |
| CRF | Compost Resource Framework |
| DAA | Directly Associated Activities |
| EA | Environment Agency |
| EMS | Environmental Management System |
| EPR | Environmental Permitting Regulations |
| ERA | Environmental risk assessment |
| EWC | European Waste Catalogue |
| HACCP | Hazard and Critical Control Point Plan |
| kWthi | Kilowatts of thermal input |
| NOx | Oxides of nitrogen |
| OMP | Odour Management Plan |
| PHI | Priority Habitat Inventory |
| SAC | Special Area of Conservation |
| $SO_2$ | Sulphur dioxide |
| SOP | Standard Operating Procedure |
| SPA | Special Protection Area |
| SR | Standard Rules |
| SSSI | Site of Special Scientific Interest |
| TPA | Tonnes per annum |

## Contents

# 1 Introduction

This Environmental Management System (EMS) Manual covers Mill Farm Recycling Ltd.'s (The Operator) activities carried out under a Bespoke environmental permit, (Ref: EPR/XP3198EF), at Mill Farm, Stone Road, Chebsey, Stafford, ST21 6NX, hereafter referred to as the 'Site'. The Site operates activities associated with green waste composting, the sorting of wood materials, the chipping (shredding) and milling of Grade A wood, the drying of wood materials on drying floors and the storage of waste and the storage and blending of BS3882 soil and compost products.

Condition 1.1.1 of the permit requires the operator to operate the site in accordance with a written Management System. This EMS has been prepared and set out in accordance with contemporary Environment Agency (EA) Environmental Permitting Guidance[1].

The key aims of a site-specific EMS are to identify and minimise risks of pollution including those arising from operations, maintenance, accidents, non-conformances and complaints. An EMS must provide a framework within which to manage the site whilst ensuring that all operations are undertaken in compliance with the Environmental Permit.

The EMS is written with consideration to the site Environmental Risk Assessment (Appendix A) which has been developed to:

- Assess the potential environmental risks from the operations;
- Determine if existing control measures are sufficient; and
- Propose additional control measures where appropriate.

The EMS comprises of a series of 'live' documents to assist and inform daily site operations. This document, the EMS Manual, is an overarching document which links together all the EMS documents including the Emergency Procedure, Odour Management Plan (OMP), Standard Operating Procedures (SOPs), maintenance schedules and forms used for record keeping.

All the EMS documents are listed within the Master Document Control File **(MIL-OD-02)** which is used as a complete reference to all management system documents and includes version numbers and issue dates to ensure document control.

# 1 Environmental Policy

The environmental policy outlines the environmental commitments of the Operator with respect to its overall operations, activities, and environmental performance.

The Environmental Policy **(MIL-OD-03)** is a management system document.

# 2 Organisation & Site Profile

## 2.1 Planning

The original planning permission for the site was issued by Staffordshire County Council (SCC) in 2003 and permitted the import of green waste to produce compost for use on the farm (Ref: S.02/14/467W). In 2005 and 2007 SCC granted extensions to the area of the site and the throughput also permitting use of the compost produced on other farms locally (Ref: S.05/02/467 W) and (Ref: S.07/02/467 W).

Further amendments to the site planning permission were granted by SCC (Refs: S.08/017/467 W & S.09/10/467 W). These related to the open windrow composting operation and the construction of three concrete compost storage pads.

In 2011 a planning application was made to SCC (Ref: S.11/03/467 W) to make temporary permissions permanent in place, to construct an anaerobic digestion (AD) plant and associated infrastructure and for a static screening plant.

On 10th April 2014 SCC granted extant planning permission for the Site (Ref: S.13/22/467 W). The AD plant has not been built and there are no plans to do so.

There is an application in progress with SCC (Ref: 18/12/467 W) for:

- Consolidation of the existing permitted open windrow composting operations including all development permitted by planning permission Ref: S.13/22/467 W but excluding all elements related to AD;
- Removal of steelwork for the partly built AD building;
- Erection of a new building for the operation of a shredder within;
- Construction of a concrete storage area around the shredder building;
- Retrospective planning permission for the importation of wood waste for shredding, composting and milling in the permitted milling building;
- Retention of the existing permitted milling building; and,
- Retrospective planning permission for the addition of a dust extraction unit on the northern side of the milling building.

## 2.2 Permitting

### 2.2.1 Wider Site

In 2017 3 No. biomass boilers were installed on Site for the burning of clean biomass (non-waste wood) to produce heat for the direct heating of farm buildings and drying floors only; there is no associated power generation. Each boiler is 1mW but operated to 500kW. MCPD controls do not apply to MCP using the gaseous products of combustion for direct heating, drying or other treatment of materials.

### 2.2.2 History

In 2005 the Environment Agency (EA) issued Mr. Robert Ainsworth and Mrs. Anne Ainsworth (a partnership) with the original environmental permit for the Site, a bespoke waste operation permit for open windrow composting (reference: EAWML/40264). This permit was superseded in 2008 by EAWML/100313 and the permit number EPR/XP138EF/A001 assigned.

On 25 June 2013 a varied permit was issued (reference: EPR/XP3198EF/V002) which included an additional 12 permitted waste codes for the composting process. On 11 September 2017 a varied and consolidated bespoke installation environmental permit was issued (EPR/XP3198EF/V003) to reflect

the biological waste treatment capacity of over 75 tonnes per day, but which reduced the annual throughput from 75,000 to 45,000 tonnes. This authorises the Operator to operate an open windrow composting facility. The Environment Agency (EA) initiated a review of the permit occasioned by the Waste Treatment BAT Conclusions published on 17 August 2018. A varied and consolidated permit was issued 16/12/2022 (Ref: EPR/XP138EF/V004).

On 27 January 2024 a permit variation application (reference: EPR/XP3198EF/V005) was submitted to the EA by the Operator to incorporate the non-hazardous (Grade A) wood waste treatment activities on site which were previously carried out under a T6 waste exemption.[1] However, changes to the Environmental Permitting (England and Wales) Regulations 2016 (as amended) mean that previously exempt activities at a regulated facility must become permitted activities. This application was not Duly Made.

On 1 July 20205 a permit transfer was issued which changed the legal entity holding the permit from Mr. Robert Ainsworth and Mrs. Anne Ainsworth (a partnership) to Mill Farm Recycling Limited reference EPR/XP3198EF/T006

This revised EMS is part of a new application which encompasses wider Site changes and a revised site permit boundary.

### 2.2.3 Current variation

The current permit variation is to add a waste operation to the permitted activities; there are no proposed changes to the listed activity, composting (S5.4 A (1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment).

It is proposed to add an additional directly associated activity (DAA) to the main listed activity, namely blending PAS100 compost with products e.g. BS3882 topsoil to enrich the compost for use in landscaping projects.

The additional waste activities are the transfer and treatment of non-hazardous waste wood namely:

- Acceptance of non-hazardous waste wood (Grade A wood only)[2]
- Storage of waste wood pending treatment
- Shredding, milling, chipping, screening of wood
- Storage of wood products after treatment
- Drying of wood products utilising heat from on-site biomass boilers
- Dispatch of wood products

The permitted activities and waste types for the wood operation are detailed in Sections 5.3.2 and 5.3.3 respectively.

The variation requires an extension of the permit boundary, and an updated Site Condition Report has been produced. The Site currently receives approximately 20,000 tonnes per annum of Grade A wood, which forms part of the total maximum permitted tonnage of 45,000 tonnes per annum which is reflected in the planning permission and the environmental permit.

[1] https://www.gov.uk/guidance/waste-exemption-t6-treating-waste-wood-and-waste-plant-matter-by-chipping-shredding-cutting-or-pulverising Accessed 30 April 2025

[2] Waste Wood Assessment Guidance for the UK Waste Wood Industry, Wood Recyclers' Association, Version 4, November 2024

## 2.3 Management Overview

The site is operated by Mill Farm Recycling Limited. Both Robert Ainsworth and William Ainsworth manage the Site on a day-to-day basis and are WAMITAB qualified to act as Technically Competent Manager (TCM).

## 2.4 Site Description

| |
|---|
| **Site Address:** Mill Farm, Stone Lane, Chebsey, Stafford, ST21 6NX |
| **National Grid Reference (approx. centre of Site):** SJ 85306 29458 |
| **Local Authorities:** Stafford Borough Council and Staffordshire County Council |

The Site is situated on Mill Farm, off the B5026 (Stone Road). The Site Location is shown in Figure 1 - Site Location Plan.

The current Site footprint is 4.1 hectares (10.1 acres) in extent. The additional proposed permitted area is 0.8 hectares (1.8 acres) in extent. Subject to the permit variation application, the permitted area will increase to 4.9 hectares (11.9 acres).

## 2.5 Infrastructure

### 2.5.1 General

Site infrastructure serving the green waste and the wood waste operation comprises:

- Site access road with keycard access and CCTV
- Weighbridge
- Site office

### 2.5.2 Green Waste Composting

The site infrastructure for open windrow composting comprises:

- Concrete pad with sealed drainage to 2 No. underground tanks (250m$^3$ & 100m$^3$)
- Specialist green waste shredder
- Specialist compost screening equipment (Komptech)
- Specialist windrow turning equipment

### 2.5.3 Wood Waste Operation

The site infrastructure for wood waste operation comprises:

- Pre-shred (Komptech Crambo 5200)
- 3 No. covered wood chip storage bays
- Main wood processing building:
    - Pre-shred (Komptech Crambo 5200)
    - Plant hopper
    - Conveyor to mill with magnet
    - Mill (Haas HZM1600)
    - Magnets and Eddy Current separator (Wagner ECS2000)
    - Chip screen
    - Product storage bays (3 No. Bays within building)

- 3. No metal skips
- Diesel generator
- Dust extraction unit

- Bedding plant building – wood chip handling system:
  - Hopper
  - Conveyors
  - Hammermill
  - Screen
  - Diesel generator
  - Dust extraction unit
- 6 No. Product storage bays
- 6. No Drying bays
- Impermeable surfacing and sealed drainage:
  - Upper yard - impermeable surfacing, sump, pump and above ground storage tank (1,500m$^3$)
  - Lower yard storage area – impermeable surfacing and underground tank (750m$^3$)

## 2.6 Hours of Operation

The permitted opening hours for the waste management operation including delivery, dispatch, shredding, screening, turning and other processing are limited to;

- 07.00 am – 18.00 pm Monday to Friday; and
- 07.00 am hours – 13.00 pm hours on Saturday.

Limited working activities (i.e. turning and emergency works) and acceptance of green waste from civic amenity sites by Local Authority vehicles can be carried out on Sundays and bank holiday weekends.

No deposit of waste or composting activities will take place outside daylight hours unless adequate artificial lighting is provided in the working area.

## 2.7 Site Security

Site security is based on the following objectives:

- To prevent possible unauthorised access to the site, either by humans or livestock, so far as is practicable; and
- To minimise vandalism to site plant; and
- To reduce the potential for injury outside operational hours.

The site is secured with perimeter fencing. Access to the site is from the B5026 along the site access road which has a locked gate, with access only allowed during opening hours or when one of the site directors enables access. There is a CCTV camera at the weighbridge.

All visitors to the site are required to sign in at the site office on arrival to, and exit from, the site.

The condition of the fencing, gates and building is inspected regularly, and any repairs will be made promptly.

The site shall be kept closed and secure at all times when unattended.

# 3 Site Sensitivities

## 3.1 Geology

The underlying geology is of Stafford Halite Member – Halite stone and mudstone.

The soil type is classified as slightly acid loamy and clayey soils with impeded drainage in the northern section of the Site and slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils in the southern section of the Site.[3] Areas of the site subject to previous development are Made ground and most of the Site is surfaced with impermeable concrete.

## 3.2 Hydrogeology

There are no recorded superficial or bedrock aquifers on site. The groundwater vulnerability is classified as high due to the soluble rock risk. [4]

The site is not within a designated Groundwater Source Protection zone (SPZ) or within a Drinking Water Safeguard Zone (groundwater). There are no boreholes depicted within 250 m of the Site.

## 3.3 Surface Water

The closest watercourse is a tributary of the River Sow which located 285m west of the site. The main River Sow is 390m south of the site which runs from the north of Eccleshall to the west to Little Bridgeford to the south east where it joins the Meece Brook.

The site is within the 'Sow - Brockton Brook to Doxey Brook' Water Body catchment area which was designated under the Water Framework Directive as having moderate ecological status in 2019 and 2022.[5]

The site is not within a Drinking Water Protected Area (surface water) or Drinking Water Safeguard Zone (surface water).

The site is within a Nitrate Vulnerable Zone (NVZ) for surface water; River Trent (source to confluence with Derwent).

## 3.4 Flood Risk

The site is within Flood Zone 1 which means that there is a low probability of flooding from rivers and the sea[6]. There are some areas at risk of surface water flooding within the proposed new permitted area with the highest risk being flooded to 0.1m- 0.3m during a 1 in 1,000-year event. There is a negligible risk of groundwater flooding on site.[7]

## 3.5 Human Receptors

Human receptors within 1 km of the site are captured in Table 1 below and are shown in Figure 5 – Human Receptor Plan.

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[3] https://www.landis.org.uk/soilscapes/ Accessed 24 April 2025
[4] https://magic.defra.gov.uk/MagicMap.html Accessed 24 April 2025
[5] https://environment.data.gov.uk/catchment-planning/WaterBody/GB104028047220 Accessed 24 April 2025
[6] https://flood-map-for-planning.service.gov.uk/ Accessed 24 April 2025
[7] Enviro & Geo Insight Report, GS-WJC-51J-3C4-WH3, Groundsure 02/06/2025

*Table1: Human Receptors within approximately 1 km*

| ID | Receptor name | Type of receptor | Easting | Northing | Distance from site boundary (m) | Direction from site |
|---|---|---|---|---|---|---|
| **H1** | Mill Farm (owned by Operator) | Residential | 385382 | 329571 | 20 | East |
| **H2** | The Vicarage / Vicarage Fields | Residential | 385762 | 329087 | 325 | East south east |
| **H3** | Stokes | Residential | 384875 | 329694 | 370 | West |
| **H4** | The Lodge | Residential | 384815 | 329724 | 435 | West |
| **H5** | The Old Vicarage | Residential | 385866 | 328989 | 460 | East south east |
| **H6** | The Grange | Residential | 384793 | 329746 | 460 | North west |
| **H7** | Oxleasows Farm | Residential and workplace | 385594 | 330087 | 475 | North east |
| **H8** | Hilcote Hall (previously a care home, now flats) | Residential | 384749 | 329697 | 490 | North west |
| **H9** | Keepers Cottage | Residential | 384714 | 329446 | 520 | West |
| **H10** | Chebsey Village | Residential | 385948 | 328836 | 610 | South east |
| **H11** | Mill Court Farm | Residential | 385897 | 328697 | 650 | South east |
| **H12** | Fieldhouse Farm | Residential and workplace | 384633 | 328959 | 720 | South west |
| **H13** | Manor Farm | Residential and workplace | 386230 | 329304 | 745 | East |
| **H14** | The Leas | Residential | 384468 | 329692 | 760 | North west |
| **H15** | Walton Hall Academy | School | 385218 | 328354 | 835 | South west |
| **H16** | Rodgeley Lodge Farm | Residential and workplace | 386413 | 329304 | 930 | East |
| **H17** | Scamnel Farm | Residential and workplace | 386261 | 329938 | 930 | North east |

## 3.6 Ecological Receptors

Ecological receptors within relevant screening distances from the Site as identified in the pre-application Nature and Heritage Conservation Screening Report (Appendix B) provided by the Environment Agency (EA), are detailed in Table 2 below.

The site is not within:

- 500m of a European designated site (within the meaning of Regulation 8 of the Conservation of Habitats and Species Regulations 2017) or a Site of Special Scientific Interest, including candidate or proposed sites or Marine Conservation Zone
- 250m of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat
- 50m of a Local Nature Reserve, Local Wildlife Site, Ancient Woodland or Scheduled Monument
- 50m of a site that has species or habitats of principle importance (as listed in Section 41 of the Natural Environment and Rural Communities Act 2006) that the Environment Agency considers at risk to this activity

*Table 2: Ecological Receptors within Relevant Screening Distances*

| Site / Species name and type | Distance from site boundary (m) | Direction from site |
|---|---|---|
| **Ramsar within 10km** | | |
| Midland Meres and Mosses Phase 2 Ramsar site | 4,750 | West |
| **Local Wildlife Sites within 2km** | | |
| Fieldhouse Dingle | 475 | South west |
| Drumble Wood | 960 | South east |
| Meece Brook | 755 | North east |
| Chebsey Hollow | 1,000 | South east |
| Yelds Rough | 1,665 | East |
| **Ancient Woodland within 2km** | | |
| The Dingle | 760 | South west |
| Drumble Wood | 960 | South east |
| **Protected Species within 2km** | | |
| European Eel migratory route | 390 | South |
| **Protected Habitats within 2km** | | |
| Coastal & Floodplain Grazing Marshes | 400 | South |

A Nature and Heritage Conservation Risk Assessment which considers the impact on these sites from the proposed changes forms Appendix C.

### 3.6.1 Statutory Designated Sites within 10km

There are no statutory designated sites within 2 km of the Site.

The pre-application Nature and Heritage Conservation Screening Report (Appendix B) provided by the Environment Agency (EA) identifies the Midland Meres and Mosses Phase 2 Ramsar site 4.75km to the west of the site as the only Statutory Designated Site within the10km screening distance.

### 3.6.2 Non-statutory Designated Sites

The pre-application Nature and Heritage Conservation Screening Report (Appendix B) identifies:

- 5 No. Local Wildlife Sites within 2km of the Site, the closest being Fieldhouse Dingle 745m to the south west and Meece Brook 755m to the north east.
- 2 No. Ancient Woodland Sites within 2km of the Site; The Dingle 760m south west and Drumble Wood 960m south east.

### 3.6.3 Priority Habitats & Species

There are numerous areas of priority habitat inventory (PHI) deciduous woodland within 2km of the site and an area of PHI Coastal and floodplain grazing marsh 400m to the south associated with the River Sow, which is identified on the maps in Appendix B.

The pre-application Nature and Heritage Conservation Screening Report (Appendix B) identifies that the River Sow 390m to the south of the site at the closest point is a migratory route for the European Eel.

## 3.7 Air Quality Management Areas

There are no Air Quality Management Areas within proximity of the site. [8]

[8] https://uk-air.defra.gov.uk/aqma Accessed 24 April 2025

# 4 Process Description

## 4.1 Waste Acceptance

### 4.1.1 Overview

This section is relevant to both the green waste composting and the wood waste treatment operations on site.

### 4.1.2 Waste Pre- Acceptance

The permitted wastes are restricted to source segregated organic wastes, all of which are well characterised and understood. Waste will only be received at the facility, which is capable of being recycled, to produce a quality soil improver, soil conditioner, topsoil or Grade A wood product.

The pre-waste acceptance controls are contractual agreements with all clients which include a full explanation of waste acceptance criteria and terms and conditions. Prior to receiving waste on site, an appropriate risk assessment will be carried out to determine the potential for any chemical and/or physical contaminants. Where potential risks are identified, the waste producer will be required to provide further information to clarify the nature and composition of the material and identify any additional processing for the waste.

The permitted waste types for the composting operation are detailed in Table 4, Section 5.2.3. The waste types are also listed in the Composting SOP **(MIL-SOP-01)**.

The permitted waste types for the wood waste operation are detailed in Table 6, Section 5.3.2

It is not considered necessary to undertake further pre- acceptance checks for permitted waste streams. This rationale is based on the following:

- There are contractual requirements in place which include criteria for acceptance / rejection of loads delivered.
- All source segregated green waste arises from activities undertaken by local authority, local landscapers and household kerbside collections.
- Source segregated green waste is well known, the characteristics are well established, and variability is low.
- The acceptance of Grade A wood is subject to the Wood Waste Acceptance and Rejection SOP **(MIL-SOP-02)**.
- The Site is certified to PAS100, CQP and the Compost Certification Scheme Rules (Process PR083). The Site operates under the restrictions dictated by the Site certification. This process is carried out in accordance with the Composting SOP **(MIL-SOP-01)**.

### 4.1.3 Waste Acceptance

All carriers of input materials arriving on site will be required to report to the site office and be weighed in on the weighbridge. Waste carrier information, description of waste, waste type, source and quantities will be recorded on the site information system. Only the top ticket is to be issued to the delivery driver.

Once checked in, the driver will be directed to the waste reception area, where a site operator will be available to ensure the carrier tips in the appropriate area for inspection of waste prior to processing.

All waste received at the site shall be visually inspected to confirm that the description and composition conform to the written description and Waste Code on the relevant Duty of Care Transfer Note. This will apply to any other accompanying documentation.

Waste shall only be accepted at the site if it meets the specified acceptance criteria stated in the relevant SOP. The load is to be rejected if it does not conform to the specified waste acceptance criteria in the SOP.

In addition, all waste received is kept separate from and is not covered by or mixed with other waste until it has been confirmed and recorded for acceptance at the site. Large visible physical contaminants may be removed and segregated for appropriate disposal or recovery.

Should the consignment of waste contamination levels exceed those which are stipulated within the Composting SOP **(MIL-SOP-01)** with other waste types, domestic or commercial waste, the load will be rejected. Otherwise, the load (relatively free from contamination) will be discharged in the relevant waste reception area.

The feedstock material will be assessed and any potential processing requirements or waste characteristics (e.g. for green waste excessive moisture, malodorous, etc.) will be noted. The maximum storage period for unprocessed green waste will be 5 days.

### 4.1.4 Waste Rejection

If a vehicle load, upon inspection, is non-compliant with the Environmental Permit and or/ the acceptance criteria in the relevant SOP the following steps will be implemented:

- Waste will be reloaded if found to be unsuitable following tipping or quarantined in an area that is separate from other input loads for collection at a later point;
- Rejected loads will be removed from site and disposed of to an appropriately permitted site within five days;
- Duty of Care Transfer Notes will be maintained;
- A record will be made on the 'Rejected input load form'.
- The Environment Agency shall be informed immediately of all hazardous waste rejected by the site.

### 4.1.5 Waste Tracking

The site operates an information management system that provides records of the types, quantities and sources of waste received at the site; shredding and processing data (temperature, moisture and turning frequency records); and final end product screening and quality characterisation.

Traceability (for the management of compost processing) will be ensured through linking the data recorded on the weighbridge system with manual compost data sheets. Record sheets will hold additional information including feedstock assessment (in particular any feedstock rejections), moisture content, quality and characteristics of compost.

Spare volumes capacity is kept available so that the site can manage the inflow of waste to the site to prevent over capacity at the site.

The quantities of waste received, compost and wood removed from site will be measured using the weighbridge. Electronic records will be maintained of loaded and unloaded weights of each vehicle (in tonnes), together with the nature and composition of each load. The weighbridge will be subject to regular maintenance and calibration checks.

Should the weighbridge fail, then an average estimated net weight for the relevant loads will be used and manual tickets issued. Electronic data will be progressively backed up at the end of each working day. The weighbridge has a manufacturer's manual maintenance requirement.

### 4.1.6 Waste Tonnages

The site currently receives approximately 20,000TPA of Grade A wood and approximately 20,000 TPA

of green waste for composting. The total maximum permitted tonnage is 45,000 TPA which is reflected in the planning permission and the environmental permit.

The site has the capacity to treat 45,000 TPA of waste. Green waste inputs will be affected significantly by the seasons and maximum daily inputs have been set at 455 tonnes, approximately 2.6 times the average daily input. The maximum input rates are expected between April and July.

Approximately 20-25 tonnes of wooden pallets are received on an operational day with about 1,000 pallets per week going back out for reuse.

Approximately 900 tonnes per annum of arboricultural material (virgin wood) is received for use as a non-waste fuel within the biomass boilers or for producing logs which are seasoned for use by drying within the drying bays.

## 4.2 Composting Operation

### 4.2.1 Composting Operation Permitted Activities

The permitted activities and limits of activity carried out as part of the composting operation and as detailed within Table S1.1 of the permit are shown in Table 3 below.

*Table 3: Composting Permitted Activities*

| Activity reference | Activity listed in schedule 1 of the EP Regulations | Description of activities | Limits of activities |
|---|---|---|---|
| **AR1** | S5.4 A(1)(b)(i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment | R3: Recycling/reclamation of organic substances which are not used as solvents | From receipt of waste through to composting and recovery of by-products Composting of waste under aerobic conditions in open systems such as outdoor turned windrows or aerated statis piles on impermeable surface with sealed drainage system. Waste types as per Table S2.2 in permit. |
| **Directly Associated Activity** | | | |
| **AR2** | Storage of waste pending recovery or disposal | R13: Storage of wastes pending the R3 operation (excluding temporary storage, pending collection, on the site where it is produced) | From receipt of waste to dispatch for composting or dispatch off site for recovery and / or disposal. Storage of waste on an impermeable surface with sealed drainage. Waste types as per Table S2.2 in permit. |
| **AR3** | Physical treatment for the purpose of recycling. | R3: Recycling/reclamation of organic substances which are not used as solvents | From receipt of waste to dispatch for composting or dispatch off site for recovery. Pre-treatment of waste prior to composting on an impermeable surface |

| Activity reference | Activity listed in schedule 1 of the EP Regulations | Description of activities | Limits of activities |
|---|---|---|---|
| | | | including shredding and screening.<br>Post-treatment of processed compost on an impermeable surface including screening to remove contraries.<br>Waste types as per Table S2.2 in permit. |
| **AR4** | Compost storage | R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) | From the receipt of processed uncertified compost produced at the facility to dispatch for use off-site.<br>Storage of processed uncertified compost on an impermeable surface. |
| **AR5** | Process water and surface water collection and storage | Collection and storage of compost liquor/ leachate in 3 storage tanks | From the receipt of compost leachate produced at the facility and site surface water to re-use within the facility. |
| **AR6 (proposed)** | Blending of products | Blending of PAS100 compost with products e.g. BS3882 topsoil to enrich the compost for use in landscaping projects. | Blending of products with products. |

### 4.2.2 Composting Operation Waste Types

The waste types permitted for the compost operation, as per Table S2.2 of the environmental permit are shown in Table 4 below.

*Table 4 : Composting Permitted Waste Types*

| Code | Description | Entry type |
|---|---|---|
| **02** | **Wastes From Agriculture, Horticulture, Aquaculture, Forestry, Hunting And Fishing, Food Preparation And Processing** | |
| **02 01** | **wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing** | |
| 02 01 03 | plant-tissue waste | Absolute non-hazardous |
| 02 01 06 | animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site | Absolute non-hazardous |
| 02 01 07 | wastes from forestry | Absolute non-hazardous |
| 02 01 99 | wastes not otherwise specified | Absolute non-hazardous |
| **02 03** | **wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation** | |
| 02 03 04 | materials unsuitable for consumption or processing | Absolute non-hazardous |
| **02 06** | **wastes from the baking and confectionery industry** | |
| 02 06 01 | materials unsuitable for consumption or processing | Absolute non-hazardous |
| **02 07** | **wastes from the production of alcoholic and non- alcoholic beverages (except coffee, tea and cocoa)** | |
| 02 07 01 | wastes from washing, cleaning and mechanical reduction of raw materials | Absolute non-hazardous |
| 02 07 02 | wastes from spirits distillation | Absolute non-hazardous |
| 02 07 04 | materials unsuitable for consumption or processing | Absolute non-hazardous |
| 02 07 99 | wastes not otherwise specified | Absolute non-hazardous |
| **03** | **Wastes From Wood Processing and The Production of Panels and Furniture, Pulp, Paper and Cardboard** | |
| **03 01** | **wastes from wood processing and the production of panels and furniture** | |
| 03 01 01 | waste bark and cork | Absolute non-hazardous |
| 03 01 05 | sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04 | Mirror non-hazardous |

| Code | Description | Entry type |
|---|---|---|
| **03 03** | **wastes from pulp, paper and cardboard production and processing** | |
| 03 03 01 | waste bark and wood | Absolute non-hazardous |
| 03 03 10 | fibre rejects, fibre-, filler- and coating-sludges from mechanical separation | Absolute non-hazardous |
| **04** | **Wastes From the Leather, Fur And Textile Industries** | |
| **04 02** | **wastes from the textile industry** | |
| 04 02 10 | organic matter from natural products (for example grease, wax) | Absolute non-hazardous |
| **15** | Waste Packaging, Absorbents, Wiping Cloths, Filter Materials And Protective Clothing Not Otherwise Specified | |
| **15 01** | packaging (including separately collected municipal packaging waste) | |
| 15 01 01 | paper and cardboard packaging | Absolute non-hazardous |
| 15 01 03 | wooden packaging | Absolute non-hazardous |
| 15 01 05 | composite packaging | Absolute non-hazardous |
| 15 01 09 | textile packaging | Absolute non-hazardous |
| **17** | Construction And Demolition Wastes (Including Excavated Soil From Contaminated Sites) | |
| **17 02** | wood, glass and plastic | |
| 17 02 01 | wood | Mirror non-hazardous |
| **17 05** | **soil (including excavated soil from contaminated sites), stones and dredging spoil** | |
| 17 05 06 | dredging spoil other than those mentioned in 17 05 05 | Mirror non-hazardous |
| **19** | Wastes from Waste Management Facilities, Off-Site Waste Water Treatment Plants and The Preparation Of Water Intended For Human Consumption And Water For Industrial Use | |
| **19 05** | wastes from aerobic treatment of solid wastes | |
| 19 05 01 | non-composted fraction of municipal and similar wastes | Absolute non-hazardous |
| 19 05 03 | non-composted fraction of animal and vegetable waste | Absolute non-hazardous |
| **19 12** | **wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified** | |

| Code | Description | Entry type |
|---|---|---|
| 19 12 01 | paper and cardboard | Absolute non-hazardous |
| 19 12 07 | wood other than that mentioned in 19 12 06 | Mirror non-hazardous |
| **20** | **Municipal Wastes (Household Waste And Similar Commercial, Industrial And Institutional Wastes) Including Separately Collected Fractions** | |
| **20 01** | **separately collected fractions (except 15 01)** | |
| 20 01 38 | wood other than that mentioned in 20 01 37 | Mirror non-hazardous |
| 20 01 99 | other fractions not otherwise specified | Absolute non-hazardous |
| **20 02** | **garden and park wastes (including cemetery waste)** | |
| 20 02 01 | biodegradable waste | Absolute non-hazardous |
| **20 03** | **other municipal wastes** | |
| 20 03 01 | mixed municipal waste | Absolute non-hazardous |
| 20 03 02 | waste from markets | Absolute non-hazardous |

### 4.2.3 Process Description

#### *4.2.3.1 Overview*

The composting operation is Certified to PAS 100, CQP & Scheme Rules and is operated in accordance with a site-specific **Compost Quality Policy and Management system** (CQPMS), Standard Operating Procedures (SOP) and Hazard Analysis Critical Control Point study (HACCP) and processes green waste to produce PAS100 compliant 0 – 10mm Soil conditioner and 0 - 20mm mulch grades. The composting facility provides treatment and recycling of green and wood waste. The soil improvers are used on local agricultural land, and within the horticultural industry as a constituent of growing media, as well as a constituent of BS3382 Topsoil.

The composting process is actively managed with temperature and moisture monitoring continuously through distinct phases:

- Sanitisation – (Approx. 3-4 weeks) Temperature and moisture monitoring carried out once per working day as a minimum (Temperature 55-70°C).
- Stabilisation – (Approx. 2 weeks) Temperature is monitoring carried out once per week to be within 45-70°C.
- Maturation – To meet customer specific stability requirements Temperatures 35-45°C.

The duration of the active composting phases is approximately 5-6 weeks.

Moisture 60-65% at the start of the process and 40-60% during the process. Carbon to nitrogen ratio is maintained between 20:1 and 40:1.

A detailed process description is within the Composting SOP **(MIL-SOP-01)**; a summary is provided below. A Process Flow Diagram providing an overview of site activities is Appendix D.

#### *4.2.3.2 Storage of waste before treatment*

After waste acceptance, the feedstock material will be further assessed and any potential processing requirements or waste characteristics (e.g. excessive moisture, malodorous etc.) will be noted.

Received waste (suitable for composting) will be stored for composting in a stockpile for a maximum of 5 days.

#### *4.2.3.3 Feedstock Preparation*

Any large objects or oversize material (e.g. tree trunks, root stocks) will be removed from the feedstock materials, if appropriate, and stored for processing later or diverted to produce virgin wood biomass. If used as a biomass fuel they are considered non-waste because the material is virgin timber and has certainty of use as fuel.

Large items of Grade A wood waste are diverted to the wood waste operation for treatment (see Section 5.3).

Under normal operating conditions, shredding takes place on a daily basis once sufficient feedstock material has accumulated.

It is important to achieve the correct particle size for an effective composting process. Shredding is minimized prior to batch formation as physical contaminants can then be removed more effectively when of large particle size than if pre-shredded. Some Civic Amenity (CA) feedstock materials will be shredded and formed into windrows. Other kerbside collected feedstock deemed of an acceptable particle size will be blended but not shredded. Should any malodours be generated from the stockpiled feedstock material, shredding and mixing of the material will be carried out without delay and recorded in the site diary.

#### *4.2.3.4 Formation of Windrows & Turning*

The shredded material is formed into windrows. The typical dimensions of the windrow are as stated in the SOP. Windrows will be turned with a windrow turner or where necessary, a loading shovel or 360 digger. The windrows are turned on a regular basis. The turning frequency is determined by the Site Manager with information from the Compost Manager monitoring program but it will be carried out at least once a week.

#### *4.2.3.5 Sanitisation & Stabilisation*

The moisture content of the composting feedstock material is a critical parameter for the sanitisation and stabilisation of organic matter. The typical moisture content range for green waste is likely to be 40-60% (wet weight) depending on seasonal and yearly fluctuations. This has given huge variation in management, to reduce moisture loss through evaporation in dry periods and prolonging activity heat to increase moisture evaporation in prolonged wet periods by increasing windrow size to produce quality material to market.

The moisture content of the composting material in each windrow is assessed by a probe with digital record.

Dirty water collected from the main processing area may be used during batch formation prior to sanitisation.

The sanitisation and stabilisation of composting materials will normally be achieved during open air windrow processing in a minimum period of 6 weeks. Sanitisation is the virtual elimination of pathogenic organisms. In open air windrowing, the required temperatures are generally obtained

throughout much of the composting phase (only when mature do compost temperatures begin to decline). The compost will then be screened and matured for a further 4-6 weeks.

To ensure sanitisation of the composting material, core temperatures will be monitored on a regular basis.

If temperatures fail to reach 60°C the corrective action to raise the windrow temperature will be implemented. This may include increasing the turning frequency of the windrow; increasing its size to reduce the rate of heat loss (thermal buffering); water addition if compost is too dry; and the addition of bulking agent or dry material, if the compost has become too moist.

Following weekly assessments of windrow conditions, any action taken, routine or corrective, will be recorded on monitoring records and in the site diary.

All process monitoring will be undertaken in accordance with the details specified in the SOP and to the limits within this and the HACCP.

#### *4.2.3.6 Maturation*

Stabilised compost may be actively managed through a maturation phase to meet specific client criteria for end use, e.g. use as a constituent of growing media.

#### *4.2.3.7 Screening*

The compost is screened using specialist screening equipment. The screener uses magnets and eddy currents to remove metals; plastics are removed through vacuum extraction and manual separation. Dust is removed by rotary separation. The principal grade of compost produced will be a 0-10mm and 0-20mm product. The oversize fraction will be reused. The screened products will be routinely inspected by a site operator.

#### *4.2.3.8 Storage and blending of compost*

Compost products may be stored in the product storage area for a period of up to 12 months prior to use. Controlled product handling and management will ensure that each batch of compost produced will be located in a specific storage area.

BS3882 topsoil is brought in and blended with PAS100 compost to enrich it for use in landscaping projects to meet specific end user criteria.

## 4.3 Wood Waste Operation

### 4.3.1 Wood Operation Permitted Activities

The wood waste activities are the transfer and treatment of non-hazardous waste wood namely:

- Acceptance of non-hazardous waste wood (Grade A wood only)[9]
- Storage of waste wood pending treatment
- Shredding, milling, chipping, screening of wood
- Storage of wood products after treatment
- Drying of wood products utilising heat from on-site biomass boilers
- Dispatch of wood products

The permitted activities and limits of activities carried out as part of the wood waste operation (not

[9] Waste Wood Assessment Guidance for the UK Waste Wood Industry, Wood Recyclers' Association, Version 4, November 2024

within permit at the time of writing) are shown in Table 5 below.

*Table 5: Proposed Permitted Activities (Wood Waste)*

| Description of activities | Limits of activities |
|---|---|
| R13: Storage of waste pending any of the operations numbered R3<br>R3: Recycling/reclamation of organic substances which are not used as solvents | Storage and pre-shredding of Grade A non-hazardous wood on a concrete surface with sealed drainage.<br>Shredding, milling, chipping and screening of Grade A wood within 2 No. dedicated buildings with dust abatement units.<br>Drying of wood products within 6 No. dedicated drying bays.<br>Storage of wood products on an impermeable surface within a building or within covered bays on an impermeable surface with sealed drainage. |
| D10: incineration on land. | Use of diesel in 2 No. generators to produce electricity for the process. |

### 4.3.2 Wood Operation Waste Types

The proposed waste types for addition to the permit for the wood waste operation are shown in Table 6 below:

*Table 6: Proposed Waste Types (Wood Waste)*

| Waste Code | Description | Entry type |
|---|---|---|
| **02** | **Wastes From Agriculture, Horticulture, Aquaculture, Forestry, Hunting And Fishing, Food Preparation And Processing** | |
| **02 01** | **wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing** | |
| 02 01 03 | plant-tissue waste | Absolute non-hazardous |
| **03** | **Wastes From Wood Processing And The Production Of Panels And Furniture, Pulp, Paper And Cardboard** | |
| **03 01** | **wastes from wood processing and the production of panels and furniture** | |
| 03 01 01 | waste bark and cork | Absolute non-hazardous |
| 03 01 05 | sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04 | Mirror non-hazardous |
| **03 03** | **wastes from pulp, paper and cardboard production and processing** | |
| 03 03 01 | waste bark and wood | Absolute non-hazardous |
| **15** | **Waste Packaging, Absorbents, Wiping Cloths, Filter Materials And Protective Clothing Not Otherwise Specified** | |

| Waste Code | Description | Entry type |
|---|---|---|
| **15 01** | **packaging (including separately collected municipal packaging waste)** | |
| 15 01 03 | wooden packaging | Absolute non-hazardous |
| **17** | **Construction And Demolition Wastes (Including Excavated Soil From Contaminated Sites)** | |
| **17 02** | **wood, glass and plastic** | |
| 17 02 01 | wood | Mirror non-hazardous |
| **19** | **Wastes from Waste Management Facilities, Off-Site Waste Water Treatment Plants and The Preparation Of Water Intended For Human Consumption And Water For Industrial Use** | |
| **19 12** | **wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified** | |
| 19 12 07 | wood other than that mentioned in 19 12 06 | Mirror non-hazardous |
| **20** | **Municipal Wastes (Household Waste And Similar Commercial, Industrial And Institutional Wastes) Including Separately Collected Fractions** | |
| **20 02** | **garden and park wastes (including cemetery waste)** | |
| 20 02 01 | biodegradable waste | Absolute non-hazardous |

### 4.3.3 Process Description

All wood and timber products are weighed into the site across the weigh bridge. Only the top ticket is to be issued to the delivery driver.

The load is checked for contamination of anything that is not timber. If the load is heavily contaminated then the load is rejected, however if only lightly contaminated the contaminants are removed from the load. Grade A wood waste is received and processed to meet end users' specific criteria to produce Animal Bedding for use in poultry and livestock housing.

Whole pallets are inspected for suitability for reuse. 20-25 tonnes of pallets are received on site per week with up to 1,000 pallets a week going off-site for reuse.

Any Grade A wood which would be better recovered through the compost process is identified and sent for preparation by shredding for this purpose.

Grade A wood destined for animal bedding is shredded through the pre shredder. The timber is to then be stored in a clean area of the yard ready to be transported to the mill.

The mill is fed with a suitable loader with a clean bucket. The only material to be fed into the hopper is the pre-shredded timber. The mill hammers and screens are checked for wear once a week.

The three metal skips (two under the magnets and one under the eddy current separator) are checked for fill level every 2 hours that the mill is running. These remove all staples and nails from the material.

The chip screen is separated into three particle sizes so has three screen decks these are checked for

damage every day.

Bays are filled automatically by the plant so before filling the empty bays they should be cleaned out ready for fresh material.

Products are tested regularly and if moisture levels exceed 25% it is placed on a clean empty drying floor. When moisture levels are below 25% it is moved to the product storage bays.

Any lorries used to remove wood products are swept out or cleaned inside before they are loaded. Loading is carried out using a clean bucket on a suitable loader.

A Process Flow Diagram providing an overview of site activities is Appendix D.

### 4.4 Site non-waste activities

Virgin wood is processed to produce a fuel for non-waste wood biomass appliances, including the biomass boilers on site. This material is stored and processed separately. This is not part of the permitted activities on site however, the storage of non-waste wood has been fully considered in terms of fire risk and included within the Fire Prevention Plan **(MIL-OD-07).**

Wood chip products to be used as a fuel are produced to a high standard and certificated by Woodsure for Ofgem.

In accordance with the Waste Wood Assessment Guidance for the UK Waste Wood Industry, Version 4, November 2024 wooden fire doors and clean untreated pallets may be recycled as follows:

- Water damaged/warped wooden fire doors are also received and reused as fire resistant cladding.
- Clean untreated pallets which may be reused following inspection are recycled for reuse.

# 5 Control of Emissions to Water & Land

## 5.1 Overview

See Figure 7 Surfacing & Drainage Plan

All areas within the regulated facility where waste is stored or treated benefit from an impermeable surface with a sealed drainage system. There are no point source emission points to water or ground from any areas that are utilised for the storage and treatment of waste.

The access road to the site facility has been constructed using reinforced C40 concrete and laid to a fall to encourage water run-off and prevent ponding. As shown on the Surfacing and Drainage Plan any water falling on the road is captured within the site drainage systems.

Roof water from buildings is captured via a separate drainage system and routed to the clean water storage lagoon.

## 5.2 Composting Operation

All composting operations are carried out on an impermeable concrete composting pad to prevent or minimise the risks of groundwater and surface water contamination. In addition to the impermeable working surface, site drainage has been designed to control and manage surface water runoff and any leachate that arises from the composting operations.

The main working area of the composting facility has been constructed using reinforced C40 concrete with a nominal depth of 200mm. The concrete hard standing forms an impermeable base for the composting operations, from waste reception to shredding, turning and screening.

The perimeter of the working area for the composting site is effectively contained by having continuous reverse concrete slopes which retain water in the open channel drainage for both rainfall runoff and compost leachate. All drainage water is collected in 2 No. underground tanks for recycling back onto the windrows during batch formation (350m$^3$ of tank storage).

The concrete hard standing has a minimum fall of 1:100, adequate to ensure proper drainage of the slab. The runoff and leachate collected in the underground tanks will be applied to the windrow using a vacuum tanker (15,000L) and rain gun during batch formation. The addition of moisture ensures that adequate moisture levels are maintained in the compost. Clean water from the farm lagoon may be applied during the active composting process. It should be noted that the application rate will be controlled to prevent excessive amounts of moisture being added to the compost. Typically, the moisture content will be maintained between 40-60% (fresh weight).

The chemical composition of the liquid will be monitored on a regular basis and recycled beneficially onto the composting organic wastes. The dissolved oxygen concentrations and the pH of the recycled runoff liquors will be monitored but the regular use of the liquid will prevent low dissolved oxygen levels in the tanks. The conditions of the underground tanks and collection points will be checked on a weekly basis and any defects recorded in the site diary; the tanks will be subject to preventative maintenance.

Runoff and leachate from the composting and the processing area will be monitored against levels within the leachate tanks on a regular basis to ensure sufficient capacity for runoff during heavy rainfall.

The water and leachate management system will ensure that all surplus rainwater and leachate accumulating on the pad will be collected, contained and reused to ultimately improve the final

quality of the compost. As a contingency the leachate can be removed to a suitably permitted facility such as a local AD Plant or spread to land under a mobile plant permit.

In October 2024 Wardell Armstrong were commissioned to carry out an assessment of the condition of the following infrastructure on site:

- 2No. SPEL Tankstor underground leachate tanks taking water and leachate off the concrete pad for composting concrete; 100,000l installed in 2004 and 200,000l installed in 2006 against CIRIA C736[10].
- Concrete pad for the composting operation.

The report concludes that:

- the leachate tanks pose a low risk to pollution due to their location within the clay strata.
- there were signs of disrepair on the concrete slab in trafficked areas but not severe enough to allow the flow of leachate to ground.

The report proposed an ongoing inspection and regime for primary containment which is undertaken.

## 5.3 Wood Waste Operation

Wood waste is received, shredded and stored on a concrete pad to the west of the current composting area. This concrete drains to a 750 $m^3$ underground collection tank. This water may be used for dust suppression within the permitted area or as a water source for the adjacent composting process, which itself has a sealed drainage system.

Except for pre-shredding which is carried out on the concrete pad in the lower yard, wood treatment activities are carried out within the 2 No. dedicated buildings and/or drying bays. Any surface water from the yard areas around the buildings drain to a collection sump from which water is pumped to an above ground water storage tank (1,500$m^3$).

## 5.4 Inspection and Maintenance of Concrete Surfacing

The condition of the concrete slab is inspected weekly and any repairs found necessary will be carried out without undue delay. Drains and gullies are inspected monthly for accumulation of fines, blockages or damage. Any remedial action necessary will be undertaken.

The condition of the open channel drains and collection chambers will be checked and any deterioration in their efficacy investigated and remediated.

## 5.5 Storage of Oils and Chemicals

There is no chemical storage associated with the permitted activities.

Diesel for on-site machinery and generators associated with the permitted activities is stored in 2 No. bunded locked stores as shown on Figure 4 FPP Layout Plan. Spill kits are located in the upper yard as shown on the FPP Layout Plan. All on-site mobile plant carry oil spill kits.

[10] Containment systems for the prevention of pollution Secondary, tertiary and other measures for industrial and commercial premises, CIRIA C736, London 2014

## 5.6 Control of Emissions to Land & Water under Abnormal Operations

The site is checked for any spillages as part of daily checks (Daily Checks **(MIL-RC-01)** and any spillages are cleared up as they happen and in accordance with the Spillage Procedure **(MIL-SOP-06).**

Control of emissions to water and land under abnormal operating conditions are detailed in the Emergency Plan **(MIL-SOP-05)** and associated procedures including the Spillage Procedure **(MIL-SOP-06)**.

# 6 Control of Emissions to Air

## 6.1 Overview

There are 4 No. point source emissions to air associated with the wood waste operation, these are detailed in Table 7 below and their locations shown on the Permit Boundary and Emission Point Plan (Figure 2):

*Table 7: Emission Points to Air*

| Emission point ID | Description | X(m) | Y(m) |
|---|---|---|---|
| A1 | Dust abatement plant for main wood processing building | 385277 | 329627 |
| A2 | Dust abatement plant for bedding plant | 385321 | 329643 |
| A3 | Diesel generator 1 for main wood processing building | 385251 | 329588 |
| A4 | Diesel generator 2 for bedding plant | 385322 | 329641 |

Fugitive emissions to air are controlled in accordance with the measures described in Section 8.4 Control of Dust and the Dust and Emission Plan **(MIL-OD-10).**

## 6.2 Control of Emissions from the Wood Processing Buildings

### 6.2.1 Overview

The 2 No. dust abatement plants are manufactured by HAAS and supplied by a UK based company CRJ Services Ltd.

The dust extraction units are closed units that benefit from a vibration and air injecting system such that they are self-cleaning. They are inspected daily in accordance with:

- Biomass Screening Plant Daily Checks (MIL-RC-02); and
- Bedding Plant Daily Checks (MIL-RC-03).

The Operator has a contract with CJR who carry out annual inspection and maintenance of the HAAS wood treatment equipment and 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.

### 6.2.2 Milling Hall

There is a dedicated dust extraction unit on the Milling Hall Building, which can treat up to 27,000$m^3$/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/$m^3$.

### 6.2.3 Bedding Plant

The building containing the bedding plant equipment also benefits from a dust extraction system

which can treat up to 15,000m$^3$/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/m$^3$.

## 6.3 Control of Emissions from Diesel Generators

The 2 No. diesel generators are inspected and maintained as part of the site wide planned preventative maintenance system. On a daily basis the following are checked and corrective actions taken as required:

- Oil level
- Coolant level
- Pre-heater
- Air filter
- Visual cleanliness
- Fuel facilities in order
- Fuel/ oil spillages

See Biomass Screening Plant Daily Checks **(MIL-RC-02)** & Bedding Plant Daily Checks **(MIL-RC-03)**.

In addition, the Operator has a service and maintenance agreement in place for the generators.

## 6.4 Control of Emissions to Air under Abnormal Operations

Control of emissions to air under abnormal operating conditions are detailed in the Fire Prevention Plan **(MIL-SOP-07).**

# 7 Control of Amenity Impacts

## 7.1 Weather Monitoring

Weather conditions are monitored to inform day to day operations and as a record, particularly for cumulative rainfall over time.

The following weather conditions are monitored and recorded daily in the site office:

- temperature;
- rainfall volume
- description of weather conditions, including any precipitation (drizzle, rain, sleet, hail, snow); and
- wind direction

## 7.2 Odour

### 7.2.1 Overview

Due to the nature of the waste, the wood waste operation doesn't generate odours. The Composting Operation may become a source of odour. Odour management is detailed fully within the Odour Management Plan (OMP) **(MIL-OD-06)**.

### 7.2.2 Sources & Control Measures

Green waste is processed methodically using a first in first out principle unless waste is showing signs of biodegrading upon receipt when the operational decision may be made to process this waste first to reduce the odour potential of the operation.

Orientation of windrows to a line with prevailing winds has not been practiced due to the initial build of the site. The fall of the concrete slab was designed considering the site's natural topography which is not aligned with the prevailing wind direction. The site is protected from prevailing winds by the 4m high bund around the Site's perimeter.

Under normal operational conditions, compost typically produces an earthy, musty odour akin to soil-based compost products. Malodours from composting are not common but where they are present, they usually arise from inadequate site management or poor process understanding. Feedstock materials, if not handled and processed appropriately, may become anaerobic and generate malodors associated with sulphides and organic acids. Malodorous waste may be treated effectively with further processing, material blending and improved structural integrity.

Appropriate measures will be maintained throughout the operational phase of composting to prevent or minimise any potential nuisance from malodours arising from the composting process. The facility is operated in accordance with BSI PAS 100:2018. This regime further reduces the risk of malodor formation.

A perimeter atomizing system has been installed to mechanically aid suppression of dust and odour but due to optimum process control it has not needed to be used.

### 7.2.3 Monitoring

The site is inspected daily as part of the Daily Checks **(MIL-RC-01**) to check for the presence of any malodours emanating from the site. In the event of any malodours being detected, a corrective action plan is implemented immediately in accordance with the OMP.

## 7.3 Noise

### 7.3.1 Sources & Control Measures

The potential sources of noise from the site operations and control measures are shown in Table 8 below:

*Table 8: Potential sources of noise and control measures*

| Source of noise | Control measures |
|---|---|
| Vehicles delivering waste to the Site and collecting wood, compost or topsoil products | • The number of HGVs entering the Site are regulated in accordance with condition 31 of the extant planning permission.<br>• There is an enforced site speed limit of 10 miles per hour. |
| Mobile plant moving around the Site e.g. compost turner, 360 excavator for turning, loader with bucket, loading or unloading the drying floors | • There is an enforced site speed limit of 10 miles per hour.<br>• All vehicles used at the Site are maintained in good efficient working order.<br>• Mobile plant on site have an Eco setting with automatic switch off.<br>• The mobile plant is fitted with reversing bleepers, which automatically adjust relative to ambient noise levels in order to minimise this intermittent noise emission.<br>• All equipment used at the site is silenced to manufacturer's recommendations. |
| The wood milling equipment | • Enclosure of noisy equipment within 2 No. buildings which are kept with their doors shut unless vehicles are entering or leaving<br>• Planned preventative maintenance for all equipment including the shredder etc. which are potential sources of noise emissions.<br>• All equipment used at the site is silenced to manufacturer's recommendations. |
| Fixed plant for composting operation | • Planned preventative maintenance for all fixed equipment used at the site (e.g. screener)<br>• The screen is housed in an open sided building<br>• All equipment used at the site is silenced to manufacturer's recommendations. |

The drying floors themselves are not a significant source of noise.

### 7.3.2 Monitoring

Condition 34 of the Planning Consent imposes a requirement to undertake annual noise monitoring. In 2011 noise testing was undertaken in line with the planning approval over a 5-year period. From 2016 it was agreed with Stafford Borough Council that given the planning approval requirement had not been breached in over 10 years that noise monitoring would only be required on an as needed basis. For example, after a noise complaint.

Noise is monitored daily; Daily Checks **(MIL-RC-01)**. If noise emissions are detected off-site then corrective actions will be taken as soon as possible and, if required, a Noise Management Plan will be developed, submitted to the EA and implemented.

Sharps Redmore undertook a Sound Level Assessment to inform the most recent site planning application to Staffordshire County Council. The assessment encompassed the following equipment:

- Dust Extraction Fan
- Milling Hall Plant

- Tractor and trailer movements
- Shredder building

Within the context of previously submitted noise assessments for the Site and existing noise limits it was agreed that a noise limit from the site attributable noise of 45dB $_{LAeq,}$ would be appropriate and corresponds to the Site's existing noise limit.

## 7.4 Dust

### 7.4.1 Sources & Control Measures

The potential sources of dust from the site operations and control measures are shown in Table 9 below:

*Table 9: Potential sources of dust and control measures*

| Source of dust | Control measures |
|---|---|
| **Operational surfaces through vehicle movements** | • Concrete access road, turning and processing areas<br>• Checking and removal of debris / spillages of waste<br>• In dry spells, the access roads and processing area may be sprayed using a vacuum tanker<br>• Site speed limit (10 miles per hour) |
| **The deposit, mechanical sorting, transfer, loading, turning of non - hazardous organic wastes** | • Screening by earth bunds and woodland<br>• In dry spells, the access roads and processing area may be sprayed using a vacuum tanker |
| **Turning /shredding /screening operations** | • Screening by earth bunds and woodland<br>• Control of moisture content of compost 40-60% moisture |
| **Wood waste milling** | • This is carried out within buildings which benefit from dust abatement<br>• The doors are kept shut when not in use |
| **Drying floors** | • Wood being dried is static within the drying bays and loaded carefully to abate dust. |
| **Animal bedding** | • Stored within enclosed buildings and transferred via elevators internally to the building from the milling/screening equipment. |
| **Loading of compost and A grade wood products** | • Concrete loading areas<br>• Screening by buildings<br>• Minimise drop height into lorry trailer.<br>• Transported by covered/sheeted trailer |
| **Stockpiles** | • Screening by earth bunds and woodland<br>• Storage of dried wood products in roofed bays and buildings. |

### 7.4.2 Monitoring

Dust is monitored daily; Daily Checks (**MIL-RC-01).** This frequency will be increased in dry conditions.

If dust is detected, then the yard and / or access road will be dampened down using a hose. Dust will then be monitored for again and further dampening down will be carried out as necessary. If dampening down is not found to be effective the operation creating dust will be temporarily halted until effective corrective action has been taken.

All of these control measures can be found in the Dust and Emissions Management Plan (DEMP) (**MIL-OD-10**). Staff training will be provided on the DEMP. The DEMP and proposed control measures will be revised and improved if required.

## 7.5 Bioaerosols

### 7.5.1 Sources & Control Measures

Shredding, windrow turning and screening are regular operational activities which have the greatest potential to generate airborne particles or bioaerosols.

Windrow composting operations have been designed to minimise dust and bioaerosol emissions. Control measures may include maintaining appropriate moisture levels in the compost and adequate aeration with regular turning frequency.

Wood accepted is not mouldy or decaying.

Redmore Environmental Ltd have completed a Site-Specific Bioaerosol Risk Assessment[11] in support of this application for the Mill Farm Recycling Ltd facility. This establishes the likely sources of bioaerosols arising from operations at the site and assesses the potential for significant risk of impact at sensitive locations due to emissions using a source - pathway - receptor approach in accordance with Environment Agency guidance.

The results of the assessment indicate that the residual risk from all sources associated with the facility is low or very low. As such, it is concluded that no further control measures, other than those detailed in the assessment, are required in order to reduce the potential for impacts at sensitive locations in the vicinity of the site.

### 7.5.2 Monitoring

The EA regulatory position statement on bioaerosol monitoring at regulated facilities, states that if the facility is over 250m from a residential or workplace receptor, there is no requirement to carry out a site-specific risk assessment or to monitor bioaerosols.

Shredding, windrow turning and screening are regular operational activities which have the greatest potential to generate airborne particles or bioaerosols. Recent monitoring data shows that the migration of any airborne particles generated from the site is unlikely to pose any significant risk.

The operational facility was undertaking monitoring of bioaerosols. This was undertaken by a nominated contractor and more frequently if higher or unexpected concentrations of bioaerosols are recorded.

Bioaerosol monitoring study is undertaken in accordance with the EA Technical guidance note M17 and the AFOR sampling protocol by a competent company.

## 7.6 Litter

Any litter arising will be detected during Daily Checks **(MIL-RC-01)** and cleared up on the same day. All waste will be stored securely and disposed of appropriately. Perimeter litter fencing is in place.

[11] 9659r1 – Bioaerosol Risk Assessment – Mill Farm Recycling, Stafford

### 7.7 Mud

The working surfaces and access roads are constructed from concrete to minimise the accumulation of mud and debris on the wheels and other parts of the waste collection vehicles.

All waste delivered to site will be via public highways and most unlikely to carry either mud or debris to the site.

Should any mud or debris be carried onto or accumulate on the site access road; remedial action may include scraping up with a loading shovel or a road sweeper to clean site roads and working areas.

### 7.8 Pests

Site operations are not typically expected to attract vermin, flies and scavenging birds due to the absence of food waste in the composting process. The operations will be checked on a daily basis as part of the Daily Checks **(MIL-RC-01)** and, if required, a specialist contractor will carry out independent inspections. Should an infestation ever be found, then appropriate pest control measures will be immediately implemented.

The site has a Pest Management Plan **(MIL-OD-09)** which is adhered to.

## 8 Control of Climate Change Impacts

Climate change impacts and mitigation controls are considered in a separate Climate Change Risk Assessment **(MIL-OD-13)**.

# 9 Roles & Responsibilities

## 9.1 Overview

This section of the Manual sets out the management structure of Mill Farm Recycling Limited relevant to site operations along with the roles and responsibilities placed on operational staff. Specific responsibilities are also set out in the accompanying operational procedures.

All members of staff should be clear about their role, responsibilities, and position within the management structure to facilitate effective environmental management. All roles and responsibilities will be reviewed periodically by the Management Team.

Mill Farm Recycling Limited is a limited company and comprises three directors:

- Robert Ainsworth
- Anne Ainsworth
- William Ainsworth

The directors have overall responsibility for the site operation and any associated impacts. They form the Management Team. They operate with a written Environmental Policy statement (section 2).

A Staff Organogram for Operational Staff is a management system document **(MIL-OD-04)**.

## 9.2 Directors

The Directors have overall responsibility for implementation, audit and review of the Management Systems.

The Directors shall ensure that the organisational structure is regularly reviewed and kept updated to reflect any changes in management and staffing within the organisation, and / or as regards external contractors and consultants. Roles and responsibilities will be defined, and a written record will be maintained for inspection.

The Directors have responsibility for the upkeep and maintenance of the various documents concerning the site.

All of the Directors have management roles:

- Robert Ainsworth- Site Manager and Technically Competent Manager
- Anne Ainsworth – Office Manager
- William Ainsworth - Wood Processing Manager and Technically Competent Manager

## 9.3 Technically Competent Manager

Robert Ainsworth and William Ainsworth are the two Technically Competent Managers (TCM's). They have both obtained the appropriate WAMITAB qualification:

- Non- hazardous transfer / with or without treatment (4TSMNH6 Treatment) –
- OCC6-725 Aerobic Composting (AC).
- Continuing competence certificates

William Ainsworth has also achieved the following qualification:

- Composting biodegradable wastes – open windrow (4MBT0W6)

The site is supervised by the TCM for at least 20% of every week (week is equivalent to 48 hours) during the hours of operation. The TCM will sign /out of the site diary each time he attends site.

Additionally, during operational hours, the composting facility will be directly manned by at least one operative and indirectly manned by staff employed to operate the weighbridge and site office. The site manager and operators will be appropriately trained and will be conversant with the requirements of the Permit and the MS including:

- waste acceptance and control procedures;
- operational controls and environmental monitoring;
- site maintenance (site inspection checklist);
- record keeping;
- emergency action plans; and
- notification to the Environment Agency. The role of the Technically Competent Manager is fulfilled by the Plant Manager. The Technically Competent Manager has the responsibility for:
    - Maintaining technical competence including Continuing Competence assessments;
    - Ensuring that operations at the site comply with all relevant environmental and health and safety legislation and where possible relevant guidance; and
    - Recording attendance hours on site.

## 9.4 Site Operatives

Site Operatives are responsible for:

- Being fully aware of the EMS to ensure that procedures and controls are upheld and understand and reduce the environmental impact of the organisation's activities.
- Obtaining and maintaining the necessary the professional skills, training and/or experience to deal with all issues relevant to their role in the facility; and
- Fulfilling the specific role requirements of individual procedures and reporting to the **Site Manager**.

# 10 Implementation & Operation

## 10.1 Overview

This section of the EMS Manual outlines the procedures and processes for identifying and delivering training requirements, communications, emergency preparedness and response, operation controls and documentation in relation to the EMS.

## 10.2 Document & Record Control

### 10.2.1 Overview

The Operator is committed to maintaining document and record controls to provide an audit trail of evidence in support of the company's activities.

### 10.2.2 Control of Documents

The EMS requires that all documents are clearly identifiable and traceable through their version history, and that only the current versions of documents are in circulation throughout the company. The Operator will ensure that documents are appropriately organised, stored and archived in a place (physical or electronic) that is easily accessible to staff who may need to consult or edit documents.

The internally produced documentation associated with the EMS is presented in a consistent format including:

- Title of document
- Document reference in the format MIL-YYY-NN where:
    - YYY is:
        - OD denoting an Overarching Document for example a management plan
        - SOP is a Standard Operating Procedure
        - FT is a Standard form template used in relation to the management system and associated procedures
    - NN is a unique number to identify the document.
- Document author / name of person who issued the document
- Version number
- Date of issue

To prevent the loss of documents the Operator uses cloud-based systems which are protected and backed up.

The status of all management system documents is recorded within the Master Document Control File **(MIL-OD-02).**

### 10.2.3 Control of Records

*10.2.3.1 Overview*

The site diary, duty of care notes and other environmental information will be securely maintained at the site office.

All electronic data including weighbridge data, weather station information and other site records will be backed up on a cloud-based system.

All records shall be completed as follows:

- Be legible.
- Be made as soon as reasonably practicable.
- If amended, be amended in such a way that the original and any subsequent amendments remain legible or are capable of retrieval; and
- Be retained, unless otherwise agreed in writing by the EA, for at least 6 years from the date the records were made.

All records shall be completed within 24 hours of the event

Records are maintained to provide evidence of conformity with the requirements of the EMS (and wider management system). The records are listed on the Master Document Control File **(MIL-OD-02)** using the referencing system in the format MIL-RC-NN where NN is a unique number to identify the document. These are not controlled documents.

Management system records for operational control are listed in Table 10 below.

*Table 10: Management System Records (Operational Controls)*

| Document Reference | Document Title |
|---|---|
| **Form Templates** | |
| MIL-FT-01 | Accident and Incident Report Form |
| MIL-FT-03 | Complaint Record Form |
| MIL-FT-04 | Waste Rejection Form |
| **Management System Records** | |
| MIL-RC-01 | Daily Checks |
| MIL-RC-02 | Biomass Plant Daily Checks |
| MIL-RC-03 | Bedding Plant Daily Checks |
| MIL-RC-04 | Vehicle Daily Inspection Checklist - Loading Shovel |
| MIL-RC-05 | Vehicle Daily Inspection Checklist - Telehandler |
| MIL-RC-06 | Weekly Checks |
| MIL-RC-07 | Site Diary |

*10.2.3.2 Waste Movement Records*

A record will be kept in digital format of all wastes received and of all materials (wastes and recovered materials) removed from the site for recycling.

All Duty of Care Transfer Notes will be kept for a minimum of 2 years in the site office (or other designated centre of administration) in a locked cabinet secure from loss, damage and deterioration.

Hazardous Waste consignment notes (where relevant, as hazardous waste is not accepted onto site) will be kept for a minimum of three years.

Waste accepted by the site, waste rejected by the site and/or dispatched from the site and site diaries shall be kept in the site office for a minimum of 6 years. These will be available for inspection by an authorised person.

A summary record of the waste types accepted and removed from the site shall be made on the Environment Agency form every quarter. This information will be submitted to the Environment Agency within one month following the end of the quarter.

*10.2.3.3 Records of Offsite Environmental Effects*

Records of any offsite environmental effects including pollution incidents that caused or were alleged to have caused, harm or health effects will be kept until the site is surrendered.

*10.2.3.4 Records of Onsite Environmental Effects (Site Condition Reporting)*

Records that relate to the condition of the land and groundwater will be kept until the permit surrender. The initial state of the site is described within the Application Site Condition Report. This is a live document and will be maintained throughout the life of the site. Records will include details on;

- Design , construction, inspection, monitoring and maintenance;
- Failure of pollution prevention control measures;
- Spills and incidents;
- Records of investigations and remedial actions; and
- Records of remedial action in response to non-conformances as noted by an Environment Agency Officer.

*10.2.3.5 Site Diary*

A site diary is safely stored at the site office and made available to the Environment Agency and site staff. Details of the following will be recorded in the Site Diary.

- Names of site staff and times of attendance on site;
- Names and times of technically competent manager on site;
- Any incident of fire;
- Any incident of spillage;
- Any incidents causing pollution to the environment harm to human health or detriment to the amenities of the locality;
- Any machinery breakdown;
- Any incidents of litter, dust, pest, odour and noise problems.
- Condition, repair or remedial work related to:
    - Fencing and gates;
    - Site identification boards;
    - Site office;
    - Site roads and hardstanding areas;
    - Quarantine area;
    - Weighbridge;
    - Drainage system;
    - Buildings.

## 10.3 Competence, Training & Awareness

The Operator will ensure all people performing tasks for the organisation or on its behalf, whose work may have a significant impact on the environment, are competent based on appropriate education, training and/or experience, and will retain associated records.

The Operator has established and implemented procedures to identify the training needs associated with the EMS, the operation of the site and the retention of staff competencies.

It is essential that all staff are fully aware of the EMS to ensure that procedures and controls are upheld. All new staff will receive appropriate training using the environmental permit for the site and the EMS including documented procedures to understand and reduce the environmental impact of the organisation's activities.

All formal training and Toolbox Talks received will be logged in the Training Matrix **(MIL-OD-17)**.

## 10.4 Communication

### 10.4.1 Internal & External Communications & Reporting

For internal communication, the **Site Manager** ensures that information regarding the EMS such as the environmental policy, EMS manual, management plans and Standard Operating Procedures (SOPs), including emergency response procedures, are readily available to all relevant employees and contractors.

It is essential that all personnel are fully aware of the EMS to ensure that procedures and controls are upheld. All new employees and contractors receive appropriate training using the EMS documents and procedures to understand and reduce the environmental impact of the organisation's activities.

For external communication, the Environmental Policy **(MIL-OD-03)** will be made available upon request. The Operator seeks to proactively communicate with its external stakeholders about its EMS.

### 10.4.2 Complaints

The Operator is committed to ongoing engagement with the local community. If any activity is scheduled, which may have a negative impact on the local community, then neighbours will be contacted to communicate plans with as much notice as possible. There is a Site Notice Board in place to include contact details for during and outside of office hours for Mill Farm Recycling Limited and the Environment Agency.

All complaints will be fully investigated within 2 working days. Action will be taken to rectify the situation as necessary and as soon as possible and to let the complainant know what this action has been. This will all be recorded on a Complaints Record Form **(MIL-FT-03)**, the completed forms will be held in the Site Office.

## 10.5 Operational Controls & Emergency Response

### 10.5.1 Operational Controls

The Operator has established and implemented operational controls relevant to the operational processes and the organisation's significant environmental risks.

The management system documents relevant to operational control are Overarching Documents (ODs), including the Environmental Policy and overarching management plans, Standard Operating Procedures (SOPs) and the forms associated with the SOPs (Form templates).

The operational controls will be adhered to, by all employees and personnel working for or on behalf of the organisation. The Operator therefore ensures that all relevant management system documents are communicated to the personnel to whom they apply.

Management system documents are reviewed at planned intervals as stated within with the Master Document Control File **(MIL-OD-02)** and revised when necessary.

Table 11 below lists management system documents relevant to operational control. Further Standard Operating Procedures are under development. The Master Document Control File **(MIL-OD-02)** serves as a complete list of management system documents at any one time:

*Table 11: Management System Documents (Operational Controls)*

| Document Reference | Document Title |
|---|---|
| **Overarching Documents** | |
| MIL-OD-01 | Environmental Management System Manual *(this document)* |
| MIL-OD-02 | Master Document Control File |
| MIL-OD-03 | Environmental Policy |
| MIL-OD-06 | Odour Management Plan |
| MIL-OD-07 | Fire Prevention Plan |
| MIL-OD-08 | Staff Organogram |
| MIL-OD-09 | Pest Management Plan |
| MIL-OD-10 | Dust and Emissions Management Plan |
| MIL-OD-11 | Compost Hazard and Critical Control Point Plan |
| MIL-OD-12 | Bioaerosol Risk Assessment |
| MIL-OD-13 | Climate Change Risk Assessment |
| MIL-OD-14 | Site Decommissioning Plan |
| MIL-OD-15 | Site Condition Report |
| MIL-OD-16 | Fire Risk Assessment |
| MIL-OD-17 | Training Matrix |
| MIL-OD-18 | Contingency Plan |
| MIL-OD-19 | Waste Minimisation Plan |
| **Standard Operating Procedures** | |
| MIL-SOP-01 | Composting SOP |
| MIL-SOP-02 | Wood Waste Acceptance & Rejection SOP |
| MIL-SOP-03 | Wood Waste SOP |
| MIL-SOP-05 | Emergency Procedure |
| MIL-SOP-06 | Spillage Procedure |
| **Form Templates** | |
| MIL-FT-01 | Accident and Incident Report Form |
| MIL-FT-03 | Complaint Record Form |
| MIL-FT-04 | Waste Rejection Form |
| **Management System Records** | |
| MIL-RC-01 | Daily Checks |
| MIL-RC-02 | Biomass Plant Daily Checks |
| MIL-RC-03 | Bedding Plant Daily Checks |

| Document Reference | Document Title |
|---|---|
| MIL-RC-04 | Vehicle Daily Inspection Checklist - Loading Shovel |
| MIL-RC-05 | Vehicle Daily Inspection Checklist - Telehandler |
| MIL-RC-06 | Weekly Checks |
| MIL-RC-07 | Site Diary |

### 10.5.2 Emergency Preparedness & Response

The Operator has established and implemented emergency procedures relevant to the operational processes and the organisation's significant environmental risks.

Emergency response procedures will always be adhered to by all employees and personnel working for and on behalf of the organisation. The Operator therefore ensures that all emergency response procedures are communicated to personnel to whom they apply. Emergency response procedures are reviewed at planned intervals as stated within with the Master Document Control File **(MIL-OD-02)** and revised when necessary.

Table 12 below lists the Management System documents relating to Emergency Response that have been implemented.

*Table 12: Management System Documents (Emergency Response)*

| Document Reference | Document Title |
|---|---|
| **Overarching Documents** | |
| MIL-OD-06 | Odour Management Plan |
| MIL-OD-07 | Fire Prevention Plan |
| MIL-OD-06 | Dust and Emissions Management Plan |
| MIL-OD-18 | Contingency Plan |
| **Standard Operating Procedures** | |
| MIL-SOP-05 | Emergency Procedure |
| MIL-SOP-06 | Spillage Procedure |
| **Form Templates** | |
| MIL-FT-01 | Accident and Incident Report Form |
| MIL-FT-03 | Complaint Record Form |
| MIL-FT-04 | Waste Rejection Form |

# 11 Monitoring

## 11.1 Environmental Monitoring

The Operator monitors on an ongoing basis the environmental performance of the site through environmental monitoring as required to determine environmental performance and control environmental risks, as determined through the Environmental Risk Assessment (Appendix A).

Environmental monitoring procedures will always be adhered to by all employees working for or on behalf of the organisation. The Operator therefore ensures that all environmental monitoring procedures are communicated to personnel to whom they apply. Environmental monitoring schedules and procedures will be reviewed at planned intervals as stated within with the Master Document Control File **(MIL-OD-02)** and revised when necessary.

Table 12 below lists the environmental monitoring procedures and check lists that will be implemented.

*Table 12: Management System Documents (Environmental Monitoring)*

| Document Reference | Document Title |
|---|---|
| **Overarching Documents** | |
| MIL-OD-01 | Environmental Management System Manual (this document) |
| MIL-OD-06 | Odour Management Plan |
| MIL-OD-11 | Compost Hazard and Critical Control Point Plan |
| **Standard Operating Procedures** | |
| MIL-SOP-01 | Composting SOP |
| **Management System Records** | |
| MIL-RC-01 | Daily Checks |
| MIL-RC-06 | Weekly Checks |
| MIL-RC-07 | Site Diary |

## 11.2 Process Monitoring

Process monitoring is carried out in accordance with the following procedures:

- Composting SOP:
  - Temperature
  - Moisture
  - Windrow batch size
  - Carbon to nitrogen ratio
- Wood waste SOP
  - Moisture

Process monitoring is key to ensure a stable composting process, to minimise the risk of abnormal events which may lead to emissions. Process monitoring also enables the Operator to maximise the efficiency of the process.

Process monitoring of the wood waste operation ensures the production of quality wood products to meet customer requirements and ensures the Operator to maximise the efficiency of the process.

Visual checks are also key to monitoring the processes on site and recorded on Daily Checks **(MIL-RC-01)**.

Process monitoring determines appropriate process management. Process monitoring results are reviewed to identify data trends to inform decisions about managing the process. By reviewing trends in the data rather than individual results, changes in the balance of the whole system are more easily identified.

It is the responsibility of the **Site Managers** to look at process monitoring data and make process management decisions in consultation with the other Directors and to record decisions on the Site Diary **(MIL-RC-07)** and readily share with team members in person. Major decisions will also be recorded in weekly operations meetings.

## 11.3 Product Quality Monitoring

### 11.3.1 Compost

The sampling of compost products is carried out to validate the composting process has been carried out correctly and to ensure quality specifications have been met. The quality of the compost is defined in terms of its biological, chemical and physical characteristics in accordance with PAS100:2018 and the CQP. The development and adoption of BSI PAS100:2018 Specification and the CQP End of Waste provides a minimum standard for quality compost generated at the site. Should the compost or mulch produced not meet the requirements to be certified Compost it will be used subject to Environmental Permitting Regulations as a waste. Provision for this is made within the Composting SOP **(MIL-SOP-01)** and the HACCP **(MIL-OD-11**).

BS3882 topsoil is brought in and blended with PAS100 compost to enrich it for use in landscaping projects. The blended product is retested to ensure that the quality standards are met.

All monitoring equipment will be maintained in a functional state through ongoing onsite calibration combined with offsite annual calibration, in agreement with manufacturers' instructions. Maintenance and calibration records (e.g. suitable for use or defective and will be repaired or replaced) will be compiled and held on file.

### 11.3.2 Wood Products

Wood Product sampling for biomass wood chip is undertaken for quality by Woodsure for Ofgem. Other products are determined to reach recycling requirements for reuse stipulated within the SOP for the product e.g. Pallets suitable for reuse.

## 11.4 Inspection & Maintenance of Plant & Equipment

### 11.4.1 Overview

The Operator ensures that all process plant and equipment are commissioned, operated, and maintained in accordance with the manufacturers' recommendations and is documented and recorded. In the event of breakdown of plant and machinery, site operations will cease until such time as replacement plant is provided, or satisfactory repairs are affected. All equipment and vehicles are managed in line with the manufacturer's manuals with regards to maintenance.

The Operator ensures that all monitoring and measuring equipment is fit for purpose, maintained, and calibrated to appropriate standards (UKAS approved where applicable) and that a suitably qualified

person undertakes all maintenance and calibration work.

Plant and equipment are inspected on a daily basis in accordance with the Management System records in Table 13 below:

*Table 13: Inspection & Maintenance Records*

| Document Reference | Document Title |
|---|---|
| **Management System Records** | |
| MIL-RC-01 | Daily Checks |
| MIL-RC-02 | Biomass Plant Daily Checks |
| MIL-RC-03 | Bedding Plant Daily Checks |
| MIL-RC-04 | Vehicle Daily Inspection Checklist - Loading Shovel |
| MIL-RC-05 | Vehicle Daily Inspection Checklist - Telehandler |
| MIL-RC-06 | Weekly Checks |
| MIL-RC-07 | Site Diary |

Any issues that are detected during routine maintenance or outside routine maintenance will be repaired as soon as practicably possible by a trained mechanic. All maintenance and repair work are recorded in the Maintenance Book, held in the Site Office.

### 11.4.2 Mobile Plant

Mobile plant includes:

- Windrow turner
- Shredder
- Loading shovels
- Telehandlers
- Tractor and trailer and water bowser
- Vacuum tanker (with rain gun)

Daily inspections of machinery used onsite are undertaken and recorded in accordance with:

- Biomass Plant Daily Checks (MIL-RC-02)
- Bedding Plant Daily Checks (MIL-RC-03)
- Vehicle Daily Inspection Checklist - Loading Shovel (MIL-RC-04)
- Vehicle Daily Inspection Checklist - Telehandler (MIL-RC-05)

The windrow turner and shredder are under manufacturer maintenance contracts, which require a service once per annum.

The loading shovels and telehandlers are under manufacturer maintenance contracts which require the manufacturers to come to site every 500 hours and service the machinery.

### 11.4.3 Static Equipment

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. The Operator has a contract with CJR 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.

The 2 No dust abatement plans and the 2 No. generators are inspected and maintained in accordance with the details provided in Section 7.2 and 7.3 respectively.

Each time the drying floors are empty, which is approximately once a week, they are inspected, and the fan is used to clean material off them. In addition, once a year each drying floor is removed and a thorough inspection and deep clean out is carried out.

### 11.5 Energy Efficiency

The Operator shall ensure that:

- appropriate measures are taken to ensure that energy is used efficiently in the activities;
- review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- take any further appropriate measures identified by a review.

The Operator shall take proportional steps to ensure that the Composting facility and wood operations are designed and operated in such a way to optimise energy efficiency and ensure the operation meets the indicative BAT requirements.

### 11.6 Efficient Use of Raw Materials

In order to monitor and control the use of raw materials:

- A Raw Materials Inventory is retained which includes their use and their properties.
- Periodically the inventory is reviewed to consider whether raw materials new to the market that have less environmental impact can be used. This includes, where possible, substituting raw materials with waste.
- Quality assurance procedures are in place to control the content of raw materials.

### 11.7 Avoidance, Recovery and Disposal of Wastes Produced by the Activities

Residual waste from the green waste composting area comprises of predominantly plastics from the screening process. The site has 6 euro bins from council which are removed once per week. The residual waste tonnages are declared quarterly on the waste returns. The residual waste is sent to a waste to energy plant which is currently the optimum recovery route in terms of the waste hierarchy.

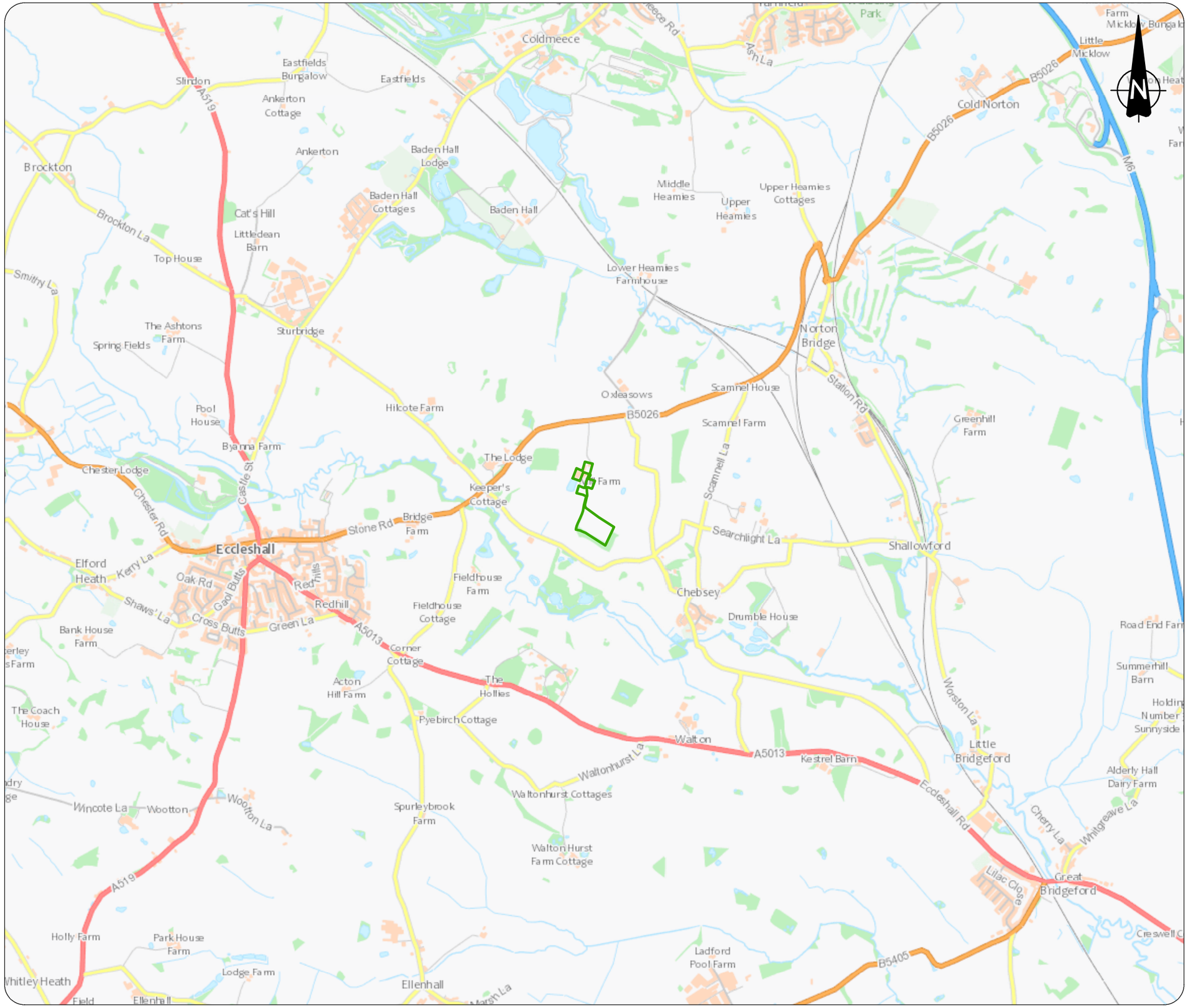
Stones are also removed from the green waste and reused as aggregates. Any trowels or garden implements are washed and donated for local causes.

The wood waste operation is focussed on reuse where possible. Any pallets which are accepted are inspected for suitability for reuse; in the region of 1,000 pallets per week are sent off site for reuse. Fire doors are also accepted and reused as fire resistant cladding.

Residual waste from the wood waste operation is predominantly nails from the pallets; 10 to 12 tonnes per month of nails.

A Waste Minimisation Plan **(MIL-OD-19)** has been developed in accordance with Best Available Techniques and forms part of the management system

## Figures

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REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

Permit boundary

0 250 500 750 1,000 1,250 m

Scale at A3: 1:25,000

Client
Mill Farm Recycling Limited

Project
ETL956/Permit Variation 2025

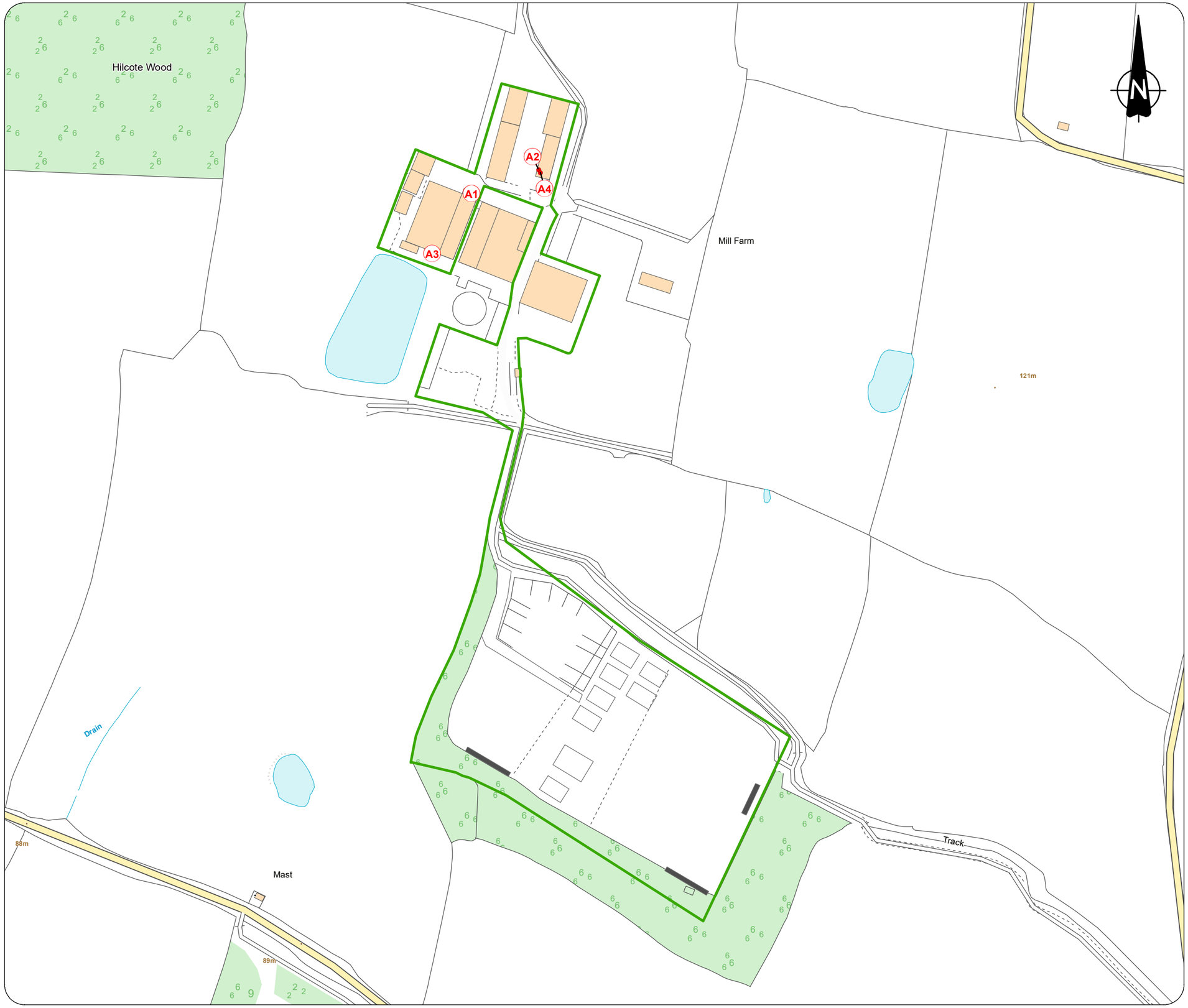
Title
Site Location Plan

Earthcare TECHNICAL
Manor Farm
Chalton
Waterlooville
Hants PO8 0BG
Tel: 02392 290488
enquiries@earthcaretechnical.co.uk
www.earthcaretechnical.co.uk

| Drawn | Checked | Approved | Revision |
|---|---|---|---|
| JJ | ESP | ESP | REV A |

| Date | Scale | Sheet Size |
|---|---|---|
| July 2025 | 1:25,000 | A3 |

| Drawing Number | File Reference |
|---|---|
| ETL956/MIL/SL/EPR01 | ETL956 |




REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- Emission point to air
- (E) Emission point to air

| | |
|---|---|
| A1 | Dust abatement plant for main wood processing builing |
| A2 | Dust abatement plant for bedding plant |
| A3 | Diesel generator 1 for main wood processing building |
| A4 | Diesel generator 2 for bedding plant |

0 25 50 75 100 125 m

Scale at A3: 1:2,500

Client
Mill Farm Recycling Limited

Project
ETL956/Permit Variation 2025

Title
Permit Boundary and Emission Point Plan

Earthcare TECHNICAL
Manor Farm
Chalton
Waterlooville
Hants PO8 0BG
Tel: 02392 290488
enquiries@earthcaretechnical.co.uk
www.earthcaretechnical.co.uk

| Drawn | Checked | Approved | Revision |
|---|---|---|---|
| JJ | ESP | ESP | REV A |

| Date | Scale | Sheet Size |
|---|---|---|
| July 2025 | 1:2,500 | A3 |

| Drawing Number | File Reference |
|---|---|
| ETL956/MIL/PBPEPP/EPR02 | ETL956 |


| ID | Description |
|---|---|
| 1 | Woodchip storage bays 3 no. (1a-1c inclusive) |
| 2 | Main wood processing building |
| 3 | Dust abatement plant for main wood processing building |
| 4 | Diesel generator for main wood processing |
| 5a - 5f inc | Drying floor 1 - 6 |
| 6 | Bedding plant building |
| 7 | Dust abatement plant for bedding plant |
| 8 | Diesel generator for bedding plant |
| 9 | Fuel tank for diesel generator |
| 10 | Product storage area 1 (7 No. bays) |
| 11 | Product storage area 2 (2 No. bays) |
| 12 | Product storage area 3 (4 No. bays) |
| 13 | Komtech screening equipment for compost |
| 14 | Fire quarantine area with curbed concrete wall (10m x 22m) |
| 15 | Topsoil and compost storage |
| 16 | Clean water storage lagoon - Source of fire water |
| 17 | Weighbridge with swipe card entry |
| 18 | Livestock housing |
| 19 | Car park |
| 20 | Offices and welfare |
| 21 | Housing for 3 no. non waste biomass boilers |
| 22 | Control unit container |
| 23 | Drainage collection sump and pump |
| 24 | Above ground water storage tank (1,500m³) |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

Permit boundary

0 10 20 30 40 50 m

Scale at A3: 1:1,000

Client
Mill Farm Recycling Limited

Project
ETL956/Permit Variation 2025

Title
Site Layout - Upper Yard

Earthcare TECHNICAL
Manor Farm
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Waterlooville
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www.earthcaretechnical.co.uk

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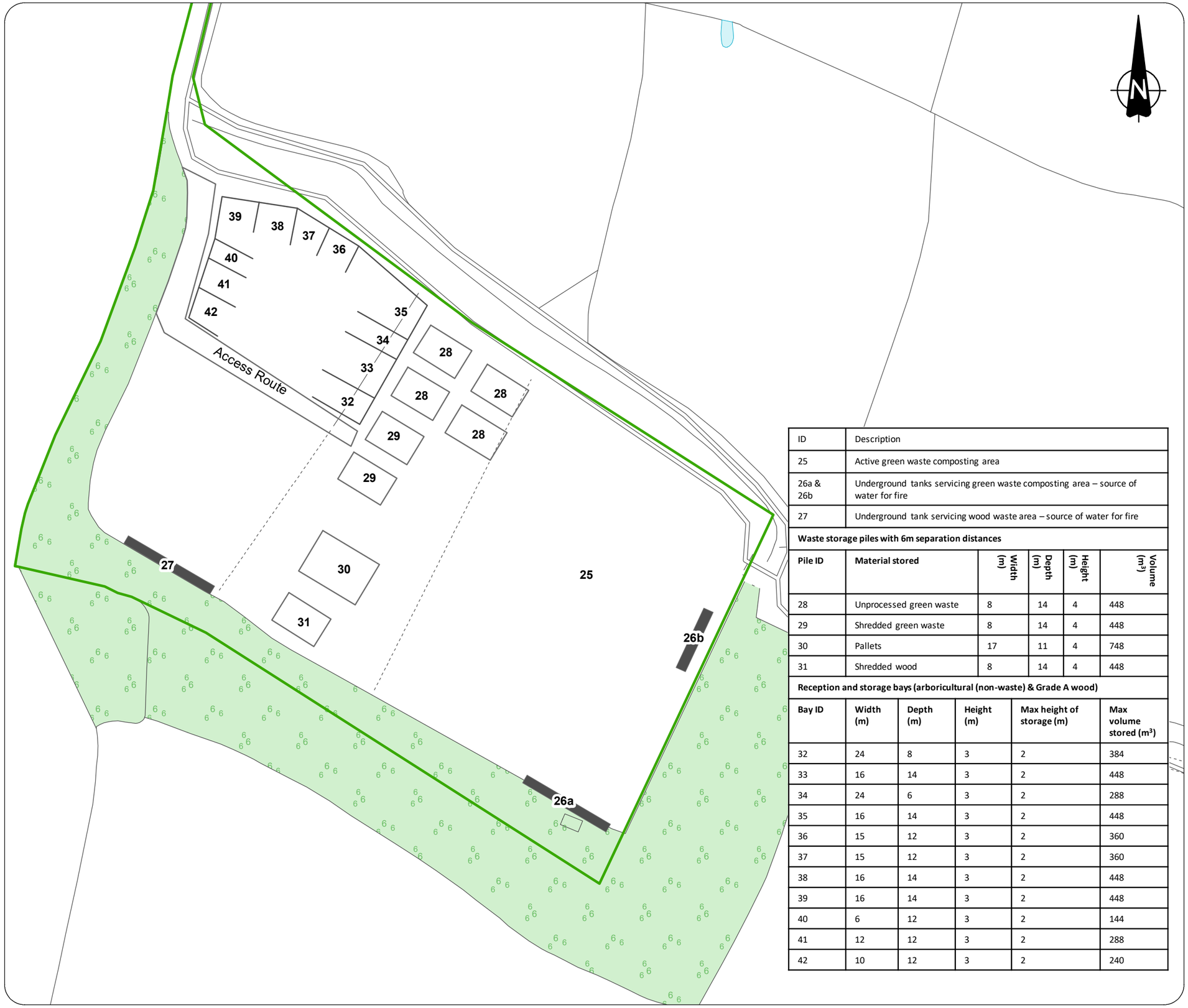
| Date | Scale | Sheet Size |
|---|---|---|
| July 2025 | 1:1,000 | A3 |

| Drawing Number | File Reference |
|---|---|
| ETL956MILSLPEPR04 Page 1 of 2 | ETL956 |




| ID | Description |
|---|---|
| 25 | Active green waste composting area |
| 26a & 26b | Underground tanks servicing green waste composting area – source of water for fire |
| 27 | Underground tank servicing wood waste area – source of water for fire |

**Waste storage piles with 6m separation distances**

| Pile ID | Material stored | Width (m) | Depth (m) | Height (m) | Volume ($m^3$) |
|---|---|---|---|---|---|
| 28 | Unprocessed green waste | 8 | 14 | 4 | 448 |
| 29 | Shredded green waste | 8 | 14 | 4 | 448 |
| 30 | Pallets | 17 | 11 | 4 | 748 |
| 31 | Shredded wood | 8 | 14 | 4 | 448 |

**Reception and storage bays (arboricultural (non-waste) & Grade A wood)**

| Bay ID | Width (m) | Depth (m) | Height (m) | Max height of storage (m) | Max volume stored ($m^3$) |
|---|---|---|---|---|---|
| 32 | 24 | 8 | 3 | 2 | 384 |
| 33 | 16 | 14 | 3 | 2 | 448 |
| 34 | 24 | 6 | 3 | 2 | 288 |
| 35 | 16 | 14 | 3 | 2 | 448 |
| 36 | 15 | 12 | 3 | 2 | 360 |
| 37 | 15 | 12 | 3 | 2 | 360 |
| 38 | 16 | 14 | 3 | 2 | 448 |
| 39 | 16 | 14 | 3 | 2 | 448 |
| 40 | 6 | 12 | 3 | 2 | 144 |
| 41 | 12 | 12 | 3 | 2 | 288 |
| 42 | 10 | 12 | 3 | 2 | 240 |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

Permit boundary

0 10 20 30 40 50 60 m

Scale at A3: 1:1,250

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: Site Layout - Lower Yard

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| Drawing Number: ETL956MILSLPEPR04 Page 2 of 2 | | | File Reference: ETL956 |


| ID | Description |
|---|---|
| 1 | Woodchip storage bays 3 no. (1a-1c inclusive) |
| 2 | Main wood processing building |
| 3 | Dust abatement plant for main wood processing building |
| 4 | Diesel generator for main wood processing |
| 5a - 5f inc | Drying floor 1 - 6 |
| 6 | Bedding plant building |
| 7 | Dust abatement plant for bedding plant |
| 8 | Diesel generator for bedding plant |
| 9 | Fuel tank for diesel generator |
| 10 | Product storage area 1 (7 No. bays) |
| 11 | Product storage area 2 (2 No. bays) |
| 12 | Product storage area 3 (4 No. bays) |
| 13 | Komtech screening equipment for compost |
| 14 | Fire quarantine area with curbed concrete wall (10m x 22m) |
| 15 | Topsoil and compost storage |
| 16 | Clean water storage lagoon - Source of fire water |
| 17 | Weighbridge with swipe card entry |
| 18 | Livestock housing |
| 19 | Car park |
| 20 | Offices and welfare |
| 21 | Housing for 3 no. non waste biomass boilers |
| 22 | Control unit container |
| 23 | Drainage collection sump and pump |
| 24 | Above ground water storage tank (1,500m³) |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- Bunded fuel storage (farm operations)
- Bunded fuel storage (waste operations)
- Fixed fire extinguisher
- Spill kit
- CCTV Location
- Overnight parking of mobile plant
- Access route for emergency vehicles

0 10 20 30 40 50 m

Scale at A3: 1:1,000

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: FPP Layout Plan - Upper Yard

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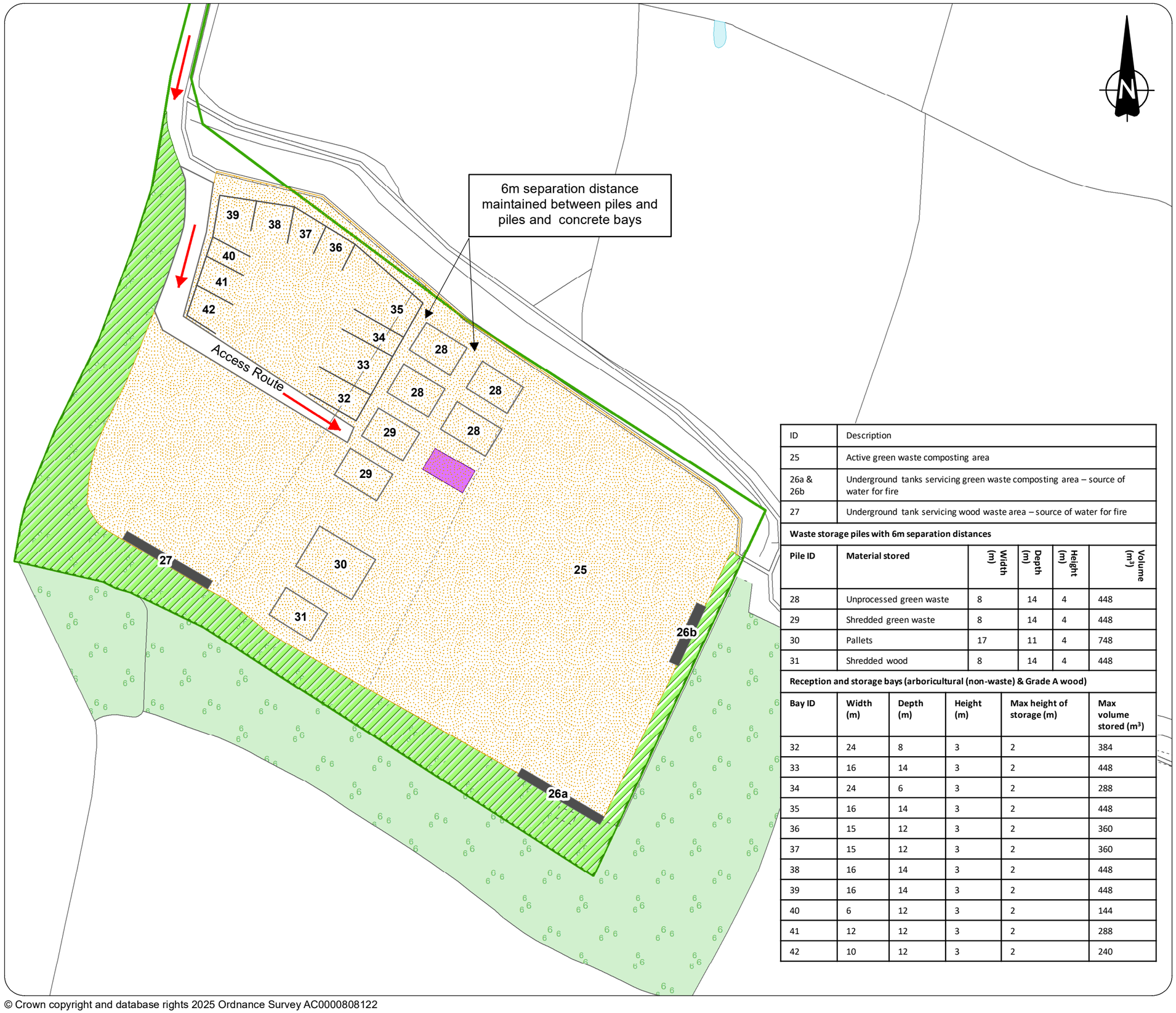
| Drawing Number | File Reference |
|---|---|
| ETL956/MIL/FPPSL/EPR05/V1.0 Page 1 of 2 | ETL956 |




| ID | Description |
|---|---|
| 25 | Active green waste composting area |
| 26a & 26b | Underground tanks servicing green waste composting area – source of water for fire |
| 27 | Underground tank servicing wood waste area – source of water for fire |

**Waste storage piles with 6m separation distances**

| Pile ID | Material stored | Width (m) | Depth (m) | Height (m) | Volume ($m^3$) |
|---|---|---|---|---|---|
| 28 | Unprocessed green waste | 8 | 14 | 4 | 448 |
| 29 | Shredded green waste | 8 | 14 | 4 | 448 |
| 30 | Pallets | 17 | 11 | 4 | 748 |
| 31 | Shredded wood | 8 | 14 | 4 | 448 |

**Reception and storage bays (arboricultural (non-waste) & Grade A wood)**

| Bay ID | Width (m) | Depth (m) | Height (m) | Max height of storage (m) | Max volume stored ($m^3$) |
|---|---|---|---|---|---|
| 32 | 24 | 8 | 3 | 2 | 384 |
| 33 | 16 | 14 | 3 | 2 | 448 |
| 34 | 24 | 6 | 3 | 2 | 288 |
| 35 | 16 | 14 | 3 | 2 | 448 |
| 36 | 15 | 12 | 3 | 2 | 360 |
| 37 | 15 | 12 | 3 | 2 | 360 |
| 38 | 16 | 14 | 3 | 2 | 448 |
| 39 | 16 | 14 | 3 | 2 | 448 |
| 40 | 6 | 12 | 3 | 2 | 144 |
| 41 | 12 | 12 | 3 | 2 | 288 |
| 42 | 10 | 12 | 3 | 2 | 240 |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- Planted earth bund (4m)
- Final extent of concrete (planned)
- Compost shredder (mobile)
- Access route for emergency vehicles

0 10 20 30 40 50 60 m

Scale at A3: 1:1,250

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: FPP Layout Plan - Lower Yard

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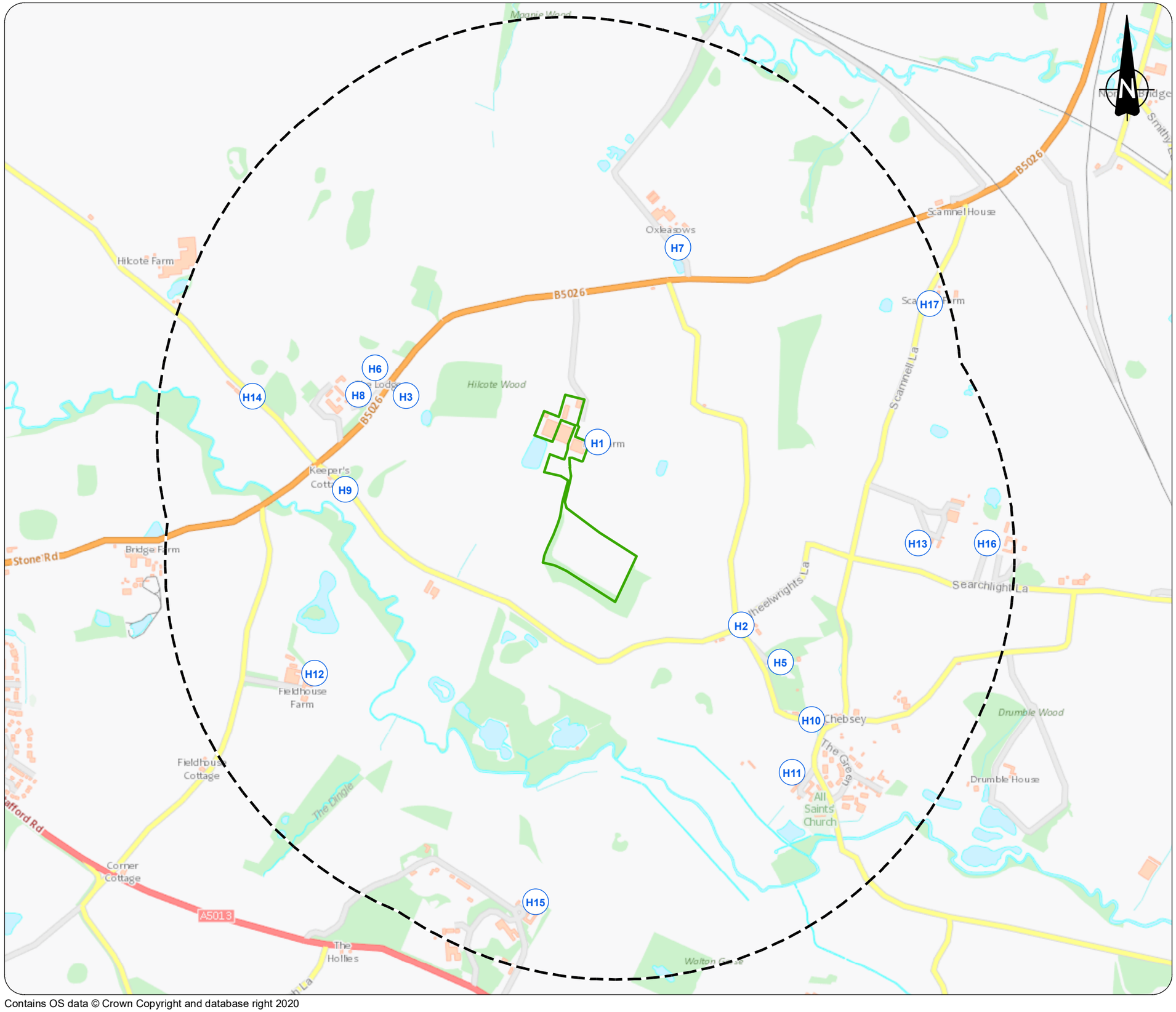
| Drawing Number: ETL956/MIL/FPPSL/EPR05/V1.0 Page 2 of 2 | | | File Reference: ETL956 |

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REVISIONS

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|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- 1km study area
- (H) Human receptors

0 100 200 300 400 500 m

Scale at A3: 1:10,000

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: Human Receptors (1km)

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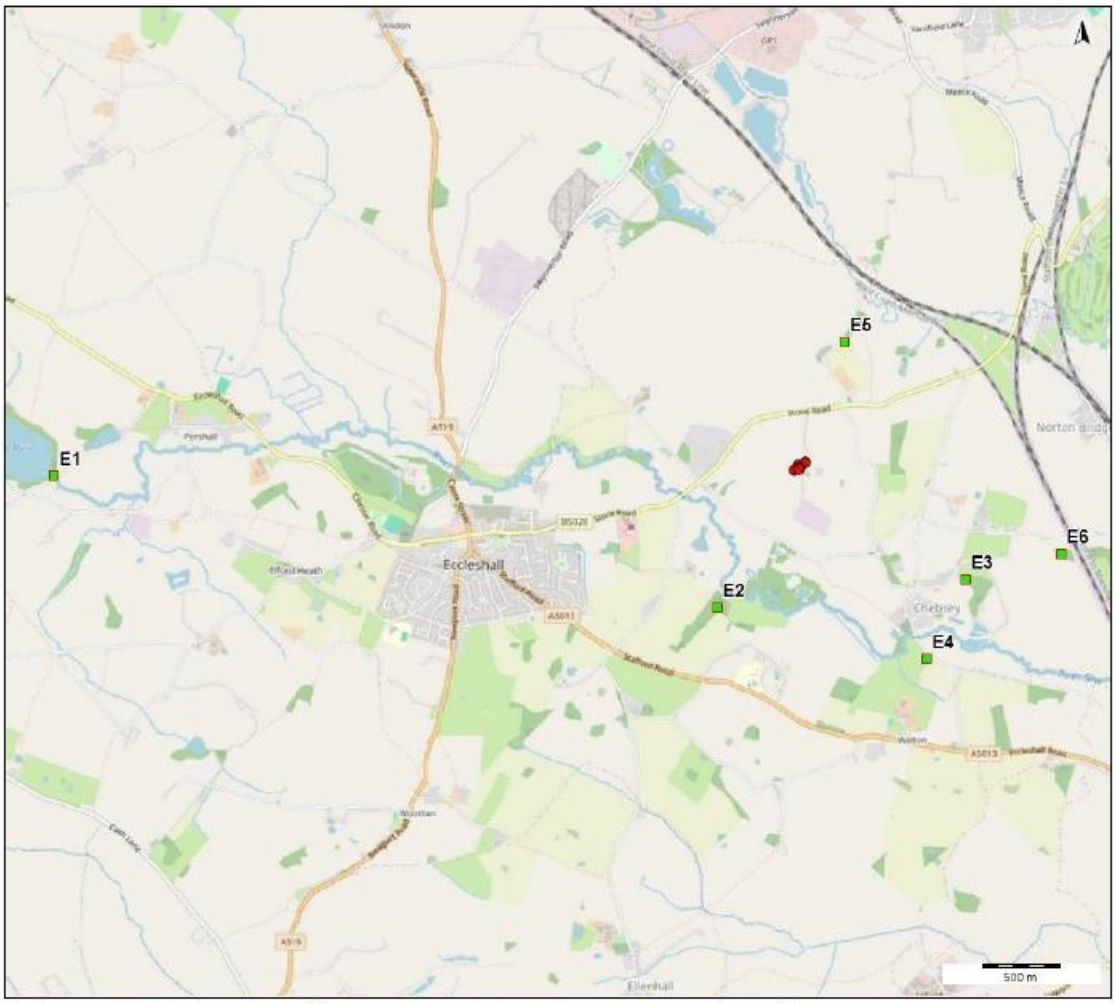
| Date | Scale | Sheet Size |
|---|---|---|
| July 2025 | 1:10,000 | A3 |

| Drawing Number | File Reference |
|---|---|
| ETL956/MIL/HR/EPR06 | ETL956 |

**Figure 6: Ecological Receptor Plan, Earthcare Technical Ltd (ETL956 EPR07 V1.30)**




Background image ©OpenStreetMap contributors www.openstreetmap.org/copyright

**Legend**

Point sources

Ecological receptors

| ID | Location | Designation | NGR X | NGR Y | Distance and direction from green line boundary | |
|---|---|---|---|---|---|---|
| | | | | | Distance (m) | Direction |
| E1 | Midland Meres and Mosses Phase 2 Ramsar site/Cope Mere | Ramsar/SSSI | 380496 | 329556 | 4,750 | west |
| E2 | Fieldhouse Dingle/The Dingle | LWS/AW | 384754 | 328712 | 760 | southwest |
| E3 | Drumble Wood | LWS, AW | 386350 | 328888 | 960 | southeast |
| E4 | Chebsey Hollow | LWS | 386102 | 328380 | 1,000 | southeast |
| E5 | Meece Brook | LWS | 385573 | 330416 | 755 | northeast |
| E6 | Yelds Rough | LWS | 386962 | 329053 | 1,665 | east |


| ID | Description |
|---|---|
| 1 | Woodchip storage bays 3 no. (1a-1c inclusive) |
| 2 | Main wood processing building |
| 3 | Dust abatement plant for main wood processing building |
| 4 | Diesel generator for main wood processing |
| 5a - 5f inc | Drying floor 1 - 6 |
| 6 | Bedding plant building |
| 7 | Dust abatement plant for bedding plant |
| 8 | Diesel generator for bedding plant |
| 9 | Fuel tank for diesel generator |
| 10 | Product storage area 1 (7 No. bays) |
| 11 | Product storage area 2 (2 No. bays) |
| 12 | Product storage area 3 (4 No. bays) |
| 13 | Komtech screening equipment for compost |
| 14 | Fire quarantine area with curbed concrete wall (10m x 22m) |
| 15 | Topsoil and compost storage |
| 16 | Clean water storage lagoon - Source of fire water |
| 17 | Weighbridge with swipe card entry |
| 18 | Livestock housing |
| 19 | Car park |
| 20 | Offices and welfare |
| 21 | Housing for 3 no. non waste biomass boilers |
| 22 | Control unit container |
| 23 | Drainage collection sump and pump |
| 24 | Above ground water storage tank (1,500m³) |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- Overnight parking of mobile plant
- Building or covered bay
- Concrete
- Direction of surface water flow

0 10 20 30 40 50 m

Scale at A3: 1:1,000

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: Surfacing & Drainage Plan - Upper Yard

Earthcare TECHNICAL
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| JJ | ESP | ESP | REV A |

| Date | Scale | Sheet Size |
|---|---|---|
| July 2025 | 1:1,000 | A3 |

Drawing Number: ETL956SDPEPR08V1.0 Page 1 of 2

File Reference: ETL956


| ID | Description |
|---|---|
| 25 | Active green waste composting area |
| 26a & 26b | Underground tanks servicing green waste composting area – source of water for fire |
| 27 | Underground tank servicing wood waste area – source of water for fire |
| 28 | Unprocessed green waste piles |
| 29 | Shredded green waste piles |
| 30 | Pallets - pile |
| 31 | Shredded wood - pile |
| 32- 42 inclusive | Covered reception and storage bays (arboricultural (non-waste) & Grade A wood) |

REVISIONS

| REV | DATE | DESCRIPTION | DWN | CHK | APP |
|---|---|---|---|---|---|
| - | 19/06 2025 | First Issue | JJ | ESP | ESP |
| A | 28/07 2025 | Second Issue | JJ | ESP | ESP |

LEGEND

- Permit boundary
- Planted earth bund (4m)
- Final extent of concrete (planned)
- Compost shredder (mobile)
- Concrete
- Direction of surface water flow

0 10 20 30 40 50 60 m

Scale at A3: 1:1,250

Client: Mill Farm Recycling Limited

Project: ETL956/Permit Variation 2025

Title: Surfacing & Drainage Plan - Lower Yard

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| Date: July 2025 | | Scale: 1:1,250 | Sheet Size: A3 |
| Drawing Number: ETL956SDPEPR08V1.0 Page 2 of 2 | | | File Reference: ETL956 |

## Appendix A – Environmental Risk Assessment

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| 1.1 Local human population | Releases of emissions NOx, CO and other gases (2 No. generators) | Harm to human health - respiratory irritation and illness. | Air transport then inhalation. | Medium | Medium | **Medium** | There is potential for exposure to anyone living or working close to the site. Mill Farm House, which is owned by the Operator is 20m to the east of the permitted area. The next nearest residential receptors are residential properties 325m east south east of the permitted boundary.<br>The site is not located within an | The site is operated in accordance with a management system which includes:<br>• Daily checks on the generators (Biomass Screening Plant Daily Checks (MIL-RC-02) & Bedding Plant Daily Checks (MIL-RC-03)<br>• Service and maintenance contract in place.<br>Emissions monitoring will be carried out in accordance with the Environmental Permit and corrective action taken as required to | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | Air Quality Management Area.<br>The impact of emissions to air from the HAAS Dust abatement equipment and 2 diesel generators has been assessed through an air quality impact assessment (AQIA)[12] the long term and short term predicted impacts of pollutants at human receptors were determined to be not significant. | ensure emission limit values are met. | |

[12] ETL956 AQIA_V1.0_Mill Farm_July25

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| 1.2 Local human population | Release of particulate matter (dust) and microorganisms (bio-aerosols). | Harm to human health - respiratory irritation and illness, gastro-intestinal illness. | Air transport then inhalation.<br>Deposited on garden fruit and vegetables and then ingested | Medium | Medium | **Medium** | Composting activities produce and release bioaerosols, such as micro-organisms. The activity is carried out in the open. Finished compost is produced in accordance with the BSI PAS100 Specification and in accordance with the Compost Quality Protocol[13] or Compost Resource Framework.<br>Wood treatment activities produce | The site is operated in accordance with a Dust & Emissions Management Plan (MIL-OD-10). This includes measures to ensure that:<br>• the doors to the buildings are only opened to allow ingress and egress of vehicles<br>• The dust abatement plants are inspected and maintained as required.<br>Emissions monitoring will be carried out in accordance with the | **Low** |

[13] Quality Protocol – Compost. End of waste criteria for the production and use of quality compost from source-segregated biodegradable waste. Wrap.

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | dust and bioaerosols. With the exception of sorting and pre-shredding and drying on covered drying floors, all wood waste treatment activities are carried out in 2 no. dedicated buildings with dust abatement plants. In addition, the wood milling equipment is enclosed.<br><br>There is potential for exposure to anyone living or working close to the site. Mill Farmhouse, which is owned by the | Environmental Permit and corrective action taken as required to ensure emission limit values are met.<br><br>Daily Checks (MIL-RC-01) for dust are carried out and appropriate measures to reduce dust emissions will be carried out as required.<br><br>The composting operation is carried out in accordance with Composting SOP (MIL-SOP-01) which ensures that moisture is monitored and regulated throughout the composting process.<br><br>The Site uses a weather station to monitor weather conditions | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | Operator is 20m to the east of the permitted area. The next nearest residential receptors are residential properties 325m east south east of the permitted boundary.<br><br>A Site Specific Bioaerosols Risk Assessment (SSBRA) has been produced.[14] The results of the assessment indicate that the residual risk from all sources | such that activities can be altered as required to reduce any windblown emissions from e.g. windrow turning.<br><br>No further control measures, other than those detailed in the SSBRA, are required in order to reduce the potential for impacts at sensitive locations in the vicinity of the site. | |

[14] 9659r1 – Bioaerosol Risk Assessment – Mill Farm Recycling, Stafford

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | associated with the facility is low or very low.<br>The site is not located within an Air Quality Management Area. | | |
| 1.3 Local human population | Waste, litter and mud on local roads | Nuisance, loss of amenity and road traffic accidents | Litter and waste may be blown off site. Mud may be tracked out on vehicles. | Medium | Medium | **Medium** | There is a risk of creating unsafe road surfaces in wet weather.<br>Local residents are often sensitive to mud on roads.<br>The site benefits from impermeable surfaces including the access road. | Risk management measures are as per 1.2 above. In addition:<br>• Roads are swept and damped down as necessary. | **Low** |
| 1.4 Local human population | Odour | Nuisance, loss of amenity | Air transport then inhalation. | Medium | Medium | **Medium** | Composting produces and is likely to release unpleasant odour | The Site operates in accordance with an EMS which includes: | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | and emissions if allowed to become anaerobic.<br><br>There is potential for exposure to anyone living or working close to the site (excluding operator and employees). Mill Farm House, which is owned by the Operator is 20m to the east of the permitted area. The next nearest residential receptors are residential properties 325m east south east of the permitted boundary. | • Procedures for waste acceptance (Composting SOP (MIL-SOP-01)<br>• An Odour Management Plan (OMP) (MIL-OD-06)<br><br>Waste is only accepted on Site where there is capacity to treat the waste.<br><br>The Site is certified to PAS100, CQP and the Compost Certification Scheme Rules (Process PR083). The Site operates under the restrictions dictated by the Site certification. This process is carried out in accordance with the Composting SOP (MIL-SOP-01). | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| 1.5 Local human population. | Noise and vibration. | Nuisance, loss of amenity, loss of sleep. | Noise through the air and vibration through the ground. | Medium | Medium | **Medium** | Local residents can be sensitive to noise and vibration.<br>There is potential for exposure to anyone living or working close to the site (excluding operator and employees). Mill Farm House, which is owned by the Operator is 20m to the east of the permitted area. The next nearest residential receptors are residential properties 325m east south east of the permitted boundary. | Noise is monitored daily; Daily Checks (MIL-RC-01). If noise emissions are detected off-site then corrective actions will be taken as soon as possible and, if required, a Noise Management Plan will be developed, submitted to the EA and implemented.<br>Operational measures to reduce noise emissions include:<br>• There is an enforced site speed limit of 10 miles per hour.<br>• All vehicles used at the Site are maintained in | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | The number of HGVs entering the Site are regulated in accordance with condition 31 of the extant planning permission. | good efficient working order.<br>• Mobile plant on site benefit from an Eco setting with automatic switch off and are fitted with reversing bleepers, which automatically adjust relative to ambient noise levels in order to minimise this intermittent noise emission.<br>• All equipment used at the site is silenced to manufacturer's recommendations.<br>• Enclosure of noisy equipment within 2 No. buildings which are kept | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | with their doors shut unless vehicles are entering or leaving. | |
| 1.6 Local human population. | Scavenging animals and birds | Nuisance, loss of amenity and harm to human health from waste carried off-site from faeces. | Animals and birds travel over land and through the air. | Low | Low | **Low** | The permitted waste types do not generally attract scavenging animals and birds. | The operations will be checked on a daily basis as part of the Daily Checks (MIL-RC-01) and, if required, a specialist contractor will carry out independent inspections. Should an infestation ever be found, then appropriate pest control measures will be immediately implemented.<br>The site has a Pest Management Plan (MIL-OD-09) which is adhered too. | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| 1.7 Local human population. | Pests | Nuisance, loss of amenity and harm to human health | Pests, such as flies can travel through the air or over land. | Medium | Medium | **Medium** | The permitted waste types may attract pests, such as flies. They can multiply, particularly in the summer months when the waste is more odorous and attracts flies. | The risks are managed as per 1.6 above.<br>The compost process is managed to optimise aerobic conditions in accordance with the Composting SOP (MIL-SOP-01) including utilising shredding received waste within 5 days, using the correct feedstock blend, regular monitoring and windrow turning. | **Low** |
| 1.8 Local human population. | Contaminated water used for recreational purposes. | There is a risk of contaminated water used for recreational purposes causing skin damage or gastro- | There is a risk of direct contact with or ingestion of contaminated waters. | Low | Low | **Low** | This risk is unlikely to occur but might restrict recreational use. | There are no waste water emissions from the Site. Emissions from the clean surface water attenuation pond are restricted to runoff from the designated clean areas of the site including rainwater from roofs. | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | intestinal illness. | | | | | | All compost is produced to the PAS100 Specification. Sanitisation process takes approx. 3-4 weeks during which the material must go through 4 periods of 48 hours during which the temperature is continuously >60°C.<br><br>There is adequate leachate storage for the composting operation in the form of 2 No. underground storage tanks (350m$^3$ of tank storage). | |
| 2.1 Risk to local human population | Flooding of the Site | Flood waters can flood the site. | There is a risk of waste washed off-site contaminating buildings, | Low | Low | **Low** | The permitted waste types are non-hazardous and therefore the risk of | There is a written management system that identifies and documents the process controls to minimise | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| and local environment | | | gardens and natural habitats downstream. | | | | contamination is not high.<br><br>Leachate may have a high biological oxygen demand (BOD), ammonia and suspended solids.<br><br>The site is within Flood Zone 1 which means that there is a low probability of flooding from rivers and the sea. There are some areas at risk of surface water flooding within the proposed new permitted area with the highest risk being flooded to 0.1m- 0.3m during a 1 in 1,000- | the risk of pollution – includes those arising from operations, maintenance, accidents, incidents and non-conformances.<br><br>In addition:<br>• There is a Contingency Plan (MIL-OD-18) in place which includes procedures to be followed in the event of extreme weather.<br>• The Site uses a weather station to monitor weather conditions.<br>• A drainage plan is available on Site.<br>• All waste is stored within enclosed | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | year event. There is a negligible risk of groundwater flooding on site.[15] | buildings on an impermeable surface.<br>• All operatives receive training on emergency procedures. | |
| 2.2 Local human population and local environment. | Fire Risk | Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters or arsonists/ vandals. Pollution of water or land. | Fire can cause:<br>Polluting materials (smoke or fumes) to travel through the air, water or over land; and<br>Spillages and contaminated firewater by direct run-off from the site and | Medium | Medium | **Medium** | The reasons for giving the activity this rating is because:<br>• rapidly decomposing material gives rise to self-heating.<br>• material can become dry and increase combustibility | There is a written management system which includes a Fire Prevention Plan (FPP) (MIL-OD-07). The FPP includes the management control in place to mitigate and prevent potential issues associated with stockpiling waste with a particular focus on fire risk. Storage capacity is governed by | **Low** |

[15] Enviro & Geo Insight Report, GS-WJC-51J-3C4-WH3, Groundsure (June 2025

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | through surface water drains and ditches. | | | | | pile sizes set out in the FPP. Water supplies are available for fire fighting with the required quantities defined within the FPP.<br>There is no burning of waste and permitted waste types are non-hazardous.<br>Temperature and moisture monitoring for all stockpiles and compost batches are carried out in accordance with the Composting SOP (MIL-OD-01). | |
| 3. Risk to local human population livestock and wildlife | Litter on surrounding land and in final material | Nuisance, loss of amenity, harm to animal health and reduction in land bank | Litter can travel through the air and then be deposited on land. | Medium | Medium | **Medium** | The reasons for giving the activity this rating is because: | The management system includes waste acceptance and rejection procedures: | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | values due to contamination. | | | | | • local residents are sensitive to litter.<br>• plastic contamination in compost reduces land values and economic market certainty.<br>• plastic contamination can harm grazing animals and soil quality.<br><br>Perimeter litter fencing is in place | • Composting SOP (MIL-SOP-01). A 5% contamination level warrants rejection as part of the acceptance criteria.<br>• Wood Waste Acceptance & Rejection SOP (MIL-SOP-02)<br><br>All batches of compost are screened prior to storage and dispatch as PAS100 compost which allows for the removal of contaminants such as plastic and metal from the compost.<br><br>Any litter arising will be detected during Daily Checks (MIL-RC-01) and cleared up on the same day. All waste | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | will be stored securely and disposed of appropriately. | |
| 3.2 Risk to local human population livestock and wildlife | Gaining unauthorised access to site | There is a risk of causing injury to humans or livestock. | Direct physical contact with all on-site hazards such as wastes, machinery and vehicles. | Low | Low | **Low** | The reasons for giving the activity this rating is because the:<br>• permitted wastes are non-hazardous.<br>• management system includes procedures for worker and visitor safety. | Activities are managed and operated in accordance with a management system. Site Specific security measures include:<br>• perimeter fencing<br>• locked gate at the end of the access road, with access only allowed during opening hours or when one of the site directors enables access.<br>• All visitors to the site are required to sign in at the site office on arrival to, | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | and exit from, the site.<br>• The site shall be kept closed and secure at all times when unattended.<br>• CCTV at the weighbridge.<br><br>The condition of the fencing, gates and building is inspected regularly, and any repairs will be made promptly.<br>Visitors receive a health and safety induction when visiting and must follow the site operator's instructions. | |
| 4.1 All surface waters close to and | Spillage of liquids, leachate from waste, | Acute effects: Oxygen depletion, fish | Direct run-off from site across ground surface, via surface | Medium | Medium | **Medium** | There is potential for contaminated rainwater run-off from waste | There is a written management system that identifies and documents the process | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| downstream of site. | contaminated rainwater run-off from waste with high organic and ammonia content and suspended solids. | kill & algal blooms. | water drains, ditches etc. | | | | operations, especially during heavy rain.<br><br>Leachate may have a high BOD, ammonia and suspended solids.<br><br>The closest watercourse is a tributary of the River Sow which located 285m west of the site. The main River Sow is 390m south of the site which runs from the north of Eccleshall to the west to Little Bridgeford to the south east where it joins the Meece Brook. | controls to minimise the risk of pollution – includes those arising from operations, maintenance, accidents, incidents and non-conformances.<br><br>Any polluting liquids (diesel) ae stored within locked bunded stores.<br><br>All storage and treatment of waste takes place within enclosed buildings with impermeable surfacing or outside on impermeable surfaces with sealed drainage.<br><br>Weather conditions are monitored by the on-Site weather station. | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | The permitted waste types are non-hazardous. No sludges or liquids are accepted. | All operatives are trained on emergency preparedness and response. The Spillage Procedure (MIL-SOP-06) will be enacted in the case of any spillages being identified. | |
| 4.2 All surface waters close to and downstream of site. | There is a risk of pollution from:<br>liquid spills<br>leachate from waste contaminated rainwater run-off from waste with a high organic and ammonia content and suspended solids content | Chronic effects: deterioration of water quality. | Contamination can travel by:<br>direct run-off from site over the land, through surface water drains and ditches.<br>indirect run-off through soil | Low | Low | **Low** | Pollution is likely to be detected quickly. | As above. | **Very low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | loss of containment from on-site storage | | | | | | | | |
| 5. Abstraction from watercourse downstream of facility (for agricultural or potable use). | Liquid spills, leachate from waste and contaminate run-off from waste with high organic content | Acute effects, closure of abstraction intakes. | Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction. | Low | Low | **Low** | There is potential for contaminated rainwater run-off from outside waste operations, especially during heavy rain.<br>There are eleven licensed surface water abstraction licences within 2km of the site, seven of which are historic and four of which are active. Three of the active surface water abstractions are from the Meece | The risk is managed as set out in risks 4.1 and 4.2. | **Very low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | Brook and the other is from the River Sow at Hilcote Farm 909m west of the site; all upstream of the Site.[15] | | |
| 6. Groundwater | As above | Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole. | Transport through soil/groundwater then extraction at borehole. | Medium | Low | **Low** | As above<br>All waste is stored on an impermeable surface with sealed drainage.<br>The site is not located within a Groundwater Source Protection Zone. The secondary aquifer is classified as high vulnerability.<br>The 2024 assessment | Risk management is as set out in 4.1, 4.2 and 5.<br>The site management system includes ongoing inspection and maintenance of primary containment. | **Low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | against CIRIA C736 of the concrete pad for composting and the 2No. SPEL Tankstor underground leachate tanks for compost leachate concludes that:<br>• the leachate tanks pose a low risk to pollution due to their location within the clay strata.<br>• there were signs of disrepair on the concrete slab in trafficked areas but not | | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | severe enough to allow the flow of leachate to ground.<br>The report proposed an ongoing inspection and regime for primary containment. | | |
| 7. Protected Sites, including National Parks and Areas of Outstanding Natural Beauty,<br>Marine Conservation Zones, | Protected sites can be at risk from any source and by any pathway. | Harm to protected sites from; nutrient enrichment, leachate, contaminated surface water run-off, smothering, disturbance and predation from pests and vermin | Any | Low | Low | **Low** | Waste operations may cause harm to and deterioration of nature conservation sites. | Control measures as detailed under risk management techniques described in sections 1.1, 2.2, 3.1, 4.1 & 4.2.<br>The site is located:<br>> 500m of a European site (within the meaning of Regulation 8 of the Conservation of Habitats and | **Very low** |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| Sites of Special Scientific Interest,<br>Special Areas of Conservation,<br>Special Protection Areas &<br>Ramsar wetland sites | | | | | | | | Species Regulations 2017) or a Site of Special Scientific Interest, including candidate or proposed sites or Marine Conservation Zone<br>>250m of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat<br>>50m of a Local Nature Reserve, Local Wildlife Site, Ancient Woodland or Scheduled Monument<br>>50m of a site that has species or habitats of principle importance (as listed in Section 41 of the Natural Environment and Rural Communities Act 2006) | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | that the Environment Agency considers at risk to this activity<br><br>The pre-application Nature and Heritage Conservation Screening Report (Appendix B) provided by the Environment Agency (EA) identifies:<br><br>• Midland Meres and Mosses Phase 2 Ramsar site 4.75km to the west of the site as the only Statutory Designated Site within the10km screening distance.<br>• 5 No. Local Wildlife Sites within 2km of the Site, the closest being Fieldhouse | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | Dingle 745m to the south west and Meece Brook 755m to the north east.<br>• 2 No. Ancient Woodland Sites within 2km of the Site; The Dingle 760m south west and Drumble Wood 960m south east.<br><br>A Risk Assessment which considers the impact on these sites from the proposed changes forms Appendix C.<br><br>Air quality impacts of predicted pollutant concentrations, rates of nutrient nitrogen and acid depositional on ecological receptors | |

| Receptor | Source | Harm | Pathway | Probability of exposure | Consequence | Magnitude of risk | Justification for magnitude | Risk management | Residual risk |
|---|---|---|---|---|---|---|---|---|---|
| What is at risk? What do I wish to protect? | What is the agent or process with potential to cause harm? | What are the harmful consequences if things go wrong? | How might the receptor come into contact with the source? | How likely is this contact? | How severe will the consequences be if this occurs? | What is the overall magnitude of the risk? | On what did I base my judgement? | How can I best manage the risk to reduce the magnitude? | What is the magnitude of the risk after management? |
| | | | | | | | | have been predicted through an AQIA[12] and were determined to be not significant. | |

| Magnitude of Risk | Consequence | | |
|---|---|---|---|
| Probability of Exposure | Low | Medium | High |
| Low | Very Low | Low | Medium |
| Medium | Low | Medium | Medium |
| High | Medium | Medium | High |

# Appendix B – Nature and Heritage Conservation Sites Screening Report

# Nature and Heritage Conservation

Screening Report: Bespoke installation

| | |
|---|---|
| Reference | **EPR/XP3198EF** |
| NGR | **SJ 85327 29318** |
| Buffer (m) | **50** |
| Date report produced | **20/02/25** |
| Number of maps enclosed | **3** |

## This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on Magic map. Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. Help videos are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

| Sites and Features within screening distance | Screening distance (km) | Further Information |
|---|---|---|
| Ramsar | 10 | Joint Nature Conservation Committee and Magic map |
| **Midland Meres & Mosses Phase 2** | | |
| Local Wildlife Sites (LWS) (see map below) | 2 | Appropriate Local Record Centre (LRC) |
| **Fieldhouse Dingle** | | |

| | | |
|---|---|---|
| **Drumble Wood** | | |
| **Meece Brook** | | |
| **Chebsey Hollow** | | |
| **Yelds Rough** | | |
| Ancient Woodland | 2 | Woodland Trust<br>Forestry Commission<br>Natural England<br>and Magic map |
| **The Dingle** | | |
| **Drumble Wood** | | |

| Protected Species within screening distance | Screening distance (km) | Further Information |
|---|---|---|
| **European Eel migratory route** | up to 2 | Natural England<br><br>Appropriate Local Record Centre (LRC)<br><br>Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team |

| Protected Habitats within screening distance | Screening distance (km) | Further Information |
|---|---|---|
| **Coastal and Floodplain Grazing Marsh** | up to 2 | Natural England |

(see map below)

Where protected species are present, a licence may be required from Natural England to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

**The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.**

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

**Please note** we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

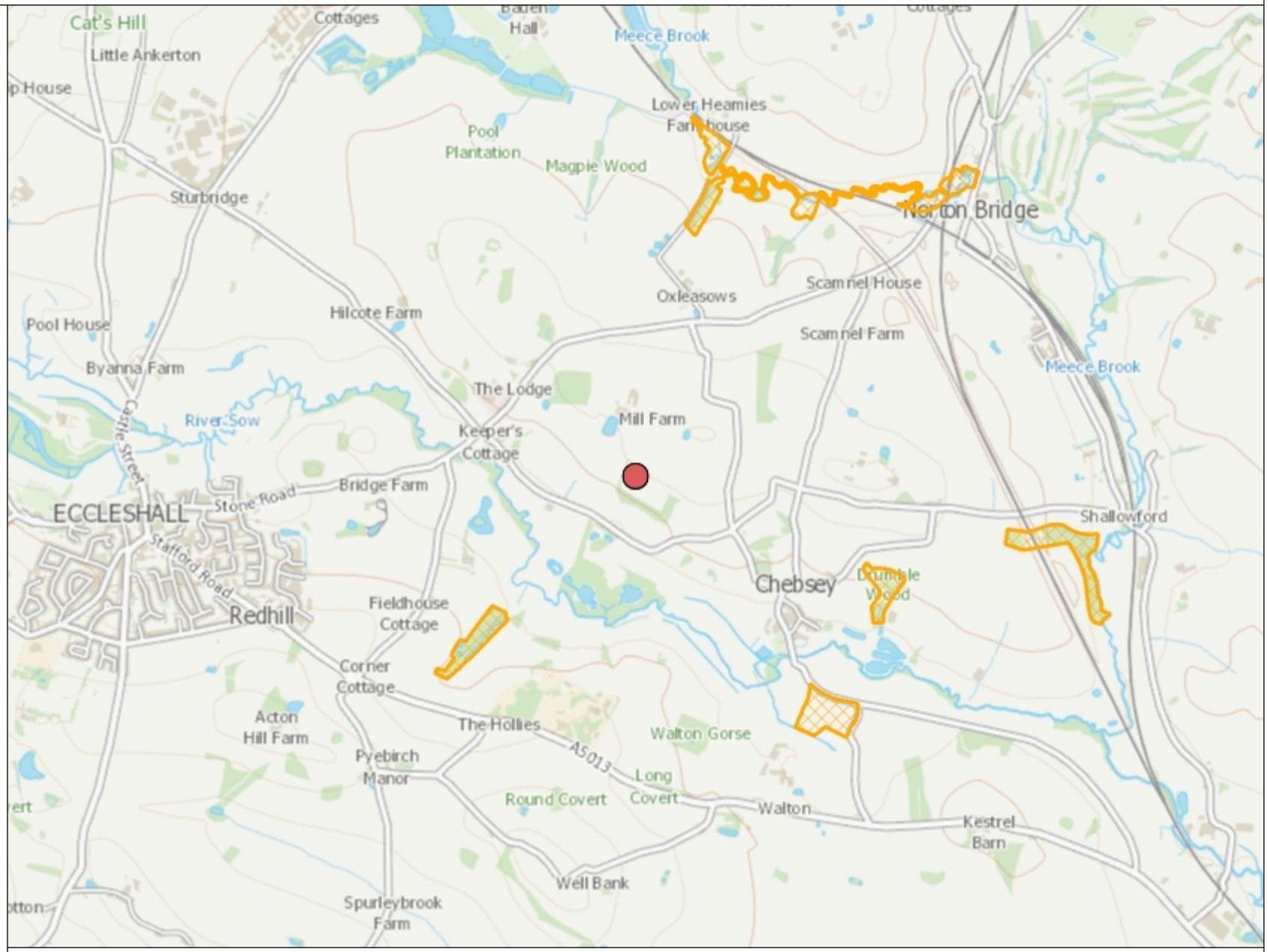
The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

# Local Wildlife Sites

Environment Agency

Legend

Local Wildlife Sites




1: 25,000

0 625

Metres

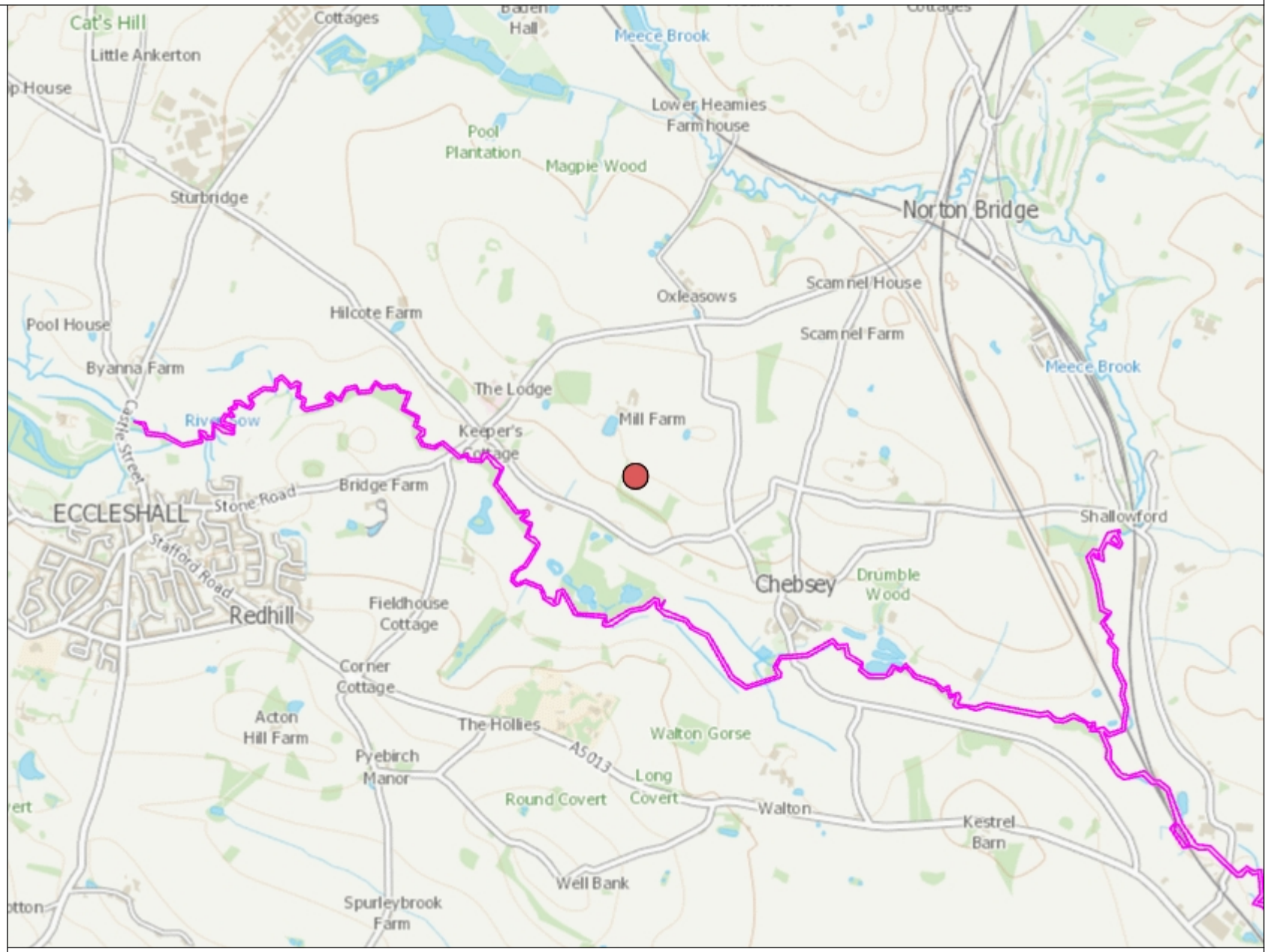
N W E S

# Protected Species

Environment Agency

Legend

Fish migratory routes screened for Environmental Permits




1: 25,000

0 625

Metres

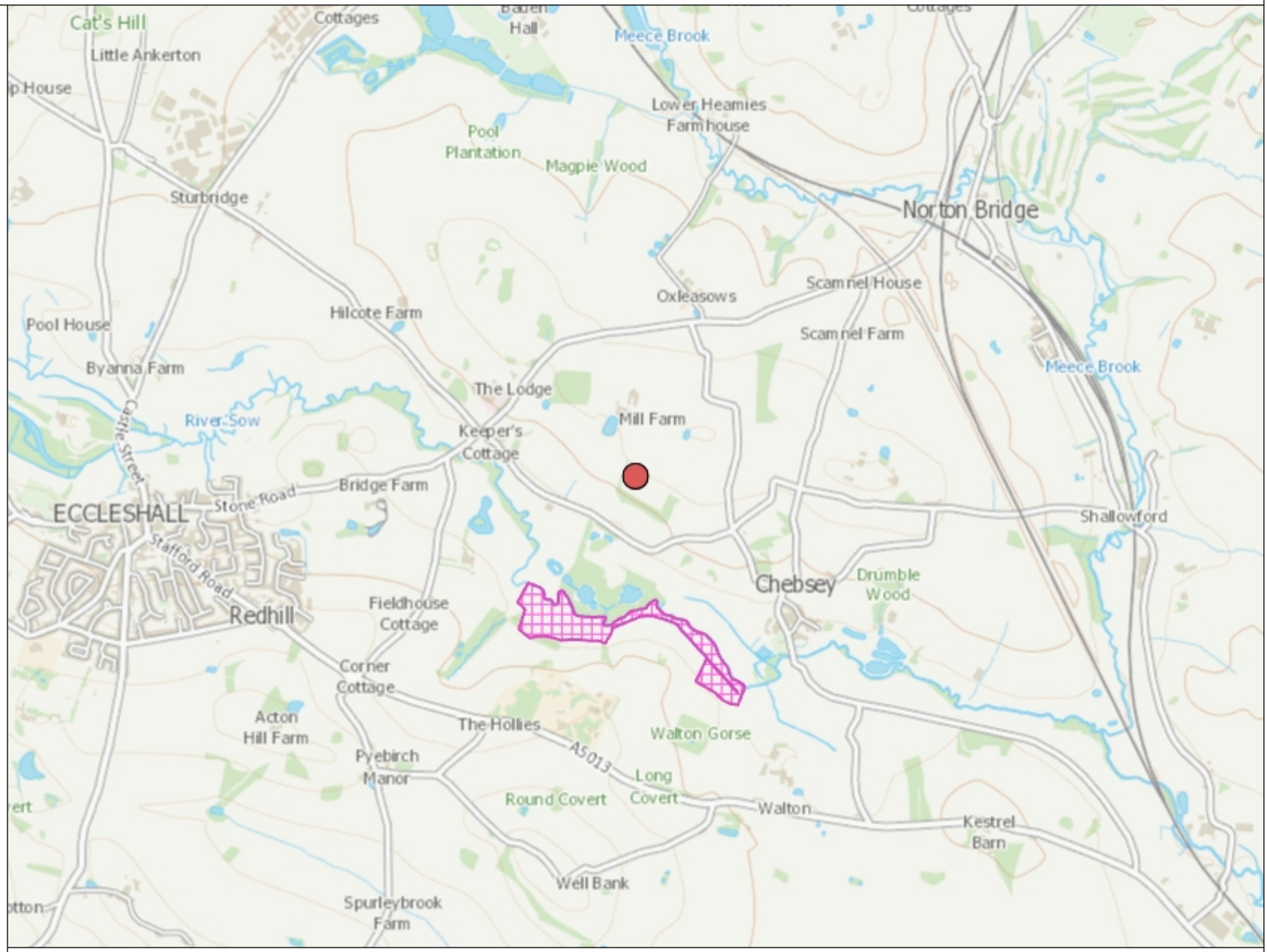
N W E S

# Protected Habitats

Environment Agency

Legend

Protected Habitats screened for Env Permits




1: 25,000

0 625

Metres

N W E S

## Appendix C – Nature and Heritage Conservation Sites Risk Assessment

| Site / Species name and type | Screening distance (m) | Distance from site boundary (m) | Direction from site | Assessment of risk upon protected site from proposed changes |
|---|---|---|---|---|
| **Ramsar** | 10,000 | | | |
| Midland Meres and Mosses Phase 2 Ramsar site | | 4,750 | West | Very Low. An Air Quality Impact Assessment (AQIA)[16] has been carried out. Air quality impacts of predicted pollutant concentrations, rates of nutrient nitrogen and acid deposition during the operational phase are determined to be not significant. Fugitive emissions to air are controlled through the site Environmental Management System. |
| **Local Wildlife Sites** | 2,000 | | | |
| Fieldhouse Dingle | | 475 | South west | As above |
| Drumble Wood | | 960 | South east | As above |
| Meece Brook | | 755 | North east | As above |
| Chebsey Hollow | | 1,000 | South east | As above |
| Yelds Rough | | 1,665 | East | As above |

[16] ETL956_AQIA_V1.0_Mill Farm_July2025

| Site / Species name and type | Screening distance (m) | Distance from site boundary (m) | Direction from site | Assessment of risk upon protected site from proposed changes |
|---|---|---|---|---|
| **Ancient Woodland** | 2,000 | | | |
| The Dingle | | 760 | South west | As above |
| Drumble Wood | | 960 | South east | As above |
| **Protected Species** | 2,000 | | | |
| European Eel migratory route | | 390 | South | Very Low. There are no emissions to water under normal operating conditions. |
| **Protected Habitats** | 2,000 | | | |
| Coastal & Floodplain Grazing Marshes | | 400 | South | Very Low. An Air Quality Impact Assessment (AQIA)[16] has been carried out. Air quality impacts of predicted pollutant concentrations, rates of nutrient nitrogen and acid deposition during the operational phase are determined to be not significant. Fugitive emissions to air and water are controlled through the site Environmental Management System. |

## Appendix D - Process Flow Diagram

# Mill Farm Recycling, Process Flow Diagram July 2025