## **AWO - 01 Non Technical Summary**



# AWO Recycling Ltd Bury Lane Farm Composting Facility

## **Site Address:**

Bury Lane Farm Ramsey Heights Ramsey Huntingdon Cambridgeshire PE26 2RU

Written by: Ben Dyson of CGSS Approved by: Thomas Bedford

Issue 1 November 2020

## **Contents**

| 1.0 | Intr   | roduction                               | 3  |
|-----|--------|---|----|
| 1.1 | Pro    | oposed Operation                        | 3  |
| 1.2 | Site   | e Location and Description              | 3  |
| 1.3 | Оре    | perational Layout                       | 4  |
| 1.4 | Cur    | rrent Recycling Operations              | 5  |
| 2.0 | Waste  | tes to be Processed                     | 5  |
| 3.0 | Opera  | ating Procedures                        | 8  |
| 3.1 | Оре    | perational Hours                        | 9  |
| 3.2 | Tec    | chnical Standards and Control Measures  | 9  |
| 4.0 | Enviro | onmental Impact and Mitigation Measures | 9  |
| 4.1 | Air    |   | 9  |
| 4.  | 1.1    | Odour                                   | 9  |
| 4.  | 1.2    | Bioaerosols                             | 9  |
| 4.  | 1.3    | Noise                                   | 10 |
| 4.2 | Floi   | ora and Fauna                           | 10 |
| 4.3 | Wa     | aters                                   | 10 |
| 4.3 | 3.1    | Groundwater                             | 10 |
| 4.3 | 3.2    | Surface Water                           | 10 |
| 4.4 | Ser    | nsitive Receptors                       | 10 |
| 4.5 | Acc    | cident Management                       | 10 |

#### 1.0 Introduction

AWO Recycling Ltd (AWO) are applying for a Permit Variation under the Environmental Permitting Regulations in order to continue to operate an organic waste treatment facility.

## 1.1 Proposed Operation

AWO operate an open-windrow composting facility (Permit ref: EPR/MB3935AD). The existing permit restricts the total quantity of waste received each year to 25,000 metric tonnes. AWO are applying to increase the maximum total quantity of waste received each year to 50,000 metric tonnes.

### 1.2 Site Location and Description

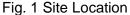
Site Address: Bury Lane Farm

Ramsey Heights

Ramsey Huntingdon Cambridgeshire PE26 2RU

National Grid Reference: TL 285 847

The main entrance to the site is from Longholme Road about 1km due west of the site boundary. It covers an area of approximately 33000m2 and is partly covered by hardstanding which incorporates sealed drainage. The site currently supports a number of outbuildings which are used for the storage and maintenance of equipment and machinery. There are two port cabins that are used as office space and staff welfare facilities. The current site layout, as visually observed within Figure 1 and Figure 2 and will not alter as a result of the proposed increase in tonnage.



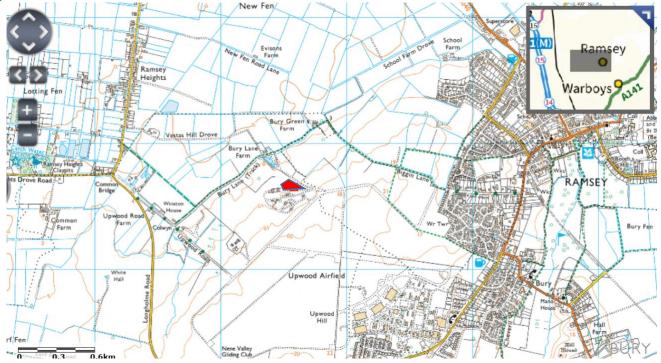
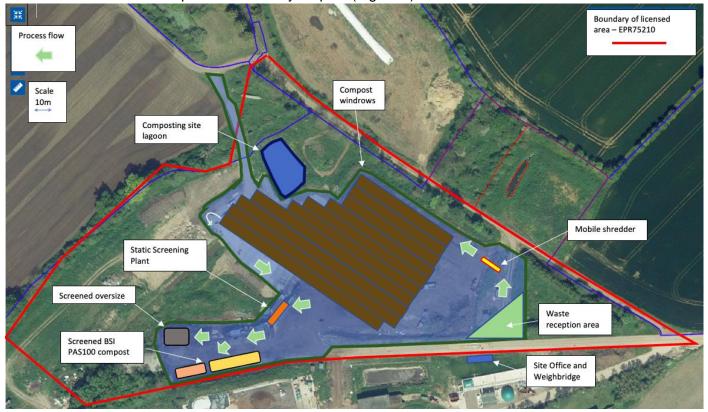


Fig. 2 Aerial view of Site



## 1.3 Operational Layout (@ <50K tonnes per annum)

The operational facility is located on a concrete pad area and hard standing area which is split into distinct areas as indicated on the operational site layout plan (Figure 3).



## 1.4 Current Recycling Operations

The site is currently operational under an Environmental Permit for the treatment and recovery of non-hazardous wastes up to 25,000 tonnes per annum. The biological composting treatment of biodegradable wastes is carried out in order to create two grades of BSI PAS100 (2018) soil improver. The site only accepts non-hazardous wastes.

#### 2.0 Wastes to be Processed (No variation)

Itemised below are a list of wastes currently permitted to be processed on site including waste codes. The biodegradable wastes included in this list are acceptable within the WRAP Compost Quality Protocol (2012) to which AWO subscribe.

Table 1 - List of wastes to be processed on site

| Waste Code | Description  | Condition  |  |
|------------|--|--|--|
| 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 01   | Sludges from Washing and Cleaning  |  |  |
| 02 01 03   | Plant-tissue waste   |  |  |
| 02 01 06   | Animal faeces, urine and manure.   |  |  |
| 02 01 07   | Wastes from forestry   |  |  |
| 02 01 99   | Wastes not otherwise specified   | spent mushroom compost and full biodegradable bedding only |  |
| 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 01   | sludges from washing, cleaning, peeling, centrifuging and separation   |  |  |
| 02 03 04   | biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances)  |  |  |
| 02 03 05   | sludges from on-site effluent treatment  |  |  |
| 02 04      | wastes from sugar processing   |  |  |
| 02 04 01   | Soil from cleaning and washing beet  |  |  |
| 02 06      | Wastes from the baking and confectionary industry  |  |  |
| 02 06 01   | Materials unsuitable for consumption or processing   |  |  |
| 02 07      | wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)   |  |  |

| Waste Code | Description   | Condition                     |  |
|------------|---|-------------------------------|--|
| 02 07 01   | wastes from washing, cleaning and mechanical reduction of raw materials (biodegradable only)  |                               |  |
| 02 07 02   | wastes from spirits   |                               |  |
| 02 07 04   | material unsuitable for consumption or processing   |                               |  |
| 02 07 99   | wastes not otherwise specified (malt husks, malt sprouts, yeast and yeast like residues only)   |                               |  |
| 03         | WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD   |                               |  |
| 03 01      | wastes from wood processing and the produ   | ction of panels and furniture |  |
| 03 01 01   | waste bark and cork   |                               |  |
| 03 01 05   | sawdust, shavings, wood, particle board and veneer other than those containing dangerous substances other than 03 01 04 NO VENEERS OR PRESERVATIVES |                               |  |
| 03 03      | wastes from pulp, paper and cardboard prod  | uction and processing         |  |
| 03 03 01   | waste bark and wood   |                               |  |
| 03 03 07   | mechanically separated rejects from pulping of waste paper and cardboard  |                               |  |
| 03 03 08   | wastes from sorting of paper and cardboard destined for recycling   |                               |  |
| 03 03 10   | fibre rejects, fibre-, filler-, and coating-sludges from mechanical separation  |                               |  |
| 04         | WASTES FROM THE LEATHER FUR AND TEX   | XTILE INDUSTRIES              |  |
| 04 02      | waste from the textile industry   |                               |  |
| 04 02 10   | organic and natural products (for example grease, wax)  |                               |  |
| 15         | WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED  |                               |  |
| 15 01      | packaging (including separately collected municipal packaging waste) (not containing non-biodegradable veneers or plastics)                         |                               |  |
| 15 01 01   | paper and cardboard packaging   |                               |  |
| 15 01 03   | wooden packaging  |                               |  |
| 15 01 05   | composite packaging   |                               |  |
| 15 01 09   | textile packaging   |                               |  |

| Waste Code | Description  | Condition               |  |
|------------|--|-------------------------|--|
| 17         | CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)  |                         |  |
| 17 02      | Wood, glass and plastic  |                         |  |
| 17 02 01   | Wood (untreated)   |                         |  |
| 17 05      | Soil (Including excavated soil from contaminated dredging spoil  | ated sites), stones and |  |
| 17 05 04   | Soil and stones other than those mentioned in 17 05 03   |                         |  |
| 17 05 06   | dewatered dredging spoil other than those mentioned in 17 05 05 (from inland waters only)  |                         |  |
| 19         | WASTES FROM WASTE MANAGEMENT FAC<br>WATER TREATMENT PLANTS AND PREPAR<br>FOR HUMAN CONSUMPTION/INDUSTRIAL U  | ATION OF WATER INTENDED |  |
| 19 02      | wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralization  |                         |  |
| 19 02 03   | premixed wastes composed only of non-<br>hazardous wastes  |                         |  |
| 19 05      | wastes from the aerobic treatment of solid wa  | astes                   |  |
| 19 05 03   | Off-specification compost  |                         |  |
| 19 08      | waste from waste water treatment plants  |                         |  |
| 19 08 05   | sludges from treatment of urban waste water  |                         |  |
| 19 12      | wastes from the mechanical treatment of was crushing, compacting, pelletising) not otherw  | •                       |  |
| 19 12 01   | paper and cardboard  |                         |  |
| 19 12 07   | wood other than those mentioned in 19 12 06  |                         |  |
| 19 12 12   | other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (shredded green waste, shredded wood, separated fruit etc) |                         |  |
| 20         | MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPERATELY COLLECTED FRACTIONS  |                         |  |
| 20 01      | separately collected fractions (except 15 01)  |                         |  |

| Waste Code  | Description  | Condition                          |
|---|--|------------------------------------|
| 20 01 01  | Paper and cardboard  |                                    |
| 20 01 08  | biodegradable kitchen and canteen waste (not including waste covered by the Animal By-Products Regulations 2005) |                                    |
| 20 01 38  | Wood other than that mentioned in 20 01 37   |                                    |
| 20 02 Garden and park wastes (including cemetery waste) |  | waste)                             |
| 20 02 01  | Biodegradable waste (comprising wood and plant tissue)   | Non-ABPR biodegradable waste only. |
| 20 03   | other municipal wastes   |                                    |
| 20 03 02  | waste from markets (not including waste covered by the Animal By-Products Regulation 2005)                       |                                    |

#### 3.0 Operating Procedures (@ <50K tonnes per annum)

Biodegradable wastes are brought into the site via the weighbridge and deposited in the designated reception area where strict waste acceptance procedures are applied. The quantity of unprocessed material stored at any one time does not exceed 250 tonnes (Approx. 450m3). Unprocessed materials are then shredded using a slow speed mechanical shredder.

Waste reception will cease if the quantity of unprocessed material reaches 250 tonnes (Approx. 450m3) and there is insufficient space to create a second pile allowing for the requisite minimum 6m separation distance from other waste piles/static plant.

Shredded waste is then formed into compost windrows and the actively managed composting process begins as described in the BSI PAS 100 Quality Management System (QMS).

The dimensions of each windrow will be approximately 5m high, 7m wide and 60m to 100m long. The typical volume of each windrow will be 1500m3, with a minimum of 1000m3, and maximum expected volume of 1750m3. Typically, there will be 10 compost windrows on site at any one time.

The BSI PAS100 QMS will be validated at a minimum composting period of five weeks during which time temperature and moisture content is monitored daily against stated critical limits for the sanitisation phase and then weekly thereafter. Compost windrows will be periodically turned throughout the five weeks in order to maintain optimal conditions for the aerobic degradation of the waste.

Once the five week process has been completed compost windrows will then be screened (graded) to produce a 0-10mm and 10-25mm compost. A by-product of the screening process is compost oversize which consists of larger pieces of woody material and a small quantity of contrary material (contamination) that is often inherent to municipally collected biodegradable waste.

The screened compost will be stored on site in stockpiles before being transported off site to customers in both agricultural and horticultural markets. The piles of screened BSI PAS100 conforming compost are typically no more than 1000m3 in volume and are not stored on site for more than eight weeks.

The screened oversize is stored on site in stockpiles no more than 450m3 in volume ahead of reuse in new compost windrows. This coarse material is useful in providing structure and additional carbon at the beginning of the composting process.

Compost screening will cease if the quantity of oversize reaches (450m3) and there is insufficient space to create a second pile allowing for the requisite minimum 6m separation distance from other waste piles/static plant.

All waste materials stored on site are identifiable and fully traceable by their storage location, and will not exceed 450m3 in volume. All stored materials will be managed and monitored in accordance with the validated BSI PAS100 and CQP QMS.

### 3.1 Operational Hours

| Day                 | Waste<br>Acceptance              | Waste Treatment                  | Maintenance                      |
|---------------------|----------------------------------|----------------------------------|----------------------------------|
| Monday to<br>Friday | <b>0730</b> to <b>1800</b> hours | <b>0800</b> to <b>1730</b> hours | <b>0730</b> to <b>1800</b> hours |
| Saturday            | <b>0730</b> to <b>1300</b> hours | <b>0800</b> to <b>1200</b> hours | <b>0730</b> to <b>1300</b> hours |
| Sunday              | Closed                           | N/A                              | N/A                              |
| Bank<br>Holidays    | <b>0730</b> to <b>1300</b> hours | <b>0800</b> to <b>1200</b> hours | <b>0730</b> to <b>1300</b> hours |

## 3.2 Technical Standards and Control Measures

AWO are operating to the PAS 100:2018 and CQP standard for the composting of biodegradable waste. The critical control points governing this technical standard are applied to this site and fully incorporated into the sites Quality Management System (QMS).

## 4.0 Environmental Impact and Mitigation Measures

All facilities have an impact on the environment around them. AWO will be employing process management and best available techniques (BAT) which will mitigate the environmental impact within the following areas:

#### 4.1 Air

#### 4.1.1 Odour

The site has a comprehensive Odour Management Plan (OMP) which is based on the Environment Agencies' Horizontal Guidance - H4 Odour Management Guidance.

#### 4.1.2 Bioaerosols

Regular bio aerosols monitoring surveys are carried at the site as specified by the M9 TGN "Environmental monitoring of bioaerosols at regulated facilities".

#### 4.1.3 Noise

There is one residential property 240 meters from the facility, this is the Bedford Family home whom operate the site. Given the distance to this property and the operational hours, noise is not considered an issue within this permit variation.

#### 4.2 Flora and Fauna

The site has operated as a waste handling facility since 2006 and there are no records of any protected species within the curtilage of the facility. The site is not within 500m of any designated areas for habitat or species protection.

#### 4.3 Waters

#### 4.3.1 Groundwater

The site is outside Groundwater Protection Zone I (inner), II (outer) or Zone III (total catchment. There are no groundwater abstraction points within 1km of the site. The site is underlain by concrete and hardstanding.

#### 4.3.2 Surface Water

Surface water will be managed on site through the underground drainage beneath the operational area. Leachate captured within the site lagoon can be pumped out and re-applied to the compost at the batch formation phase if required. There are no environmentally sensitive surface waters (monitored by the EA) within 250m of the site boundary.

## 4.4 Sensitive Receptors

There is one sensitive receptor within 250m of the site boundary, this is the Bedford Family home, who also own and operate the site.

### 4.5 Accident Management

The site has a full Accident Management Plan which is reviewed on a yearly basis, or as necessary, as identified by the processes installed within the management plan.