

# **MANAGEMENT SYSTEM**

Environmental and sustainability solutions provided to RESOURCE RECYCLING SOLUTIONS LTD

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# **CONTENTS**

1.0	INRODUCTION	1
1.1	Permitted Activities	1
1.2	Exempt Activities	1
2.0	SITE DETAILS	2
2.1	Site Location	2
2.2	Description	2
2.3	Permits and Licences	2
2.4	Planning Permission	2
2.5	Calculated Capacity	2
2.6	Aggregation	2
2.7	Directly Associated Activities	3
3.0	OPERATIONAL OVERVIEW	4
3.1	Waste Management Operations	4
3.2	Permitted Waste	8
3.3	Changes to Waste Exemptions	8
3.4	Hours of Operation	8
3.5	Staffing	8
3.6	Technical Competence	9
3.7	Site Identification Board	10
3.8	Site Security	10
3.9	Relevant Convictions	11
3.10	O Change of Operators' or Holders Details	11
3.11	1 Maintenance of Financial Provision	11
3.12	Notification of Preparatory Works	11
3.13	Commencement or Cessation of Waste Operations	12
3.14	Notification and Submissions to the Agency	12
4.0	SITE ENGINEERING	13
4.1	Operational Area	13
4.2	IVC Building	13

	4.3	Process Tunnels	14
	4.4	Air Treatment	14
	4.5	Biofiltration	15
	4.6	Weighbridge	15
	4.7	Drainage and Containment System	16
	4.8	Contaminant Storage	17
5	.0 S	ITE OPERATIONS	18
	5.1	General Pre-Acceptance	18
	5.2	Waste Wood, Soil and Aggregate Pre-Acceptance	18
	5.1.2 \	Vaste Acceptance	20
	5.1.3 \	Vaste Rejection	22
	5.1.4 \	Vaste Contamination	22
	5.1.5 \	Vaste Dispatch	22
	5.1.6 \	Vaste Measurements	23
	5.1.7 \	Vaste Storage	23
	5.1.8 \	Vaste Reception	24
	5.1.9 F	Rejection or acceptance and storage of input materials	24
	5.1.10	Acceptance criteria for acceptance / rejection of input loads	24
	5.3	Open Windrow Composting	25
	5.2.1 (	OWC Critical Limits	26
	5.2.2 (	OWC Corrective Actions	27
	5.4	In-Vessel Composting	28
	5.5	IVC Cleaning Procedure	30
	5.6	Screening	32
	5.7	Waste Wood Treatment	33
	5.8	Waste Soils, Stones & Aggregate	34
	5.9	Use of Waste on Site	35
6	.0 P	OLLUTION CONTROL	37
	6.1	Site Maintenance	37
	6.2	IVC Housekeeping	37
	6.3	Meteorological Monitoring	37
	6.4	Dust & Bioaerosols	38

6.5	Measures the Site will take reduce Dust	39
6.6	Must & Debris	40
6.7	Litter	40
6.8	Pests	41
6.9	Spillages	41
6.10	Odour	41
6.11	Noise and Vibration	43
6.12	Accident Management	43
7.0 MOI	NITORING AND RECORDS	44
7.1	Monitoring	44
7.2	Site Diary	44
7.3	Waste Records	45
7.4	Reporting and Notification	46
7.5	Training Records	46
7.6	Site Waste Returns	46
7.7	Complaints	47
7.8	Site Processing/Operations	47
ANNEX A -	WASTE INPUT CODES	48
ANNEX B -	SITE LOCATION PLAN	58
ANNEX C -	ODOUR COMPLAINT FORM	60
ANNEX D -	NOISE AND VIBRATION SHEET	63
ANNEX E -	GENERAL COMPLAINT RECORD SHEET	66
ANNEX F -	CURRENT SITE DRAINAGE PLAN	68

#### 1.0 INRODUCTION

This Management System has been prepared in accordance with the Environmental Permitting Regulations and sets out the considerations and operational details that are relevant to the operation of the resource recovery facility at Resource Recycling Solutions Ltd (hereon referred to as RRS), Out Rawcliffe, Lancashire. It details the nature of the site, relevant site and infrastructure works, methods of operation and environmental controls. The Management System (MS) relates to composting in closed vessels and open systems as well as the processing of waste wood via shredding or chipping, the blending of soils and aggregates and the use of waste in construction.

#### 1.1 Permitted Activities

RRS is currently permitted to treat a variety of materials at the Leighton Grange recycling facility under a bespoke installation permit: Permitted activities are as stated below:

- Composting in closed systems of biodegradable wastes (<75,000 tonnes per annum (tpa)).
- Composting in open systems of biodegradable wastes (<75,000tpa).</li>
- Treatment of waste wood via shredding (<1,000 tonnes at any one time).</li>
- Crushing, screening and blending of waste soils and concrete (<1,000 tonnes at any one time).
- Use of waste in construction (<1,000 tonnes at any one time).

# 1.2 Exempt Activities

RRS currently do not undertake any exempt activities on site.

#### 2.0 SITE DETAILS

#### 2.1 Site Location

Iron House Farm. Lancaster Road, Out Rawcliffe, Preston. Lancashire, PR3 6BP

Grid Reference: 341162,444756

# 2.2 Description

Iron House Farm is located off Lancaster Road. The farm is located in Out Rawcliffe which is 17km south of Lancaster and 9km west of the M6. The main village of Out Rawcliffe is situated to the south west at a distance of 3km. The site is situated within an area that is of agricultural use with some residential.

#### 2.3 Permits and Licences

RRS operate a composting facility under an installation permit, reference number EPR/ QB3036RB. This permits the facility to undertake composting of up to 75,000 tonnes per annum of biodegradable waste in open and closed systems, the processing of waste wood via shredding or chipping, the blending of soils and aggregates and the use of waste in construction.

# 2.4 Planning Permission

The site has full planning permission for the facility: 02/08/1116 from Lancashire County Council dated 14th November 2008.

## 2.5 Calculated Capacity

The site lays above the Industrial Emissions Directive (IED) threshold of 75 tonnes per day.

#### 2.6 Aggregation

The aggregation of biowaste recovery activities with other non-hazardous waste recovery treatment have been considered.

All waste streams have been accounted for in the supplied information.

# **Directly Associated Activities**

The associated activities with the system are:

- Compost storage (prior to dispatch offsite)
- Leachate collection and storage (prior to processing)
- Collection and storage of clean site surface water (roof drainage etc. from rainwater)

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# 3.0 OPERATIONAL OVERVIEW

# 3.1 Waste Management Operations

The waste management operations at the site vary depending on what waste sources are to be treated. Treatment operations comprise the following:

- Composting in closed systems of biodegradable wastes (<75,000 tpa).</li>
- Composting in open systems of biodegradable wastes (<75,000tpa).
- Treatment of waste wood via shredding (<1,000 tonnes at any one time).
- Crushing, screening and blending of waste soils and concrete (<1,000 tonnes at any</li> one time).
- Use of waste in construction (<1,000 tonnes at any one time).

The details of the engineering development, method of operation and environmental pollution control are given in Sections 4, 5 and 6 of this document. The activities to be carried out will involve Waste Recovery and Waste Storage, being designated as R3 and R13 respectively. The limitations on specified waste operations are illustrates in Table 1 below.

**Table 1 - Waste Activities and Operational Limits** 

Activity	Specified Waste Management Operation	Permitted Waste Category	Limits on Specified Waste Operation
Open Windrow Composting	R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection on the site where it is produced).  R3 Recycling or reclamation of organic substances which are not used as solvents.	All	i) Storage of waste prior to shredding shall take place on area of impermeable pavement. ii) Storage time prior to commencement of process limited to 7 days. i) The quantity of waste prior to composting shall not exceed a total of 500

Activity	Specified Waste Management Operation	Permitted Waste Category		its on Specified aste Operation
			ii) iii)	tonnes at any one time. The quantity of finished compost shall not exceed 2,500 tonnes at any one time. All shredding and composting operations shall be carried out on areas of
				impermeable pavement.
In vessel composting	R13 Storage of waste materials to be subject to category R operations.  R3 Recycling or reclamation of organic substances which are not used as solvents.	All	i)	Treatment operations shall be limited to secure storage, physical treatment, composting and maturation of the types of waste listed. The physical treatment, composting and maturation of wastes under anaerobic
			·	conditions shall be prevented.  No waste shall be stored on site prior to composting for longer than 72 hours.  Composting activities are restricted to less

Activity	Specified Waste Activity Management Operation		Limits on Specified Waste Operation
			than 2,500 tonnes at any one time.
	R13 Storage of waste pending operations numbered R3 and R5.	All	<ul><li>i) Secure storage</li><li>of the listed</li><li>wastes pending</li><li>treatment.</li></ul>
Screening and blending of waste	R3 Recycling or reclamation of organic substances which are not used as solvents.  R5 Recycling or reclamation of inorganic materials		ii) Treatment of wastes consisting only of sorting, separation, screening, crushing and blending for recovery as a soil, soil substitute or aggregate.  iii) The total quantity of waste stored at the site shall be less than 1,000 tonnes at any one time.
Wood Shredding	R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection on the site where it is produced).	All	i) Storage of waste prior to shredding shall take place on area of impermeable pavement. ii) Storage time prior to commencement of process limited to 3 months.

Activity	Specified Waste Management Operation	Permitted Waste Category		nits on Specified aste Operation
	<b>R3</b> Recycling or reclamation of organic substances.		iii)	All shredding operations shall be carried out on areas of impermeable pavement.
			iv)	The total quantity of waste stored at the site shall be less than 1,000 tonnes at
			v)	any one time. Wood shall not be stored more
	R11 Use of wastes	All	i)	than 4m high. Storage of
	obtained from any of	All	'/	waste prior
	the operations			to use in
	numbered R1 to R10.			construction.
			ii)	Construction
	R13 Storage of waste		,	includes
	pending any of the			building
	operations numbered			bunds,
	R1 to R12 (excluding			tracks, paths
	temporary storage,			and
Han of wants in	pending collection on			landscaping.
Use of waste in	the site where it is		iii)	) Storage time
construction	produced).			prior to use
				limited to 12
				months.
			iv	) The total
				quantity of
				waste stored
				at the site
				shall be less
				than 1,000
				tonnes at any
				one time.

#### 3.2 Permitted Waste

Waste shall only be accepted if it is a type and quantity specified in the permitted list of wastes, and if it conforms to the description in the documentation supplied by the producer and holder. See Annex 1 for full list of accepted wastes for each waste activity.

Any wastes that are not categorised in Annex 1 should be considered contrary/non-conforming and dealt with appropriately. There shall only be non-hazardous wastes accepted on site.

# 3.3 Changes to Waste Exemptions

RRS previously held registrations for three waste exemptions: U1, T5 and T6. These covered the use of waste in construction, the screening and blending of waste and the treatment of waste wood via shredding. Following Defra's consultation supplementary response document and associated annexes, which sets out that there will be significant changes to the waste exemption regime, RRS took the decision to add these to the environmental permit.

# 3.4 Hours of Operation

As specified by Planning Permission the site operational hours are presented within Table 2, including maintenance activities.

Week Day	Waste Acceptance	Waste Treatment	Maintenance
Monday to Friday	08:30 - 18:00	08:30 - 18:00	As required
Saturday	08:30 - 12:00	08:30 - 12:00	As required
Sunday	NIL	Emergency only	As required
Bank Holidays	NIL	Emergency only	As required

**Table 2 - Site Operational Hours** 

#### 3.5 Staffing

RRS shall ensure that sufficient personnel, who are suitably trained and competent, are present to manage and operate the on-site recycling/treatment activities safely and without causing pollution. Personnel must be fully familiar with the requirements of the Permit as is

relevant to their specific duties. Personnel shall have clearly defined roles and responsibilities. The staff numbers are presented below in Table 3.

**Table 3 - Site Operational Staff** 

Personnel	Management	Administration	Operators	Other	Total
Number	2	1	5	0	8

The site is operated under the ultimate control of the Site Manager Julie Gardner, and day to day responsibility rests with the Site Manager, Julie Gardner. The facility will require 5 full or part time employees. Staff numbers will be maintained at a level sufficient to operate and supervise the site effectively and throughout periods of employee sickness and holidays.

# 3.6 Technical Competence

The manager and operatives will be appropriately trained and will be conversant with the requirements of the Environmental Permit and Management System, with particular regard to:

- Waste acceptance/rejection procedures;
- Operational controls;
- Maintenance procedures;
- · Record keeping;
- Awareness of regulatory implications of the permit;
- Awareness of all potential environmental effects from the operations;
- Emergency action plan and prevention; and
- Notification to the Environment Agency and other regulatory authorities.

A copy of the Environmental Permit and Management System will be kept at the site office and will be readily available for reference by site staff, other company staff, Environment Agency and other regulatory authorities.

A designated person will hold a suitable qualification in order to operate the site compliantly (see Table 4 below). The suitably qualified person's actual attendance hours on site will be recorded in the Site Diary.

**Table 4 - Technical Competence Qualifications** 

Name	Qualification
Julie Gardener	CIWM (WAMITAB) Level 4 Medium Risk Operator Competence for Open Windrow Composting

Any changes in technically competent management at the site, and/or the name of any incoming personnel, together with any evidence that such personnel has required technical competence, shall be submitted to the Environment Agency within 5 working days of change in management. No site operations shall take place unless there is sufficient, trained and competent staff on site as per SGN page 76, points 3-7.

#### 3.7 Site Identification Board

In conformance with permitting regulations and the Management System, RRS shall display a clear, all-weather, easily readable Site Notice at or near the entrance to the site. The Site Sign/Notice shall contain the following information:

- Company Name
- Permit Holder's Name
- Emergency Contact Name
- Permit Holder's Telephone Number
- Statement that the site is permitted by the Environment Agency (EA)
- The Permit Number
- EA National Telephone Numbers

The Identification Board shall be inspected at least once per week. In the event of damage or defect, the board shall be repaired or replaced within three working days.

# 3.8 Site Security

The facility lies within a gated facility which is bunded on 4 sides (except where the gate for accessing the site is) and is situated within a rural location.

Within the specified licensed area, the site is closed (gate and bunding) and secured outside of operating hours.

The access road which connects the site is gated at the site entrance from the highway and these gates are locked outside all normal operating hours.

The boundary fences (which are fixed on top of the bunds to the north and west of the facility) to the application site and gate from the internal access are checked on a regular basis for damage or signs of attempted entry. Such occurrences are entered in the site diary and any damage is repaired at the earliest opportunity.

All visitors will be required to sign in at the Site Office on arrival and exiting the site.

# 3.9 Relevant Convictions

In the unlikely event of the Permit Holder or a relevant person being convicted of any relevant offence, the full details will be provided to the Environment Agency within 14 days of the conviction, as will be details of any appeals.

# 3.10 Change of Operators' or Holders Details

The following information shall be notified in writing within 5 working days to the agency:

- Any change to the Permit holders trading name;
- Any steps taken with a view to the Permit holder going to administration; and
- Any change in the operators trading name, address registered name or registered office address.

#### 3.11 Maintenance of Financial Provision

The Company (RRS) will make financial provision to meet the obligations of the Permit.

# 3.12 Notification of Preparatory Works

Commencement of preparatory works for the construction of the site and infrastructure and its completion will be notified to the Agency in writing.

Any additional preparatory works required as a result of the issuing of a new waste Environmental Permit or site improvement would be notified to the Agency or relevant authority. The Permit holder shall give no less than 7 days prior notice of any changes to the Management System.

# 3.13 Commencement or Cessation of Waste Operations

Commencement of waste recycling operations on the IVC site will be notified to the relevant authority in writing in advance.

In the event of any future cessation and subsequent re-commencement of the use of the site for open windrow composting operations, the relevant authorities would be notified in writing specifying the date of any such cessation or re-commencement.

# 3.14 Notification and Submissions to the Agency

Except where otherwise specified all submissions to the Agency shall be in writing. These correspondences shall include the reference number and the name of the Permit holder.

#### 4.0 SITE ENGINEERING

# 4.1 Operational Area

The permitted site has recently been extended by approximately 30m to the south along the entire southern boundary of the site. The operational layout of the facility is shown in document RRS03 Site Layout Plan.

The facility is one large area which runs in an east to west direction. The eastern portion of the site consists of the site offices, car park and weighbridge. The central eastern portion of the site is where waste reception, shredding and screening take place. The central western portion of the site is where the windrows are formed. The western portion of the site houses the IVC building and biofilter. Product storage is located along the southern boundary of the site and the southeast corner of the site is where the non-biodegradable wastes are stored.

The facility comprises of a large, concreted pad area in the centre where waste reception takes place. There is also an open barn located here where any rejected material is stored. The impermeable concrete pad beneath the site is constructed with a base of 40mm clean stone and with a 200mm concrete top layer. There is a sealed drainage system that served the entire impermeable concrete pad. The pad was constructed with falls to direct surface water into drains that feed the two leachate storage tanks that serve the pad.

# 4.2 IVC Building

The IVC building (50m x 45m x 8m) is an enclosed system for the reception and pre-treatment of waste to be processed within the composting tunnels and operated under negative pressure. The IVC building includes four roller shutter doors. The entrance point to the waste reception area of the building which is located at the northern point on the eastern side, will feature a 2No. of roller shutter doors big enough for Refuse Collection Vehicles (RCV's) to enter and deposit waste. Next to that will be a double roller shutter specifically for a mobile shredder to access the building, that has a dedicated area within the waste reception hall. Finally at the southern portion of the eastern edge another roller shutter door will be in place where the IVC tunnels are located, the primary function will be for non-collection vehicles (e.g., shovel loaders) taking sanitised material out to the OWC area. All roller shutter doors will be manually operated and remain closed when vehicles are not entering/exiting. For pedestrians there will be on 2No. of entrance points. One will be situated next to the waste reception roller shutter door and one situated next to the IVC tunnels roller shutter door. These doors will be airtight and enable safe access away from the delivery vehicles and as an emergency escape during fires. A footbath will also be present next to each door for sterilisation of footwear during ingress & egress.

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The IVC building includes waste storage prior to pre-treatment and pre-processing operations prior to tunnel loading. Pre-processing includes hand picking and shredding.

The IVC building has a total air space volume of 11,111m3. The IVC building is continually vented as the source of air for aerating the compost tunnels. During normal composting operations (including cool-down) on average a tunnel will consume 41m³ of air per m² of tunnel per hour. This means an average air consumption of 8,364m<sup>3</sup>/h/tunnel, or a total air demand of 33,456m<sup>3</sup>/h. Therefore, the IVC building is ventilated by 3ae/h (air exchanges per hour).

#### 4.3 Process Tunnels

There are 4 tunnels in total with an internal dimension of each tunnel of 34m x 6m x 4m (I \* w \* h). One air injection fan supplies air at the base of each tunnel on the western side of the building (4No. in total for all tunnels). These will be linked by a ducted system that will run externally to the building, drawing air from the primary air extraction fan that is connected to the reception hall. This process of forced aeration of the compost pile will take place through the channels in the tunnel floor which also act as the leachate drainage channels. These channels direct airflow at the base of the material which then flows up through the composting mass into a headspace at the top of the tunnel. Removable reinforced plastic aeration & drainage frame will line the concrete channels. These frames will feature a plastic grated top to prevent debris accumulation. A visual inspection will take place proceeding the sanitisation period and If debris is present the frames will be removed, and pressure washed. The tunnels are loaded from one end (eastern side) and operate in batch mode after the tunnel is fully loaded. The 4No. of IVC tunnel will be used to attain a nearly continuous operation. Air extraction will take place via one extraction fan that is located at the upper portion of each tunnel on the western edge (4No. in total for all tunnels). This will enable air to be drawn up through the waste pile. The tunnel's air extraction fan is linked via an external ducted system that connects to the site's biofilter ducting for odour abatement purposes. When needed water can be added via a sprinkler system.

By circulating the process air, it is possible to control parameters that are important to the composting process, such as temperature, humidity and oxygen concentration. The composting conditions can be optimised through the automated system.

# 4.4 Air Treatment

After the tunnel has been filled with waste feedstock the door is closed and the tunnel climate control program is initialised. The composting tunnels will be managed with respect to temperature and moisture to optimise the process, attain pathogen reduction requirements,

and meet process objectives. All exhaust process and ventilation air is led to the odour control system via a valve system, a motor and a pressure-controlled blower via enclosed aluminium ductwork. This system contains a biofilter.

The air supply to the tunnels is drawn from the IVC building via a fan and an external ductwork system with managed controls. The process air exhausted from the tunnels, also directly links into the external duct system. Ventilation air can by-pass the tunnels when the demand from the tunnel for air extracted from the IVC building is not there. This means the air going into the biofilter system is a mixture of IVC tunnel process air and IVC building air. Under normal operational conditions the total process airflow will be 33,456m<sup>3</sup>/h is treated by the biofilter.

## 4.5 Biofiltration

There is one biofilter for the treatment of air from the IVC building and 4No. compost tunnels. The internal dimensions of the biofilter housing are approximately  $27.3 \,\mathrm{m} \times 10 \,\mathrm{m} \,(\mathrm{l} * \mathrm{w})$  with a maximum air load of  $122.5 \,\mathrm{m}^3/\mathrm{h/m}^2$ . The biofilter is built with a spigot floor, for an optimal air distribution. The maximum airflow through the 4 tunnels during normal operation is  $33,456 \,\mathrm{m}^3/\mathrm{hr}$ . The biofilter has been sized accordingly to be able to treat the air extracted from the IVC building and tunnels.

The biofilter will be constructed of coarse shredded untreated wood. The biofilters will be filled to 1.53m<sup>3</sup> of media per m<sup>2</sup> of biofilter.

Over time biofilter material loses its coarseness. This is identified by visual inspection of the biofilter media and backpressure. Once the media has been identified as requiring replacement, fresh wood chip material is brought in and the spent biofilter media composted.

Temperature monitoring is undertaken within the biofilter media and any temperature above 35°C triggers the system to ventilate the biofilters to cool them down. In the plenum chamber, pressure and energy uptake are measured. These parameters help running the facility at its maximum efficiency.

# 4.6 Weighbridge

The site utilises an RC3/30 weighbridge. The weighbridge was installed in 2015. It is situated outside the site office and is in the entrance to/exit from the site. Calibration of the weighbridge takes place on an annual basis.

#### **Drainage and Containment System** 4.7

All drainage systems will be regularly inspected and maintained by the site manager and recorded within a site check sheet, at least on a weekly basis. The site manager will initiate regular inspection and cleaning of building gutters, gullies, drains and storage tanks at regular intervals. The floor gradients are employed to ensure any leachate or surface water runs to a drainage system (manholes and tanks). On site surface and processing water from the OWC pad is fed into one of two leachate storage tanks via falls in the concrete which direct all surface water into drains. The storage tanks have a capacity of 522m<sup>3</sup> and 124m<sup>3</sup>. The smaller tank acts as an overflow for the larger tank. The larger tank will always operate with a retained volume of 250m3 inside it. This dirty water is used at the reception area to increase the moisture content of the feedstock material, as necessary. The tank is never kept at capacity as leachate from the tank is regularly re-circulated into the compost. The two tanks are large enough to cope with a 48hr M5 worst case storm event producing 40mm of rainfall. No tanks have ever over flowed.

All leachate drainage channels for the waste reception will be cut into the concrete floor and will be lined with reinforced plastic with grating to ensure avoidance of cracking from vehicle movement. Grated channels in the waste reception area will direct leachate from south to north & east to west. The concrete floor also features falls ensuring leachate flows into the designated 'dirty area' channel and does not enter the APBR designated 'clean area' corridor that is situated in front of the tunnels. Leachate exits the building at the southern portion of the western edge into an enclosed external drainage channel to maintain ABPR and odour control. This external channel directs leachate to the leachate storage tank, which is located adjacent to the biofilter. The tank will be constructed of concrete and feature a corrugated steel cladding. Collected leachate is to be re-used when moistening of waste material during the batch formation phase within the tunnels.

Within the IVC tunnels a series of drainage channels run along the floor, these were previously mentioned as the reinforced plastic aeration frames. Leachate will flow from west to east up to the point of the tunnel entrance. A singular enclosed drainage channel runs along the front of the tunnel entrance points. This leachate drainage channel runs south to north and then east to west along the northern edge of the waste reception hall, directing leachate into the enclosed external drainage channel on the western edge of the building. Leachate will then flow northward to the leachate storage tank.

The ABPR dirty area (waste reception) and ABPR clean areas (IVC tunnels & corridor) have dedicated drainage channels within the IVC building. This enables separation of processed

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and unprocessed materials preventing leachate related cross contamination between the area. A formalised clean down procedure of the clean area corridor will also take place each time un-sanitised material has been deposited in the tunnels (e.g., pressure washing of the concrete floor and shovel loaders). The implementation of these measures ensures RRS are adhering to ABPR regulatory requirements.

These arrangements ensure that under all weather conditions, no water from the site can escape and if required, all is removed by tanker by David Kippax who is authorised to take liquid waste to United Utilities.

Any water which pools on the surface of the site is vacuumed up by a vacuum tank held on site. The liquid is then removed by David Kippax within 24 hours. Small amount of surface water are re-circulated back into the compost.

All roads will be maintained in a satisfactory condition by means of monthly inspections to check their physical state and the early implementation of repair works when deemed necessary. The results of the inspections and remedial works will be recorded in the Site Diary.

# 4.8 Contaminant Storage

All wastes received on site are stored on the concrete pad or within the IVC building as appropriate. Waste is not stored for longer than is necessary. Material that is rejected is requested to be collected with 48 hours. If waste is refused or rejected this is recorded in the 'Rejected Loads Record Sheet' as part of the PAS100 process. This document asks for date arrived, source, reason for rejection, action taken and outstanding issues.

Those wastes received which are unsuitable for processing or not permitted under the Permit and which arrive as minor contaminants within larger loads, are stored in closed containers provided and removed from site to an appropriate disposal site on a regular basis.

Any load containing a greater level of non-permitted wastes is rejected immediately on arrival and following first inspection of the load.

#### 5.0 SITE OPERATIONS

## 5.1 General Pre-Acceptance

Personnel shall ensure that the site has the required number of qualified staff on site prior to the waste acceptance and rejection procedures. Personnel shall ensure that the site has capacity to store and treat any incoming waste.

Material treated at the IVC facility will be treated in accordance with the relevant treatment parameters for ABPR as specified in EC 1069/2009 and EC 142/2011.

Personnel shall ensure that the site will not exceed Permit conditions by accepting any incoming wastes. Wastes should not be accepted at the installation without a clear method or defined treatment and recovery/disposal route as per page 32, point 44 of the Sector Guidance Notes.

Analysis required will vary depending upon the nature of the waste, the process to be used and what is known about the waste already. Results of analysis should be kept within the tracking system. These details should include (SGN page 24, point 10):

- check on constituents declared by waste producer/holder to ensure Permit compliance, treatment plant specification and final disposal
- all hazardous characteristics
- physical appearance
- colour
- pH
- presence, strength and description of odour assessment (note COSHH implications)

# 5.2 Waste Wood, Soil and Aggregate Pre-Acceptance

Pre-acceptance procedures are required to assess the waste prior to arrival at the Site, to ensure the waste is in accordance with the list of Permitted Wastes and is technically suitable for the Site operations.

The waste producer must provide enough information regarding the waste to satisfy the Site Manager that the waste has been properly assessed and classified. Household and similar non-household waste may be pre-accepted by the terms and conditions of the contract in place. For commercial and industrial waste, the following information must be obtained prior to acceptance:

- Details of the waste producer including their name, address and contact details;
- A description of the waste, and its physical form
- The Waste Classification List of Waste (LoW) code;
- The waste producer's business and the process that created the waste;
- Information on the nature and variability of the waste production process;
- Information about the history of the waste producing Site, for example, soil contaminated by historical industrial uses;
- the composition from analytical testing on representative samples (mirror entry only);
- a description of the waste's odour and whether it is likely to be odorous; and
- an estimate of the quantity likely to be received in each load and per year.

Sufficient evidence must be provided to confirm the waste have been assigned the relevant Waste Classification mirror entry LoW code.

For large loads i.e. greater than 25 tonnes or regular contracted waste, the waste will only be accepted where chemical analytical testing on representative samples indicates the waste to be non-hazardous. If a mirror entry LoW code has not been properly assessed, it must be assumed that the waste is the hazardous mirror entry as a precautionary measure. If the chemical analytical testing on representative samples indicates the waste to be hazardous, it cannot be accepted. Where the waste is an absolute non-hazardous LoW code, analytical testing on representative samples is not required.

The chemical composition of the waste from analytical testing on representative samples should be used to assess the waste classification and assign the relevant mirror entry LoW code. Analytical testing must be carried out by laboratories that are accredited to UKAS or MCERTs for the relevant analytical test, and samples scheduled for analytical testing should be representative of the waste in accordance with Technical Guidance WM3. Pre-acceptance records will be held by the Site for at least 3 years following the reception of the soil waste.

Where the waste producer is unable to undertake chemical analytical testing on representative samples, RRS may attend the waste producing Site to obtain representative samples for analytical testing. The analytical testing suite will be determined by the history of the Site and the specific processes generating the waste, and the sampling frequency will be in accordance with Waste Classification: Technical Guidance WM3. Waste will only be accepted at Site following receipt of the analytical testing results and where these results indicated the waste to be non-hazardous.

For small loads i.e. ad-hoc loads without a contract that are less than 25 tonnes, a risk-based approach shall be followed to assess and classify the waste based on the following:

- The source and nature of the waste
- Potential risks to process safety, occupational safety and the environment (for example from odour and other emissions)
- Knowledge about the previous waste holder(s)

This is in line with the Environment Agency's guidance titled "*Non-hazardous and inert waste:* appropriate measures for permitted facilities"<sup>1</sup>.

Where sufficient information regarding the above bullet points is known, RRS shall assess and determine the waste classification. RRS shall only agree to accept the waste should it be satisfied that the material is non-hazardous in nature. Where it is not satisfied that the material is non-hazardous, RRS shall insist on the chemical composition of the waste being determined from analytical testing on representative samples to assess the waste classification and assign the relevant mirror entry LoW code in line with the aforementioned detail. RRS shall only agree to accept should the results of the analytic testing indicate the waste to be non-hazardous.

#### **5.1.2 Waste Acceptance**

All incoming vehicles will enter via the existing waste facility site entrance and will drive to the weighbridge. Documentation will be checked by the operative, to ensure that the waste complies with the waste types permitted by the Planning Permission, Permit Regulations or any subsequent updates. The relevant documentation includes Carriers Certificate of Registration and Duty of Care Waste Transfer Note, which will be signed by the operative to confirm the acceptance/receipt of the waste prior to the driver being allowed to proceed to the reprocessing site.

Upon arrival (SGN page 27, point 1), waste loads will:

- be weighed or use the WTN to find tonnages, unless alternative reliable volumetric systems linked to specific gravity data are available;
- not be accepted into site unless sufficient storage capacity exists and site is adequately manned to receive waste;

<sup>&</sup>lt;sup>1</sup> Environment Agency - *Non-hazardous and inert waste: appropriate measures for permitted facilities* – August 2023

- have all documents checked and approved, and any discrepancies resolved before the waste is accepted; and,
- have any labelling that does not relate to the contents removed before acceptance on site.

Visual inspection. Where possible, confirmatory checks should be undertaken before offloading where safety is not compromised. Inspection must in any event be carried out immediately upon offloading at the installation (SGN page 27, point 3).

Vehicles depositing material will proceed to the respective waste reception areas, vehicle collecting compost product will proceed to the reception area. For any waste arriving on site, a record is kept of:

#### Sector Guidance Note 2.1.22

- Date and time of waste delivered;
- · Type of waste;
- Approximate weight of load;
- Duty of care transfer note;
- Vehicle registration number;
- Haulier and waste carrier registration number;
- SIC code, and;
- European Waste Code (EWC).

Any input materials stored for incorporation to future batches (e.g. woody material kept for mixing into loads delivered in Spring, which tend to contain high proportions of soft, sappy, putrescible plant tissues) shall carry a batch code marker. A Batch Record Sheet shall be created and maintained for such stockpiled material so that it is traceable when mixed with recently delivered input materials that form new composting batches.

Where excessive card (greater than 15%) is present within the feedstock it will be picked to reduce the percentage of card or pass through the entire composting process according to the same standard operating procedures. However, this material will be marked as a high card batch at the start or the process that is not of PAS100 quality. This is done primarily during the months of December, January and February. Although due to round collection variation this is necessary at other points during the year.

# **5.1.3 Waste Rejection**

In the unlikely event that it is found necessary to refuse to accept a particular load for disposal, a standard rejection procedure will be implemented. The waste rejection procedure to be complied with will be (SGN page 31, point 34):

- An impermeable concrete holding or quarantine area is present on site. For loads which are rejected prior to deposit, the driver will be instructed to park the vehicle as an interim measure for closer inspection. The competent manager will be contacted prior to the rejected materials being removed from the compost site and, if appropriate, the ticket and billing rate amended;
- For loads which are rejected following deposit, the unsuitable materials or the whole load depending upon the degree of contamination, will be isolated. Subsequent actions will be dependent upon the reason for rejection and would be similar to those outlined above;
- In the event that the waste material should be determined to be Hazardous Waste then the relevant consignment notification form will be prepared, in conjunction with the haulier or producer and the material will be transported to an appropriate treatment or disposal site; and,
- The Environment Agency will also be notified.

#### 5.1.4 Waste Contamination

As part of the normal composting process, it is anticipated that there will be some materials unsuitable for composting (contraries e.g. plastic bags and rubble) in the incoming loads and the majority of these contraries will be removed by the site operatives before the waste is processed.

The plastic bags and other light contrary materials removed from the compost feedstock will be bagged by hand using the appropriate PPE. Larger contrary fractions will be removed using mechanical equipment, for example, a 360° excavator or a front loader.

## **5.1.5 Waste Dispatch**

All contraries will be stored in a secure area and their weights and other particulars recorded prior to transporting from the site to a suitably permitted facility. All wastes shall be inspected prior to dispatch to confirm their description and composition. All information will be recorded on waste transfer notes.

#### **5.1.6 Waste Measurements**

The quantities of all waste input and outgoing compost product will be measured by means of the waste facility's operatives taking note. Incoming wastes will be measured using the WTN and all outgoing materials will use a facility which has a weighbridge.

# **5.1.7 Waste Storage**

All specified waste is received and initially stored strictly within the waste loading/unloading area. Green waste is stored in one open storage area. The maximum storage duration for input materials prior to shredding shall not exceed 7 days. Waste accepted and stored for composting shall not be stockpiled in a single pile of a quantity that exceeds 250 tonnes before shredding. Wood waste, soil and concrete waste are stored in another open storage area. These areas are covered with an impermeable layer of concrete. Green waste, comingled food and green waste or food only waste will be stored in the IVC building. This type of waste shall not be stockpiled for longer than 3 days and shall not be stockpiled in a quantity greater than 377 tonnes before shredding. Waste wood is stored in an open area to the south of the biomass boiler building on an impermeable concrete surface. The waste wood shall be stockpiled for up to 3 months in a pile up to 1,000 tonnes. Waste soil and aggregates are stored in an open area to the east of the waste wood storage area, again on an impermeable concrete surface. This waste shall be stockpiled for up to 12 months in a pile up to 1,000 tonnes.

Any product batch that exceeds it's time limit for storage shall be tested for compliance with the safety-related parameters and upper limits in BSI PAS 100 as well as any other characteristics declared in labelling, before a decision is made on it being dispatched/reprocessed.

No other forms of waste are stored within the site other than those non-permitted wastes pending removal to an appropriate site. The waste storage area is checked regularly and any faults are repaired as soon as reasonably practicable. Waste is removed until such repairs are finished and all repairs and faults are recorded (SGN pages 34-35, points 6-13<sup>3</sup>).

All comingled green and food waste or food only waste material received within the IVC will be considered to require treatment in line with the ABPR. Segregation of clean and dirty areas will be adhered to at all times in line with the requirements of ABPR and the AHVLA. This will

<sup>&</sup>lt;sup>3</sup> Environment Agency. Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste. Sector Guidance Note S5.06

include identification of clean and dirty machines that will operate solely within the clean and dirty areas of the IVC. Disinfectant footbaths will be installed for site operatives moving between clean and dirty areas. Wash down facilities will be provided for all vehicles entering/leaving dirty areas and for any machinery that is required to switch between clean and dirty areas.

# **5.1.8 Waste Reception**

After the vehicle driver has shown the site staff the waste transfer note containing the weight of the material in the load, the site staff shall notify the driver to proceed to the appropriate waste reception area for tipping and inspection by the operative who is assigned to operations for that day. After tipping, the wheels of the vehicle are inspected by the driver and washed if necessary, also by the driver, before the vehicle is re-weighed before leaving the site.

No waste will be accepted at the site which does not comply with the conditions of the **Environmental Permit.** 

Any non-conforming material will be quarantined and disposed of in accordance with the regulations.

When deliveries are made in windy conditions the waste is to be deposited to the front of the lean-to building providing shelter. This will also be recorded in the site diary along with multiple checks of wind direction.

# 5.1.9 Rejection or acceptance and storage of input materials

A site operative shall spread and inspect each load deposited at the storage area. The outcome of the inspection is recorded on the weigh ticket / delivery note. A copy of the weigh ticket / delivery note is handed to the delivery driver before leaving site.

## 5.1.10 Acceptance criteria for acceptance / rejection of input loads

Acceptance criteria shall be specified in the contractual arrangements and clearly communicated to each relevant input material supplier. Loads with clearly more than 0.1% contamination by weight, asbestos contamination or any other material shall be rejected.

Before removal from the site, each load or part-load due rejection shall be kept separate from loads awaiting inspection or those accepted for recycling.

Each accepted load shall be assessed to identify the processing requirements and any potential problems, which can include heightened moisture levels and larger boards.

#### **Open Windrow Composting** 5.3

The source segregated green waste will enter the site and follow the directional signage to the office area. On entering the office area, the driver must have the waste transfer documentation with the correct details of the waste on board.

The site operative will inspect the waste transfer documentation, when the site operative is satisfied that the documentation is in order the driver will be instructed to enter the waste reception area, where the weights will be documented from the waste transfer note from the site where the waste has come from.

The driver will then be instructed to proceed to the area that is designated for the waste. The site operative will then inspect the load to ensure that it is to the correct standard that is acceptable under the operational procedures; if acceptable the driver will be instructed to tip the waste onto the reception area. The driver will then proceed back to the office area via the weighbridge and be provided with a copy of the ticket for his records.

Wastes will be deposited in the reception area at the green waste facility and a site operative shall spread and inspect each load deposited at the storage area. The load shall be rejected if, by subjective assessment, it contains more than 5% litter/contrary material unsuitable for composting. The waste will be shredded as required within the waste reception area to <400mm in order to comply with CQP regulations. Following this, the waste will be formed into an open windrow for the composting process to begin.

The Batch formation during the open windrow stage will be based on a maximum available batch size of 500 – 1,000 tonnes to progress through to the stabilisation stage of the process. Temperature logging is recorded daily in the first two weeks then weekly in the last six weeks. Moisture correction is undertaken during the shredding stage by mixing in green waste materials.

The dimensions of each windrow shall be approximately 4 metres high, 8 metres wide and either 24 metres, 27metres or 45 metres long depending on the specific location of the windrow on the composting pad. Gaps of suitable width to enable turning/monitoring and litter picking will be left between the windrows. It should be noted that the windrows within the original site boundary shall be used as a priority. In an instance where green waste only is

sanitised through the IVC system, maturation of this waste shall take place in windrows within the original site boundary.

The green waste will undergo sanitisation and stabilisation as per Tables 5 and 6. Post IVC material will undergo stabilisation only as per Table 6.

Table 5 - Validated critical limits of sanitisation phase critical control points

Parameter	Sanitisation phase critical limits
Temperature	65 - 85 °C
Moisture content	Approximately 50 - 65 % m/m determined from Grip test 3-4
Minimum duration	7 not necessarily consecutive days when temperatures and moisture are within the above ranges
Minimum number of turns	1 turn during the minimum duration above

Table 6 - Validated critical limits of stabilisation phase critical control points

Parameter	Sanitisation phase critical limits
Temperature	45 - 85 °C
Moisture content	Approximately 50 - 65 % m/m determined from Grip test 3-4
Minimum duration	8 weeks when temperatures and moisture are within the above ranges except during and up to 24 hours after each turn
Minimum number of turns	1 turn during the minimum duration above

#### **5.2.1 OWC Critical Limits**

The following critical limits are monitored during the open windrow stabilisation phase on the maturation pad. Exceedance of critical limits will require corrective actions.

Table 7 - Monitoring point locations and monitoring frequency for the sanitisation phase

Parameter & batch zone	Monitoring point locations	Monitoring frequency
Temperature Surface zone	N/A	N/A
Temperature Core zone	4 points per batch and where the batch is greater than 500 tonnes an additional point for every additional 250 tonnes.	Daily
Temperature Base zone	N/A	N/A
Moisture content	4 points per batch and where the batch is greater than 500 tonnes an additional point for every additional 250 tonnes.	Daily

Table 8 - Monitoring point locations and monitoring frequency for the stabilisation phase

Parameter & batch zone	Monitoring point locations	Monitoring frequency
Temperature Surface zone	N/A	N/A
Temperature Core zone	4 points per batch and where the batch is greater than 500 tonnes an additional point for every additional 250 tonnes.	Weekly
Temperature Base zone	N/A	N/A
Moisture content	4 points per batch and where the batch is greater than 500 tonnes an additional point for every additional 250 tonnes.	Weekly

# **5.2.2 OWC Corrective Actions**

The following corrective actions are implemented when critical limits are not being met as identified by routine monitoring.

24/07/2024 WRM-LTD.CO.UK

**Table 9 - Corrective Actions** 

Parameter	Corrective Action
Temperature	Compost is formed into windrows of adequate size in order to generate required temperatures during active composting phases. Should temperature become elevated above critical limits, windrows will be turned as soon as possible to fully aerate.
	The compost windows are free draining onto a concrete pad to enable runoff from excessive moisture content. If elevated moisture levels are encountered, windrow is turned as soon as possible to fully aerate.
Moisture	Additions of water to compost should be done on a little and often basis. If additional moisture is required by monitoring moisture content less than the critical limit, fresh runoff water is applied directly to the windrow. Too much water should not be added as it will generate excessive runoff onto the composting pad.

# 5.4 In-Vessel Composting

Following acceptance of waste at the weighbridge and site office, the vehicle will directed to the IVC building via the road that runs on the inside of the northern boundary of the site. The vehicle will use the turning area in front of the IVC building to reverse through one of the two roller shutter doors at the northern end of the building. The roller shutter doors will open to allow the vehicle into the building and close behind it. The vehicle will then tip the waste onto the floor of the reception building for inspection. On acceptance of the waste, the vehicle will leave the IVC building via the same roller shutter door and return to the weighbridge and site office before leaving site. The waste on the floor of the IVC building will be stockpiled using a loading shovel. The stockpile shall not exceed 377 tonnes and it shall be processed within 72 hours of receipt. Once an appropriate quantity of waste has been stockpiled, the waste shall be shredded to <400mm to comply with ABPR regulations. Post shredded materials are then transferred to the composting tunnels for processing. Amendment material shall be added to the shredded waste as required in order to achieve suitable Carbon to Nitrogen ratios of between 20:1 to 40:1.

A loading shovel is used to deposit the shredded feedstock into one of the four enclosed IVC tunnels from above. The tunnels are 34m long x 6m wide with a 3.7m fill height and they can each hold 377 tonnes of waste material. Once the tunnels have been filled, the roof of the tunnel is lowered using the vertical screw system. The metal sheet door is then lowered into place via the slots in the tunnel walls and the tunnel is sealed. Under normal operational circumstances, there should always be one tunnel being filled, one tunnel being emptied and

two in use. Throughout the sanitisation phase the tunnels are actively monitored for temperature and moisture content using an automated data logging system. The sanitisation process will follow the two-barrier method and will typically last 7 days in total to meet the requirements under the ABPR. In the first barrier, the waste shall remain at more than 60°C for a minimum of 48 hours. The waste will then be turned and during the second barrier, the waste shall again remain at more than 60°C for a minimum of 48 hours. Following sanitisation in the IVC, the material will be transferred to the open windrow composting pad for maturation in windrows via the southern-most roller shutter door of the IVC building.

The IVC product will be stabilised using the OWC techniques as described above in Table 6 in Section 5.3.

The following critical limits are monitored during the IVC sanitisation phase. Exceedance of critical limits will require corrective actions.

**Monitoring Monitoring point Parameter Critical Limit** frequency locations 4 points per Temperature batch 1m below >60°C Continuous surface 4 points per Moisture 40-65% Continuous batch 1m below surface 1 point per tunnel Oxygen Continuous >5% at air exit vent

**Table 10 - IVC Sanitisation Critical Limits** 

The following corrective actions are implemented when critical limits are not being met as identified by the automated monitoring process.

**Table 11 - IVC Corrective Actions** 

Parameter	Corrective Action
Temperature	Compost is formed into tunnels of adequate size in order to generate required temperatures during active composting phases. Should temperature become elevated above critical limits, tunnels will be flushed with fresh air as soon as possible to fully aerate.
Moisture	The compost tunnels are free draining onto an enclosed drainage system to enable runoff from excessive moisture content. Aeration of tunnels will aid the drying of material to prevent high moisture levels occurring. If elevated

Parameter	Corrective Action
	moisture levels are encountered, additional air is introduced as soon as possible to fully aerate.
	If additional moisture is required by monitoring moisture content less than the critical limit, water is added to the tunnels through an overhead sprinkler system.
Oxygen	The composting tunnels include a forced aeration system. If oxygen levels fall below the critical limit then additional fresh air is introduced to the tunnel to fully aerate.

# **5.5 IVC Cleaning Procedure**

For the purposes of food and green waste processing in accordance with ABP Regulations RRS implements a "Clean" and "Dirty" zone to prevent cross-contamination of sanitised and unsanitised waste. The zones are defined as follows:

- Dirty Zone- This area includes the waste reception area and the area containing all of the In-Vessel Composting (IVC) units.
- Clean Zone- the Aerated Static Pile (ASP) area and corridor adjacent to the tunnel doors is defined as the clean zone.

In summary, comingled food and green waste is deposited in the reception area of the IVC building (Dirty Zone). It is then sanitised as a batch within an IVC (Dirty Zone). Once stabilised the waste is transported by loading shovel to the OWC area (Clean Zone). Dedicated machinery is assigned to both zones to reduce the risk of cross contamination. Pedestrian movements are restricted and the use of disinfectant foot dips is required to move between the two areas. The area in front of the IVC tunnels but within the IVC building shall be a clean zone when sanitised material is being transferred from the IVC tunnel to the OWC area.

These are the wash down and cleaning requirements for the dirty zone:

- On arrival, vehicles are directed to the IVC building where they unload on to the building floor. As vehicles arrive to unload, the roller doors are opened, and the vehicles reverse in to tip. Wheels are washed prior to leaving.
- 2 Loading shovels and plant equipment used within the dirty zone are washed down at the end of the day and stored within the IVC reception hall overnight.
- 3 The disinfectant foot dips at the entrance and exit of pedestrian routes are to be kept topped up with DEFRA approved disinfectant by Site Operatives. An inspection of the foot dips is included on the site weekly check.

- 4 Any spillages will be dealt with immediately following the spill procedure, making use of the available spill kits on site to safely contain the spill.
- 5 All cleaning actions taken are to be logged on the Daily HACCP Check Sheet along with any additional comments. These sheets are kept in a folder in the site office.
- 6 Should machinery be removed from the building for other site operations it will be washed down before this takes place. All wash down operations to remove contamination will take place within the designated wheel wash area.

These are the wash down and cleaning requirements for the clean zone:

- 1 Loading shovels and plant equipment used within the "Clean" zone are washed down at the end of the day and stored within a dedicated 'clean' storage area over night.
- 2 The disinfectant foot dips at the entrance and exit of pedestrian routes are to be kept topped up with DEFRA approved disinfectant by Site Operatives. An inspection of the foot dips is included on the site weekly check.
- 3 Any spillages will be dealt with immediately following the spill procedure, making use of the available spill kits on site to safely contain the spill.
- 4 All cleaning actions taken are to be logged on the Daily HACCP Check Sheet along with any additional comments. These sheets are kept in a folder in the site office.

The following are the general site cleanliness requirements:

- 1 The condition of the site shall be inspected no less than weekly and the findings documented within the weekly site check.
- 2 Vehicle routes shall be maintained. A road sweeper will be deployed as required to prevent the build-up of dust or mud on the vehicle routes, which could be brought onto the highway.
- 3 Any spillages will be dealt with immediately following the spill procedure, making use of the available spill kits on site to safely contain the spill.
- 4 Site litter levels will be monitored no less than weekly and the findings documented within the weekly site check. Litter picks of the site shall take place as required and the sites litter netting shall be maintained.
- 5 Operatives must ensure hand tools, motor oil containers etc are returned to the correct storage location after use.

Below is a summary of the site's cleaning schedule:

Area / Plant / Process	Frequency	Method
General Machinery & Equipment	Before machinery is moved from 'dirty' to 'clean' areas.	Full wash-down with pressure washer or DEFRA- approved disinfectant. All tools and equipment exposed to any ABP materials must be washed immediately after any maintenance activities.
All personnel	Between 'dirty' and 'clean' areas.	Disinfection of footwear in footbaths using DEFRA approved disinfectant.
Disinfectant Foot Dips	Formally inspected as part of the site weekly check.	Foot dips are topped up no less than weekly with DEFRA approved disinfectant.
Road Conditions	Formally inspected as part of the site weekly check.	A road sweeper will be deployed when required to ensure vehicle routes are free from debris and mud.
Litter Levels	Formally inspected as part of the site weekly check.	Site operatives will undertake litter picking duties when required.

# 5.6 Screening

Matured compost will be periodically characterised chemically, physically and biologically and all material will be screened to produce a range of products for example for agricultural and horticultural markets and land reclamation.

Screening involves the compost being loaded into a hopper and passing through mechanical rotational screening equipment, which extracts contamination or contraries such as plastic film, etc. A variety of different sized compost end products can be produced this way.

Any oversized waste materials may be returned to the sanitisation stage.

The screened compost product will be stored in stockpiles on an area specifically designated. When end markets dictate screened matured compost can be transferred by loading shovel to lorries or other suitable vehicles.

Screened compost may also be combined with soils and finished composts from other sources to produce higher value products.

Daily monitoring records will be kept to ensure the proper functioning and operation of the plant.

#### 5.7 Waste Wood Treatment

RRS are permitted to treat commercial and industrial woods of mixed grades. Processing activities for the treatment of mixed grade industrial wood includes shredding, grading and screening activities. The List of Waste Entry Codes that can be accepted by the site in for treatment and processing activities is presented as Annex 1 below. The waste acceptance procedures presented in the appropriate prior sections shall be followed prior to acceptance on to site.

Wood waste will enter the site via the Site entrance and follow the directional signage to the Site office. On entering the Site office area, the driver must report to the Site operative and present the appropriate Duty of Care Waste Transfer Documentation (WTD) with the correct details of the waste on board for inspection by a Site operative. If the site operative is satisfied that the documentation is in order and correct for the waste on-board, the driver will be instructed to enter the weighbridge area for the relevant waste, and the weight of the waste will be documented using the weighbridge.

The driver will then be instructed to proceed to the relevant waste reception area for the waste wood located to the south of the biomass boiler building. The site operative will then inspect the load to ensure that it is to the correct standard that is acceptable under the operational procedures. If acceptable the driver will be instructed to tip the waste onto the reception area. The driver will then proceed back to the office area via the weighbridge and be provided with a copy of the ticket for his records.

Waste wood is deposited in the reception area with an impermeable concrete surface and a site operative shall spread and inspect each load deposited at the storage area. The load shall be rejected if, by visual assessment, it is determined to be non-compliant waste. The load shall be rejected if, by subjective assessment, it contains more than 5% litter/contrary material. The wood will be limited to 1,000 tonnes at any one time prior to treatment, and the height of the receiving waste stockpile will not exceed 4 metres.

Untreated waste wood will be shredded using the same mechanical shredding equipment as is currently used at the site for the shredding of green waste for composting, utilising different specialist shredding components once a sufficient stockpile has been formed. No new additional plant/machinery will be required to carry out the proposed wood shredding activities.

The shredded wood will be immediately removed from site. The Grade A waste wood shall be used in the neighbouring wood combustion boiler and Grade C waste wood shall be removed from site for onward treatment.

# 5.8 Waste Soils, Stones & Aggregate

RRS are permitted to screen and blend waste soils, stones and concrete. Processing activities for the treatment of waste soil, stones and concrete includes crushing, screening, grading and blending of these materials with a finished compost to produce an off-specification bespoke soil. The List of Waste Entry Codes that can be accepted by RRS for the treatment and processing activities is presented as Annex 1 below. The waste acceptance procedures presented in the appropriate prior sections shall be followed prior to acceptance on to site.

The waste will enter the site via the Site entrance and follow the directional signage to the Site office. On entering the Site office area, the driver must report to the Site operative and present the appropriate Duty of Care Waste Transfer Documentation (WTD) with the correct details of the waste on board for inspection by a Site operative. If the site operative is satisfied that the documentation is in order and correct for the waste on-board, the driver will be instructed to enter the weighbridge area for the relevant waste, and the weight of the waste will be documented using the weighbridge.

The driver will then be instructed to proceed to the relevant waste reception area for the waste soils, stones and aggregates located to the east of the waste wood storage and processing area. The site operative will then inspect the load to ensure that it is to the correct standard that is acceptable under the operational procedures. If acceptable the driver will be instructed to tip the waste onto the reception area. The driver will then proceed back to the office area via the weighbridge and be provided with a copy of the ticket for his records.

Wastes are deposited in the reception area with an impermeable hardstanding surface and a site operative shall spread and inspect each load deposited at the storage area. The load shall be rejected if, by visual assessment, it contains more than 5% litter/contrary material and is determined to be non-compliant waste.

To create the off-specification bespoke soil, the waste soil, stones and aggregate material will undergo waste treatment processing activities including being deposited, sorted, separated using a vibrating screen and then crushed on site.

Once treatment activities are complete the processed material will be stored for no longer than 12 months prior to blending and dispatch to end markets or use on site. There will be a maximum of 1,000 tonnes of material processed at any one time on the Site.

#### 5.9 Use of Waste on Site

RRS are permitted to use waste in construction activities on site that was formerly operated under a U1 waste exemption for the use of waste in construction. The List of Waste Entry Codes that can be accepted by RRS for the treatment and processing activities is presented as Annex 1 below. The waste acceptance procedures presented in the appropriate prior sections shall be followed prior to acceptance on to site.

The waste will enter the site via the Site entrance and follow the directional signage to the Site office. On entering the Site office area, the driver must report to the Site operative and present the appropriate Duty of Care Waste Transfer Documentation (WTD) with the correct details of the waste on board for inspection by a Site operative. If the site operative is satisfied that the documentation is in order and correct for the waste on-board, the driver will be instructed to enter the weighbridge area for the relevant waste, and the weight of the waste will be documented using the weighbridge.

The driver will then be instructed to proceed to the relevant waste reception area for this waste which is shared with that with for the waste soils, stones and aggregate. The site operative will then inspect the load to ensure that it is to the correct standard that is acceptable under the operational procedures. If acceptable the driver will be instructed to tip the waste onto the reception area. The driver will then proceed back to the office area via the weighbridge and be provided with a copy of the ticket for his records.

Wastes are deposited in the reception area with an impermeable hardstanding surface and a site operative shall spread and inspect each load deposited at the storage area. The load shall be rejected if, by visual assessment, it contains more than 5% litter/contrary material and is determined to be non-compliant waste.

Construction activities include landscaping, constructing tracks and pathways or creating bunds. This could include the use of the off-specification soil produced by the activity described in Section 5.8 above. This material shall be stored for no longer than 12 months prior to use on site. There will be a maximum of 1,000 tonnes of waste material at any one time on the site.

24/07/2024 WRM-LTD.CO.UK

### 6.0 POLLUTION CONTROL

### 6.1 Site Maintenance

The site operates a strict maintenance regime and equipment used is of sufficient capacity to allow down time for routine maintenance and servicing as recommended by the manufacturer.

No plant may be operated unless full instructions and training have been given by a person competent to do so. Movement of equipment within the composting area is strictly controlled with recorded cleaning between areas.

No plant or equipment may be worked on for maintenance purposes unless it has been removed from the site and has been isolated to prevent an accidental start, only in exceptional circumstances which prevent its removal, shall work be undertaken on any item of plant within the site.

Any newly arrived or hired in equipment is subject to particular scrutiny to ensure it meets the standards required by both the company and current legislation.

All breakdowns or incidents involving plant or equipment are entered in the site diary.

The site utilises a maintenance record sheet to demonstrate all maintenance activities are checked off on a daily or weekly basis.

## 6.2 IVC Housekeeping

The IVC reception hall will be regularly cleaned in order to minimise odour potential and ensure sanitised conditions for dealing with ABPR waste materials. At the end of each working day the reception hall will be fully washed down including concrete floors and operational plant and equipment. Wash waters are directed through internal drainage.

### **6.3 Meteorological Monitoring**

Meteorological conditions are monitored at the site using an electronic 'Smart Weather' weather station. The unit provides a continuous record of wind speed, wind direction, rainfall, barometric pressure and temperature with these parameters being noted on a daily schedule. The weather station downloads data to the site computer which is located in the site office and the weather station is located in an open area adjacent to the office.

The purpose of monitoring the meteorological conditions is to provide weather data which could be of immediate use for managing the day to day operational activities. The wind direction data is useful in scheduling operations to assure prevailing wind conditions will not impact on sensitive receptors. The rainfall data is of value in predicting the impact on the leachate holding tank capacity and the likely need for pumping off surplus leachate.

Multiple wind direction checks are carried out and recorded throughout the day in the site diary.

The weather station is serviced at regular intervals and a service report filed in the site office.

### 6.4 Dust & Bioaerosols

Material in active composting phases such as open windrow composting and maturation pad areas will be controlled in terms of moisture to ensure the material does not dry to present a dust and generate a subsequent bioaerosol issue.

A Site Specific Bioaerosols Risk Assessment has concluded that when industry best practice is applied to dust control as is proposed, the operations present no risk to offsite sensitive receptors.

Turning, movement of material and screening are the operational activities that have greatest potential to generate airborne particles.

Screening will take into account moisture content, wind direction and wind speed to assure the operation does not present a problem in terms of dust or odour. During screening the wind direction will be monitored to detect shifts in wind direction that may occur during the operation.

The actions which will be taken to prevent or minimise dust emission are (SGN page 70 point 1<sup>4</sup>):

 During shredding operations an exclusion zone will be maintained around the shredding equipment to ensure that site operatives and waste vehicle drivers are outside the area where airborne dusts would be concentrated. Operatives needing to work inside this zone will wear an appropriate face mask.

<sup>&</sup>lt;sup>4</sup> Environment Agency. Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste. Sector Guidance Note S5.06

- Composting materials in the stockpiles will be kept at a suitable moisture content, using water sprays when necessary.
- The cabs of mobile plant should be provided with P111 air filtration and should be kept under positive air pressure.
- The screening operations will be monitored (as per shredding) and if found necessary, water sprays will be provided on the screening equipment.
- Bioaerosol and dust generation attributable to vehicle movements will be controlled by the maintenance and sweeping of the site access road. During dry weather action will be taken to spray the roads using a water bowser.
- The Site Manager will carry out a daily visual assessment of dust emission within the
  site and at the downwind site boundaries. In the event of a potential or actual dust
  nuisance being identified, then appropriate remedial actions will be implemented as
  soon as practicable, with the most effective action likely to involve additional water
  spraying of the source of the dust emission.
- The results of the daily inspections and any remedial work will be recorded in the Site Diary. Any complaint, which is received, will be reported to the Environment Agency.
- Recovered woody materials will be kept in piles of less than 3m to avoid excessive dust generate during high winds. Wood storage can also be moved to a covered area to further reduce dust emissions.

### 6.5 Measures the Site will take reduce Dust

Screening will take into account moisture content, wind direction and wind speed to assure the operation does not present a problem in terms of dust or odour. During screening the wind direction will be monitored to detect shifts in wind direction that may occur during the operation.

The actions which will be taken to prevent or minimise dust emission are:-

- During shredding operations an exclusion zone will be maintained around the shredding equipment to ensure that site operatives and waste vehicle drivers are outside the area where airborne dusts would be concentrated. Operatives needing to work inside this zone will wear an appropriate face mask.
- Composting materials in the stockpiles will be kept at suitable moisture content, using water sprays when necessary.
- The screening operations will be monitored (as per shredding) and if found necessary, water sprays will be provided on the screening equipment.

- Dust generation attributable to vehicle movements will be controlled by the maintenance and sweeping of the site access road. During dry weather action will be taken to spray the roads using a water bowser.
- The Site Manager will carry out a daily visual assessment of dust emission within the
  site and at the downwind site boundaries. In the event of a potential or actual dust
  nuisance being identified, then appropriate remedial actions will be implemented as
  soon as practicable, with the most effective action likely to involve additional water
  spraying of the source of the dust emission.
- The results of the daily inspections and any remedial work will be recorded in the Site Diary. Any complaint, which is received, will be reported to the Environment Agency.

### 6.6 Must & Debris

The entire working area is surfaced by impermeable concrete or hard-standing. All wastes and process take place on impermeable surfacing with sealed drainage.

Any vehicle leaving the site will be checked to ensure that they are clear of loose material and that waste is secure. Where necessary, vehicles will be cleaned before leaving site.

In the event that mud or debris is deposited onto public areas, by action or inaction, that material will be cleaned as soon as practicable and cause of mud/debris escape investigated and remediated.

### 6.7 Litter

Waste accepted on site has been pre-segregated at source reducing the risk of contamination from litter. Very little litter is expected within incoming waste, but where present it will be immediately removed to sealed refuse containers, prior to disposal.

Regular checks are made within and around the site for litter which may escape during the waste transfer process between the waste reception building and the composting vessels. The area around the reception building will be kept clean and tidy.

Any materials found will be removed and returned to the waste reception building or stored within the non-permitted waste containers, depending on the nature and origins of the litter.

#### 6.8 Pests

The site has adequate pest control provisions and monitoring to ensure pest and vermin levels remain low. These are checked on a weekly basis and a specialist contractor will carry out independent inspections at least 12 times per year. If an infestation should ever be found, then appropriate pest control measures will be immediately implemented. The results of the inspections and any remedial action will be recorded in the Site Diary.

### 6.9 Spillages

All spillages will be dealt with immediately. All vehicles, plant and equipment used on site will be operated and maintained with the objective preventing environmentally harmful leaks and spills.

In the event of any potentially environmentally harmful leaks or spillages, documented control and remediation procedures will be implemented immediately and recorded.

Any liquid contrary wastes will be immediately isolated and made ready for further disposal. Incidence of liquid contrary wastes will be recorded in the Site Diary. See Waste Acceptance procedures.

A spillage kit is available on-site (in main office) for rapid clean-up and amelioration of spills.

### **6.10 Odour**

Emissions from the activities shall be free from odour levels likely to cause pollution outside the site. All activities taking place at site will be monitored for unusual odour release.

All incoming wastes will be thoroughly checked for the presence of odorous contraries. Any odorous contraries will be immediately segregated and contained, ready for further disposal. Aggregates, soil and woody materials for recovery should not be odorous and are not an issue for odour release on Site.

The site has a fully implemented Odour Management Plan to the Environment Agency 'H4 Guidance' standard as per SGN page 73<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> Environment Agency. Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste. Sector Guidance Note S5.06

Odour emissions will be mitigated by implementing the following operational procedures as per SGN pages 73 to 746:

- Minimise waste storage time by maintaining volumes at a manageable level;
- Blending of waste materials to produce a homogenous mix will manage the moisture content to help minimise odour production;
- Regular cleaning of operational areas to prevent accumulation of potentially odorous material;
- Regular turning of windrows will help minimise odour; and
- All site operatives will undertake routine monitoring and, in the event of identifying malodorous material, will implement mitigation procedures by covering or processing the material at the earliest opportunity.

The IVC system allows oxygen levels to be continually monitored to maintain aerobic conditions, thus reducing the release of odours. Odour emissions will be mitigated by implementing the following operational procedures:

- Waste reception and pre-processing will take place inside a building to minimise emissions;
- Minimise waste storage time by maintaining volumes at a manageable level;
- Blending of waste materials to produce a homogenous mix will manage the moisture content to help minimise odour production;
- Composting within the IVC units will prevent the direct release of odour;
- Treatment of all air within the reception hall and compost tunnels through a biofiltration system;
- Regular cleaning of operational areas to prevent accumulation of potentially odorous material;
- Regular turning of windrows will help minimise odour; and
- All site operatives will undertake routine monitoring and, in the event of identifying malodorous material, will implement mitigation procedures by covering or processing the material at the earliest opportunity.

Odour monitoring will occur daily at the designated monitoring points and an Odour Assessment Report will be filled in.

<sup>&</sup>lt;sup>6</sup> Environment Agency. Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste. Sector Guidance Note S5.06

In the event of odorous problems or a complaint being received, details will be recorded in the Odour Complaint Report Form as per the OMP.

### 6.11 Noise and Vibration

Emissions from the activities shall be free from noise and vibration levels likely to cause pollution outside the site.

Suitable measures will be implemented and maintained throughout the operational life of the site to ensure noise emanating from the site is minimised. All equipment used at the site will be appropriately silenced and the shredder and screening equipment will be noise attenuated. All vehicles, equipment and plant will be switched off when not in use. All vehicles, equipment and plant will be maintained with a clear intention to reduce noise and vibration levels.

Any noise monitoring carried out and remedial action taken will be recorded in the Site Diary and will be reported to the Environment Agency.

There may be noise during crushing during the soil and aggregates manufacturing, however this noise should be mitigated during on-site operations and should not be an issue during normal operating hours.

Waste processing operations will only be carried out during the designated hours as stated in Table 2 above.

# **6.12 Accident Management**

The site has implemented a full Accident Management Plan detailing potential accident and emergency situations that could occur on site, control measures to minimise potential occurrence and procedures should accidents occur on site

## 7.0 MONITORING AND RECORDS

# 7.1 Monitoring

RRS shall undertake the monitoring as show in Table 13. RRS shall maintain records of all the monitoring required, including records of the taking and analysis of samples, instrument, measurements, calibrations, examinations, tests and surveys and any assessments or evaluations made on the basis of such data.

Frequency **Parameter** Measurement **Purpose Operations** Temperature Critical limits for Sanitisation, Temperature Daily probe. composting. maturation. Critical limits for Sanitisation, Moisture Squeeze test. Daily composting. maturation. Oxygen probe or Critical limits for Oxygen Sanitisation Daily gas analyser. composting. Identify any release of All composting Odour Sniff test. odour from composting Daily operations. operations. Monthly but Ensure fugitive releases All composting Bioaerosols External Service. are not a risk to local moving to operations. sensitive receptors. Quarterly

**Table 12 - Site Monitoring Requirements** 

## 7.2 Site Diary

A Site Diary shall be maintained and retained in the site office. It shall record visitors, non-routine activities and other incidents. The Site Diary should be checked periodically by the Permit Holder to ensure its correct use. The Site Diary shall be readily available for inspection. Examples of activities recorded in the site diary include:

- Names of operators and times of attendance on site.
- Names and times of technically competent managers on site.
- Names of visitors on site.
- Any accidents resulting in injury.
- Operational details of individual windrows
- 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 deposit of unsuitable waste at the site.
- Condition of site infrastructure and engineering.
- Incidence of litter, dust, pest, odour and noise problems.
- · Leachate pumping.
- Results of various inspections for litter, odour, noise, birds, pests etc.
- Environment Agency licence inspection reports.

### 7.3 Waste Records

Records of all waste entering and the leaving the site shall be recorded. All records will be made as soon as reasonably practicable and retained securely for a minimum of two years. Records will be clear, legible and available for viewing (on site). Records must be kept of all incoming wastes, and all outgoing compost, compost-like material and residuals.

The following records will be retained (not comprehensive):

- Waste Carriers Licences (where appropriate).
- Tickets/Documents incoming wastes.
- Bioaerosols monitoring.
- Tickets/Documents outgoing wastes (including residual wastes).
- Destination of outgoing wastes (including market sector).
- Destination of outgoing compost like material.
- Reject Waste Forms.
- Environment Agency Inspection Reports.
- Design, construction, inspection, maintenance and monitoring of pollution prevention methods.
- Failure records for pollution prevention methods.
- Off-site environmental effects.
- Batch Formation Data (start and finish dates, activities carried out.
- Composting Batch Conditions (Batch Record Sheet).
- Records of sampling.
- Records of corrective actions taken during composting processes.
- Type of input material, whether the load is rejected or accepted, and if rejected the reason why.

- Maturation Start and Finish date.
- Product Preparation Information.
- Duty of Care Records.
- Quarterly Waste Returns.

# 7.4 Reporting and Notification

Site personnel will notify the Environment Agency "without delay" following the detection of:

- Any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution.
- The breach of a limit specified in the Permit.
- Any significant adverse environmental and health effects.

Site personnel will notify the Environment Agency within 24 hours:

- Where the Environment Agency has requested in writing that it shall be notified when RRS is to undertake monitoring and/or spot sampling.
- Of any change in the operator's trading name, registered names or registered offices addresses.

During normal working hours site personnel will contact the Site Officer or the local Environment Agency Office by telephone. The Environment Agency National Incident Hotline number is: 0800 807 060.

# 7.5 Training Records

Each person, whose duties affect compost quality shall be trained, instructed and supervised commensurate with those duties, such that he/she is competent. Training records for personnel who affect site procedures, operations and quality shall be maintained in the PAS100 file – Training Records.

### 7.6 Site Waste Returns

Quarterly returns shall be provided and stored at the site office in line with Environment Agency regulations.

# 7.7 Complaints

RRS shall decide and implement any necessary action in response to any complaints or concerns expressed by interested parties, including operatives, customers, clients and regulatory authorities about quality or usability of any compost of compost based products.

### RRS shall record the:

- Name and contact details of the person who expressed concern or made a complaint;
- Specific subject(s) of the concern or complaint;
- The source / location of where the complaint comes from;
- Date and time communicated to the producer and name of the person to whom it was communicated;
- Nature and date(s) of any actions and checks and who carried them out;
- Nature and date of any response to the person who expressed a concern or made the complaint; and
- Name of the person who communicated the response.

# 7.8 Site Processing/Operations

Records should be maintained such that all materials are traceable. The following records will be kept as and when required:

- Process steps e.g. Shredding, screening, blending, storage.
- Dispatch information.

# **ANNEX A - WASTE INPUT CODES**

# List of allowable EWC codes for OWC activities

Waste Code	Waste description	
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing	
02 01 03	plant-tissue waste	
02 01 06	horse manure, farmyard manure and biodegradable bedding only	
02 01 07	wastes from forestry	
	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco	
02 03	preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation	
02 03 04	biodegradable materials unsuitable for consumption or processing	
02 06	wastes from the baking and confectionery industry	
02 06 01	biodegradable materials unsuitable for consumption or processing	
03 01	wastes from wood processing and the production of panels and furniture	
03 01 01	waste bark and cork	
03 01 05	sawdust, shavings, cuttings, wood or particle board (only where it does not contain veneers, other coatings or preserving substances)	
03 03	wastes from pulp, paper and cardboard production and processing	
03 03 01	waste bark and wood	
15 01	packaging (including separately collected municipal packaging waste)	
15 01 01	paper and cardboard packaging (only where no non-biodegradable coating or preserving substance present)	
15 01 03	wooden packaging (only where, no hazardous, non-biodegradable coating or preserving substance present)	
17 02	wood, glass and plastic	
17 02 01	wood (where no hazardous, non-biodegradable coating or preserving substance present) only	
19 05	wastes from the aerobic treatment of solid wastes	
19 05 01	Non-composted fraction of municipal and similar wastes	
19 05 03	off-specification compost (only from a process operated according to PAS 100 and Quality Protocol requirements, Waste Exemption T23 or another approved standard)	
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19 12 01	Paper and cardboard	
19 12 07	Wood other than those mentioned in 19 12 06	
20 01	separately collected fractions	
20.01.20	wood other than that mentioned in 20 01 37 (only where no non-biodegradable coating	
20 01 38	or preserving substance present)	
20 02	garden and park wastes (including cemetery waste)	
20 02 01	biodegradable waste plant matter only	
20 03	Other municipal wastes	
20 03 02	Biodegradable Waste from markets.	

# List of allowable EWC codes for IVC activities

Waste Code	Waste description	
02 01	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing	
02 01 01	Sludges from washing and cleaning - vegetables, fruit and other crops	
02 01 02	Animal tissue waste	
02 01 03	Plant-tissue waste	
02 01 06	Animal faeces, urine and manure (including spoiled fully biodegradable animal bedding)	
02 01 07	Wastes from forestry	
02 01 99	Wastes not otherwise specified – spent mushroom compost from commercial mushroom growing only	
02 02	Wastes from the preparation and processing of meat, fish and other foods of animal origin	
02 02 01	Sludges from washing and cleaning, peeling, centrifuging and separation including wash waters and sludges from secondary food processing or the cook chill sector	
02 02 02	Animal tissue waste	
02 02 03	Materials unsuitable for consumption or processing	
02 02 04	Sludges from on-site effluent treatment	
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 (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)	
02 03 04	Materials unsuitable for consumption or processing (including waste from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)	
02 03 05	Sludges from on-site effluent treatment (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)	
02 04	Wastes from sugar processing	
02 04 01	Soil from cleaning and washing beet	
02 04 03	Sludges from on-site effluent treatment	
02 05	Wastes from the dairy products industry	
02 05 01	Materials unsuitable for consumption or processing	
02 05 02	Sludges from on-site effluent treatment	
02 06	Wastes from the baking and confectionery industry	
02 06 01	Materials unsuitable for consumption or processing	
02 06 03	Sludges from on-site effluent treatment	
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 – biodegradable wastes from the processing of the raw materials used in the production of such beverages only (wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa))	
02 07 02	Wastes from spirits distillation – spent grains, hops and whisky filter sheets and cloths, yeast and yeast like residues, sludge from production process, or malt husks, malt sprouts, yeasts and yeast-like residues only	
02 07 04	Material unsuitable for consumption or processing - biodegradable wastes from the processing of the raw materials used in the production of such beverages only (wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa))	
02 07 05	Sludges from on-site effluent treatment – sludges from the production of alcoholic and non–alcoholic beverages (except coffee, tea and cocoa)	
03 01	Wastes from wood processing and the production of panels and furniture- virgin timber	
	only	
03 01 01	Waste bark and cork - virgin timber only	
03 01 05	Sawdust, shavings, cuttings, wood and particle board other than those in 03 01 04 only – virgin timber only	
03 03	Wastes from pulp, paper and cardboard production and processing	
03 03 01	Waste bark and wood – virgin timber only	
03 01 05	Sawdust, shavings, cuttings, wood and particle board other than those in 03 01 04 – virgin timber only	
03 03	Wastes from pulp, paper and cardboard production and processing	
03 03 01	Waste bark and wood – virgin timber only	
03 03 10	fibre rejects – virgin timber only	
04 02	Waste from the textile industry	
04 02 10	Organic matter from natural products such as grease and wax	
15 01	Packaging (including separately collected municipal packaging waste)	
15 01 01	Paper and cardboard packaging (excluding veneers, plastic coatings or laminates) certified to EN 13432 or equivalent certified compostable standard	
15 01 02	Plastic packaging – certified to EN 13432 or equivalent certified compostable standard	
15 01 03	Wooden packaging – virgin timber only	
15 01 05	Composite packaging certified to EN 13432 or equivalent certified compostable standard	
15 01 09	Textile packaging – made entirely from biodegradable fibres only	
15 02	Absorbents, filter materials, wiping cloths and protective clothing	
15 02 03	Absorbents, filter materials and cloths from the production of alcoholic and non-alcoholic beverages other than those mentioned in 15 02 02 – hops and whisky filter sheets and cloths made from compostable material only	
16 03	Off-specification batches and unused products	
16 03 06	Organic wastes other than those mentioned in 16 03 05 – untreated wool fleece only (excludes hides and skins)	
16 10	Aqueous liquid waste destined for off-site treatment	

16 10 02	Liquor or leachate from a composting process that accepts waste input types listed in these standard rules or composting standard rules only and in compliance with Animal	
17 05	by Products Regulation  Soils (excluding excavated soils from contaminated sites), stones and dredging spoil	
17 05 06	Dredging spoil other than those mentioned in 17 07 05 (from inland waters only)	
19 02	Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation	
19 02 03	Premixed wastes composed from waste listed within these standard rules only	
19 02 06	Sludges from physico-chemical treatment other than those mentioned in 19 02 05 (sewage sludge which has been previously pasteurised and stabilised only)	
19 05	Wastes from the aerobic treatment of solid wastes	
19 05 01	Non-composted fraction of municipal and similar wastes – from composting process that accepts wastes listed in these standard rules, made up of previously sanitised batches only	
19 05 02	Non-composted fraction of animal and vegetable waste from composting process that accepts wastes listed in these standard rules, made up of previously sanitised bathes only	
19 05 03	Off-specification compost (from a composting process that accepts wastes listed in these standard rules only and made up of previously sanitised and stabilised batches only	
19 06	Waste from the anaerobic treatment of waste	
19 06 03	Liquor from anaerobic treatment of municipal waste (from a process that accepts wastes listed in these standard rules or anaerobic digestion standard rules only) and made up of previously pasteurised and stabilised batches only	
19 06 04	Digestate from anaerobic treatment of municipal waste from a process that accepts wastes listed in these standard rules or anaerobic digestion standard rule permits and made up of previously pasteurised and stabilised batches only	
19 06 05	Liquor from anaerobic treatment of animal and vegetable waste from a process that accepts wastes listed in these standard rules or anaerobic digestion standard rule permits and made up of previously pasteurised and stabilised batches only	
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste from a process that accepts wastes listed in these standard rules or anaerobic digestion standard rule permits and made up of previously pasteurised and stabilised batches only	
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste (previously digested sewage sludge only)	
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing,	
	compacting, pelletising) not otherwise specified	
19 12 01	Paper and cardboard (excluding veneers or plastic coatings) certified to EN 13432 or equivalent certified compostable packaging only	
19 12 12	Waste types listed within this table that have been subjected to mechanical treatment only from a process that treats wastes which are listed in these standard rules only or composting standard rules and made up of previously sanitised/pasteurised and stabilised batches only)	
20 01	Separately collected fractions (except 15 01)	
20 01 01	Paper and cardboard (excluding veneers, plastic coatings or laminates) certified to EN 13432 or equivalent certified compostable packaging only	

20 01 08	Compostable kitchen and canteen waste – containing compostable plastics certified to EN 13432 or equivalent certified compostable only (Category 3 ABPR waste only)	
20 01 25	Edible oils and fats	
20 01 39	Plastics – compostable plastics only, certified to EN 13432 or equivalent certified compostable standard only. Note – limit for incidental non-compostable plastic is 5% w/w to be removed prior to processing	
20 02	Garden and park wastes (including cemetery waste)	
20 02 01	Biodegradable waste (plant matter only)	
20 03	Other municipal wastes	
20 03 01	Mixed municipal waste - only separately collected biodegradable wastes of types listed within this table	
20 03 02	Waste from markets, allowed only if source segregated biodegradable fractions	

# List of allowable EWC codes for activities involving waste wood treatment

Waste Code	Waste description	
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing	
02 01 03	Plant tissue waste	
03 01	wastes from wood processing and the production of panels and furniture	
03 01 01	Waste bark and cork	
03 03	wastes from pulp, paper and cardboard production and processing	
03 03 01	Waste bark and wood	
15 01	packaging (including separately collected municipal packaging waste)	
15 01 03	Wooden packaging	
17 02	wood, glass and plastic	
17 02 01	Wood - untreated	
20 02	garden and park wastes (including cemetery waste)	
20 02 01	Plant tissue waste	

# List of allowable EWC codes for screening and blending of waste

Waste Code	Waste description	
01 04	wastes from physical and chemical processing of non-metalliferous minerals	
01 04 08	Waste gravel and crushed rocks not containing hazardous substances	
01 04 09	Waste sand and clay	
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin	
02 02 02	Shellfish shells from which the soft tissue or flesh have been removed only	
03 01	wastes from wood processing and the production of panels and furniture	
03 01 01	Untreated waste bark and cork only	
03 03	wastes from pulp, paper and cardboard production and processing	
03 03 01	Untreated waste bark and wood	
10 01	wastes from power stations and other combustion plants (except 19)	
10 01 01	Bottom ash, slag and boiler dust (excluding boiler dust containing oil fly ash and dust)	
10 01 15	Bottom ash, slag and boiler dust from co-incineration not containing hazardous substances	
17 01	concrete, bricks, tiles and ceramics	
17 01 01	Concrete	
17 01 02	Bricks	
17 01 03	Tiles and ceramics	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics not containing hazardous substances	
17 02	wood, glass and plastic	
17 02 01	Untreated wood only	
17 03	bituminous mixtures, coal tar and tarred products	
17 03 02	Bituminous mixtures not containing hazardous substances	
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil	
17 05 04	Soil and stones not containing hazardous substances	
17 05 06	Dredging spoil not containing hazardous substances	
17 05 08	Track ballast not containing hazardous substances	
19 05	wastes from aerobic treatment of solid wastes	
19 05 99	Compost produced only by aerobic composting under the T23 exemption or standard rules permit SR2011 no.1 specifically, or by treating kitchen waste in a wormery under T26 exemption.	
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing,	
10 12 05	compacting, pelletising) not otherwise specified	
19 12 05	Glass	
19 12 09	Aggregates only	
19 12 12	Gypsum recovered from construction materials only	
19 13	wastes from soil and groundwater remediation	
19 13 02	Solid waste from soil remediation not containing hazardous substances	

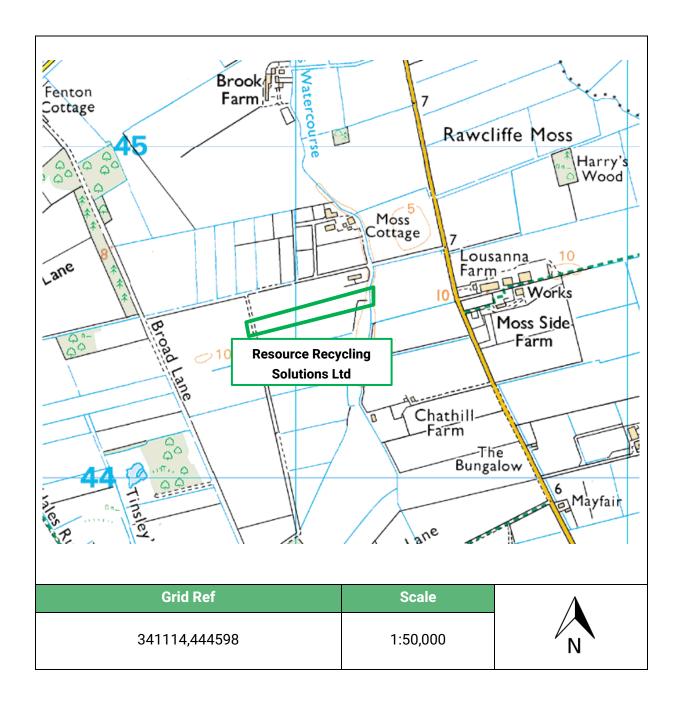
19 13 04	Sludge from remediation not containing hazardous substances
20 02	garden and park wastes (including cemetery waste)
20 02 02	Soil and stones

# List of allowable EWC codes for activities involving waste used in construction

Waste Code	Waste description	
01 01	wastes from mineral excavation	
01 01 02	Waste from mineral non-metalliferous excavation	
01 04	wastes from physical and chemical processing of non-metalliferous minerals	
01 04 08	Waste gravel and crushed rock not containing hazardous substances	
01 04 09	Waste sand and clay from exploration, mining, quarrying or treatment of minerals	
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing	
02 01 03	Plant tissue waste	
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin	
02 02 02	Shellfish shells from which the soft tissue or flesh has been removed only	
02 03 99	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  Soil from cleaning and washing fruit and vegetables only	
02 04	wastes from sugar processing	
02 04 01	Soil from cleaning and washing fruit and vegetables only	
03 01	wastes from wood processing and the production of panels and furniture	
03 01 01	Untreated waste bark and cork only	
03 01 05	Untreated wood, including sawdust, shavings and cuttings from untreated wood only	
03 03	wastes from pulp, paper and cardboard production and processing	
03 03 01	Untreated waste bark and wood	
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products	
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)	
10 13	wastes from manufacture of cement, lime and plaster and articles and products made	
10.10.11	from them	
10 13 14	Waste concrete and concrete sludge	
17 01	concrete, bricks, tiles and ceramics	
17 01 01	Concrete	
17 01 02	Bricks	
17 01 03	Tiles and ceramics	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics not containing hazardous substances	
17 02	wood, glass and plastic	
17 02 01	Untreated wood only	
17 03	bituminous mixtures, coal tar and tarred products	
17 03 02	Bituminous mixtures not containing hazardous substances	
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil	

17 05 04	Soil and stones (from construction and demolition sites) not containing hazardous	
	substances	
17 05 06	Dredging spoil not containing hazardous substances	
17 05 08	Track ballast not containing hazardous substances	
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing,	
	compacting, pelletising) not otherwise specified	
19 12 05	Glass	
19 12 07	Untreated wood not containing hazardous substances	
19 12 09	Minerals (for example sand and stone) from waste management or water treatment	
	facilities	
19 12 12	Aggregates only	
19 13	wastes from soil and groundwater remediation	
19 13 02	Solid waste from soild remediation not containing hazardous substances	
20 01	Separately collected fractions (except 15 01)	
20 01 38	Untreated wood not containing hazardous substances	
20 02	garden and park wastes (including cemetery waste)	
20 02 02	Soil and stones	

**ANNEX B - SITE LOCATION PLAN** 



**ANNEX C – ODOUR COMPLAINT FORM** 

	Ref No.
Name, address and phone number of	
complainant.	
Time and date of complaint.	
Date, time and duration of offending	
odour.	
Weather conditions	
(e.g., dry, rain, fog, snow).	
Wind strength and direction	
(E.g. light, steady, strong, gusting).	
Complainant's description of odour	
-What does it smell like	
-Intensity (use intensity scale)	
-Duration	
-Constant or intermittent	
Has complainant any other	
comments about the offending	
odour.	
Any other previous known complaints	
relating to installation (all aspects,	
not just odour).	
Any other relevant information.	
Potential odour sources that could	
give rise to the complaint.	
Operating conditions at the time	
offending odour occurred.	
Action taken	
Final outcome	
Form completed by (signed):	Date

Intensity Scale	1: Very faint odour	3: Distinct Odour	5: Very Strong Odour
0: No Odour	2: Faint Odour	4: Strong Odour	6: Extremely Strong Odour

ANNEX D - NOISE AND VIBRATION SHEET

NOISE/VIBRATION REPORT FORM					
Complaint Details:					
Telephone number of complainant:					
Date of noise and/or vibration:					
Time of noise and/or vibration:					
Location of noise and/or vibration, if not at above					
address:					
Weather conditions (i.e., dry, rain, fog, snow):					
Wind direction (e.g. from NE)					
Complainants description of					
noise and/or vibration:  Describe the noise/vibration?					
Duration (time)?					
Constant or intermittent?					
Are there any other					
complaints relating to the installation?					
Any other relevant information:					
Do you accept that noise and/or vibration	What was happening on site at the time the				
is likely to be from your activities?	noise and/or vibration occurred?				
Operating conditions at the time the noise	Actions taken?				
and/or vibration occurred?					

Form completed by:	Date:	Signed:

ANNEX E - GENERAL COMPLAINT RECORD SHEET

GENERAL COMPLAINT REPORT FORM					
Complaint Details (specific					
subject):					
Telephone number of					
complainant:					
Date received by site:					
Time received by site:					
Location of where the					
complaint comes from :					
Weather conditions (i.e., dry,					
rain, fog, snow):					
Wind direction (e.g. from NE)					
Nature and date(s) of any					
actions and checks and who					
carried them out:					
Nature and date of any					
response to the person who					
expressed a concern or made					
the complaint:					
Name of the person who					
communicated the response:					
Form completed by:		Date:	Signed:		

ANNEX F - CURRENT SITE DRAINAGE PLAN

