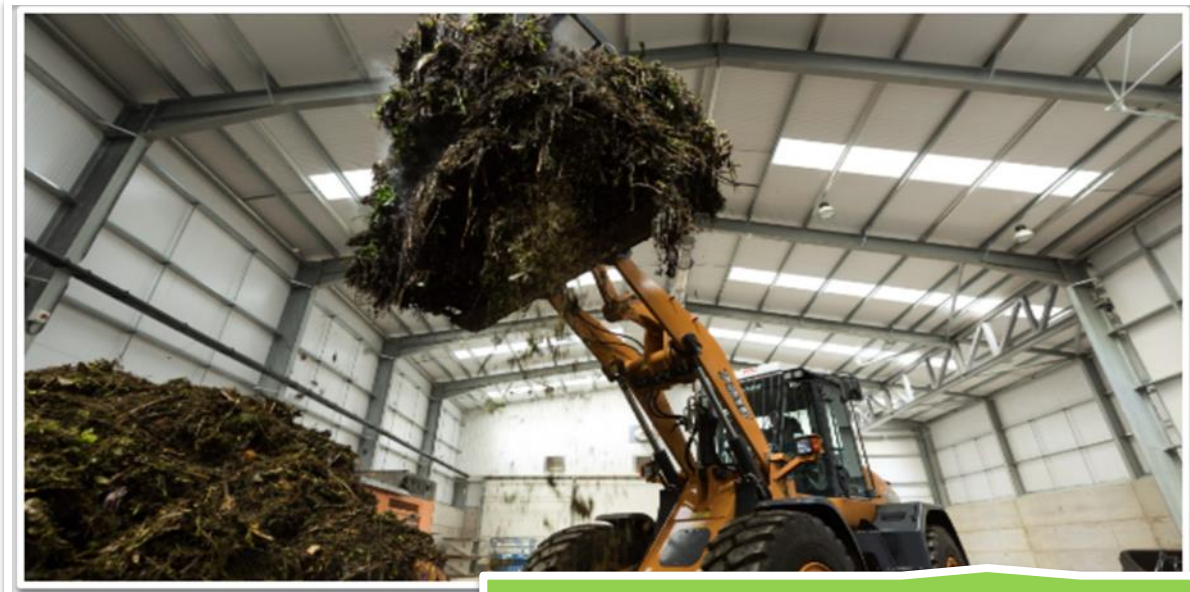


Fugitive Emissions Management Plan

Issue 04

Produced for **Biowise Ltd**

Document Reference **BIO08**



Willerby IVC Facility





A Sustainable Future. Today.

www.wrm-ltd.co.uk

01943 468138

QUALITY CONTROL

Document Title:	Fugitive Emissions Management Plan	
Revision:	04	
Date:	03/11/2020	
Document Reference:	BIO08	
Prepared For:	Biowise Ltd	
Project Reference:	PR0968W01	
Copyright:	WRM Ltd © 2020	
Author:	Oliver Wilde	
Reviewer	Ben Brown	

Version No.	Date	Description of change
03	28/03/2017	Initial plan
04	03/11/2020	Reviewed for submission of permit variation to increase capacity

Copyright ©

All material on these pages, including without limitation text, logos, icons and photographs, is copyright material of WRM Limited. Use of this material may only be made with the express, prior, written permission of WRM Limited. This document was produced solely for use by the named contractee to whom the document refers.

CONTENTS

1.0	SITE LOCATION	1
1.1	Site Address	1
1.2	Operational Locations	1
1.3	Description	1
1.4	Plans	1
1.5	Permits and Licences	1
2.0	WASTE OPERATIONS	2
2.1	Introduction	2
2.2	Activities	2
2.3	Fugitive Emissions Management Requirements	2
2.4	Fugitive Emissions	3
3.0	MANAGEMENT PLAN	4
3.1	References	4
4.0	SENSITIVE RECEPTORS	5
4.1	Personnel On Site	5
4.2	Neighbours	5
5.0	CONTROL MEASURES	6
5.1	Aerial Emissions of Dusts, Fibres and Particulates	6
5.2	Odour	6
5.3	Bioaerosols	6
5.4	Control of Pest Infestations	6
5.5	Control of Litter	6
5.6	Surface Water Control	7
5.7	Mud on the Road	8
5.8	Adverse Weather Conditions	8
5.9	Accident Management	9
5.10	Housekeeping	9
6.0	MONITORING	10
6.1	Monitoring Records	10

1.0 SITE LOCATION

1.1 Site Address

Biowise Ltd
Albion Lane,
Willerby,
Hull,
East Yorkshire,
HU10 6TS

1.2 Operational Locations

Site Grid Reference: 500500, 431896 (IVC Facility)

Site Grid Reference: 501172, 431336 (OWC, ASP, Wood and Soils)

1.3 Description

The site is located in Willerby, 7km west of Hull and approximately 14km from the M62. Willerby is situated approximately 2km to the south east of the site and Beverley 8km to the north east. Access to the site is via Albion Lane.

The site is split by Westfield Road into a northern and southern portion of the site. The northern area consists of an in-vessel composting (IVC) facility treating food and green wastes through an enclosed vessel tunnel system. The southern area of the site consists of open windrow composting (OWC), aerated static pile composting (ASP), wood recycling and soils manufacture.

1.4 Plans

Reference Drawing: Site Plans BIO12

1.5 Permits and Licences

Environmental Permit/License Number: WML65512 - EPR/PP3096ZA.

2.0 WASTE OPERATIONS

2.1 Introduction

Biowise operate a mixed waste recycling facility for the treatment and recovery of various non-hazardous waste materials. Those activities could give rise to fugitive emissions which require management to prevent production and release to the environment and local sensitive receptors. This management plan outlines the steps taken to mitigate the release of the fugitive emissions identified within this assessment.

2.2 Activities

The waste processing and recovery activities include:

- Recovery of green biodegradable wastes through open windrow composting or aerated static piles;
- Recovery of biodegradable comingled green and food wastes through in-vessel composting;
- Recovery of wood wastes through physical treatment; and
- Production of soils through the blending of soil fraction materials.

The activities involved in the recovery of wastes which can give rise to fugitive emissions include, material:

- transportation
- handling
- shredding
- screening
- processing
- storage

2.3 Fugitive Emissions Management Requirements

The preparation of this document has been undertaken using the guidance outlined in Getting the Basics Right, Sector Guidance Note (SGN) IPPC 5.06, and How to Comply with your Environmental Permit (EPR 1.00). The typical condition regarding emissions of substances not controlled by emissions limits (fugitive emissions) on a permit is as follows:

“Emissions of substances not controlled by emissions limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or, where that is not practicable, to minimise, those emissions.”

The operator shall:

“If notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan. Implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.”

2.4 Fugitive Emissions

This Management Plan addresses the need to manage the potential for fugitive emissions from the operations that may be considered as an environmental impact and a nuisance to neighbouring businesses and operations. Fugitive emissions include dust, volatile organic compounds (VOCs), mud, litter and fugitive releases to water and ground.

Fine dusts, fumes and volatile organic compounds can potentially lead to serious health impacts and fugitive leaks to ground or water can have serious effects on water supplies and aquatic ecosystems. You need to prevent or minimise these, no matter how near or far people or other receptors may be.

Other pollutants, such as coarse dust, mud and litter may be only a localised nuisance. However, you do not have the right to cause pollution or nuisance outside your site due to your activities. Your neighbours have a right to expect that your activities will not detract from their quality of life.

They have a right to expect that their environment will be free from emissions caused by your activities either on a continuous basis or at frequent intervals.

Examples of common sources of fugitive emissions are:

- Open vessels;
- Sampling activities;
- Storage areas (for example, bays, stockpiles, tanks, etc.);
- The loading and unloading of containers;
- Transferring/bulking up of material from one vessel to another;
- Conveyor systems;
- Pipework and ductwork systems (e.g. pumps, valves, flanges, catchpots, drains);
- Poor building containment and extraction;
- Potential for by-pass of abatement equipment (to air or water);
- Spillages;
- Accidental loss of containment from failed plant and equipment;
- Tanker and vessels manhole openings and other access points
- Displaced vapour from receiving tanks;
- Cleaning or replacing of filters;
- Drum cutting;
- Wastewater storage;
- Drum storage;
- Tank cleaning; and
- Tanker washing.

3.0 MANAGEMENT PLAN

The Fugitive Emissions Management Plan will identify sources and potential sources of fugitive emissions, and will consider the risk to sensitive receptors. The Fugitive Emissions Management Plan has been produced with the intention to reduce as much as possible fugitive emission causing activities.

This Fugitive Emissions Management Plan contains:

- An assessment of the risks of fugitive emissions problems, from normal and abnormal situations, including worst case scenarios, for example from weather, temperature or breakdowns and accidents.
- The appropriate controls (both physical and management) needed to manage those risks.
- Suitable monitoring.
- Actions, contingencies and responsibilities when problems arise.
- Regular review of the effectiveness of fugitive emissions control measures.

3.1 References

Documents to be viewed in conjunction with the Fugitive Emissions Management Plan:

BIO02 – Management System
BIO03 – Accident Management Plan
BIO04 – Odour Management Plan
BIO06 – Site Specific Bioaerosol Risk Assessment
BIO07 – H1 Risk Assessment
BIO09 – Drainage Management Plan

4.0 SENSITIVE RECEPTORS

4.1 Personnel On Site

Personnel/operatives working on site are the closest receptors to any fugitive emissions produced on site, however due to consistent working conditions it may be unlikely that operatives would be particularly sensitive to fugitive emissions or to changes/fluctuations in fugitive emissions. All operatives shall be made aware of the issue of fugitive emissions on site and should be fully conversant with the contents of the Site Management System (BIO02) and the Fugitive Emissions Management Plan (BIO08).

4.2 Neighbours

Neighbouring buildings and businesses (for example; Albion Mill, Churchlands and Eppleworth Wood Farm) are likely to be the most sensitive receptors to fugitive emission nuisances especially those not operating waste management facilities. Dust, fumes and litter will be particularly noticeable to neighbouring activities. Good relationships with neighbouring land owners and businesses are essential in order to anticipate potential problems and avoid them, where possible, before official complaints are made. Biowise shall ensure:

- That all the neighbouring buildings know how to contact the site if they consider fugitive emissions to be a problem (contact details will be clearly visible on the site sign along with the Environment Agency details); and
- That any complaints are recorded and that problems, where possible, are dealt with promptly. All complaints are to be handled in line with the customer care and complaints procedure (see OP05a - Handling Issues).

5.0 CONTROL MEASURES

5.1 Aerial Emissions of Dusts, Fibres and Particulates

There are few activities on-site that may create dust which could possibly drift off-site and cause an amenity nuisance. Such activities include:

- Waste vehicle movements (vehicles may kick up dust during dry weather).
- The reception and pre-treatment of waste materials (e.g. shredding).
- The grading of processed wastes including compost, wood and soils (i.e. screening).
- The loading of materials into waste vehicles for export to end markets.

Site staff supervising individual waste handling operations shall, during the carrying out of those operations, undertake visual monitoring of aerial emissions. On detection or notification of visible aerial emissions that are likely to be transported beyond the site boundary, immediate action shall be taken to stop the waste handling operations giving rise to the emission and to suppress the aerial emission from the waste. The incident and the remedial action shall be recorded in the site diary as well as the F05A-02 Issues Log document.

5.2 Odour

Odour has been identified and accounted for separately within the site specific Odour Management Plan (BIO04).

5.3 Bioaerosols

The site has undertaken a full Site Specific Bioaerosols Risk Assessment (BIO06) for current activities on site. The risk assessment includes measures for management control and proposed frequency for site monitoring.

5.4 Control of Pest Infestations

Measures shall be implemented and maintained throughout the operational life of the site to control and monitor the presence of pests on the site. An inspection of the facility for pest infestations shall be carried out at regular intervals by the site supervisor, and shall be recorded in the site diary.

The site operates a Pests Management Plan (BIO17) for current activities on site. The management plan includes measures for monitoring and management controls for infestations of flies, rats and scavenging birds.

5.5 Control of Litter

All waste inputs will be deposited in their relative reception areas. This will reduce the potential problem of windblown litter from the site. Staff will inspect the site daily and remove any litter which has accumulated. Details of site inspections and actions will be recorded in the site

diary. In the event that litter does escape from the site, it shall be retrieved as soon as is practicable, and no later than one hour after the end of the working day.

Litter barriers are not currently employed on site due to operational control of litter generation. However, should in future it be deemed that barriers are required, fixed and mobile netting will be introduced around core litter generating activities such as screening.

5.6 Surface Water Control

All surface water and process water will be collected on site via the constructed drainage system and tanks for re-use on site, to be removed to a licensed facility, or to soakaway as appropriate. The table below provides the minimum specified standards for the site surface water control system. The specification for site drainage implemented by Biowise is identified in the Drainage Management Plan (BIO09).

Minimum Specified Standards of Design, Construction and Maintenance	
Sealed Drainage Systems	<p>Drainage to areas of impermeable pavement shall be provided by a sealed drainage system with impermeable components which does not leak and shall ensure that:</p> <ul style="list-style-type: none"> • No liquid shall run off the pavement other than via the system and; • Except where they may be lawfully discharged, all liquids entering the system are collected in sealed tanks.
Sealed Tanks	<p>The minimum capacity of the sealed tanks shall be calculated using the 48 hour M5 Rule. The tanks shall be inspected no less frequently than daily and after rain, emptied when the collected liquids reach 90% of its capacity as measured using a dipstick or equivalent gauge or in the case of a tank some other readily identifiable marker, and constructed and maintained so as to collect and contain all liquids which run off the pavement;</p> <p>Inspections and emptying of sealed tanks shall be recorded in the site diary.</p> <p>Uncontaminated drainage from clean yard areas shall be:</p> <ul style="list-style-type: none"> • Kept separate and discharged to either surface water or sewer or watercourse or soakaway and/or; • Discharged to a sealed tank for use in the composting process.
Fixed Bays/Containers	<p>All fixed bays and other fixed containers used for the storage and treatment of wastes must be constructed and maintained to a standard, which is fit for purpose.</p>

Minimum Specified Standards of Design, Construction and Maintenance	
Inspection and Maintenance	<p>All areas of impermeable pavement, sealed drainage systems, covered buildings roofed areas, fixed bays and other containers, and storage areas for skips, drums and other mobile tanks and containers:</p> <p>Shall be inspected no less frequently than monthly, to ensure the continuing integrity and fitness for purpose of their construction, and the inspection and any necessary maintenance shall be recorded in the site diary; and</p> <p>In the event of any damage occurring which breaches the integrity of the engineered containment so that it no longer meets the specified standards, the licence holder shall cease importing waste into or treating waste in the affected area, shall notify the EA immediately, and shall not recommence importing waste into or treating waste in the affected area until it has been repaired to a standard at least as good as the original specification.</p>

5.7 Mud on the Road

Whenever the site is receiving or despatching wastes, measures shall be provided, operated and maintained with the objective of preventing the deposit or tracking of mud or debris arising from the site onto public areas outside the site, which shall include public highways and areas of public access.

All vehicles leaving areas of the site which are operational or upon which engineering works are being carried out shall, before leaving the site, be cleaned as necessary and shall be checked to ensure that they are clear of loose waste and that any waste is secure.

In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures shall be implemented immediately:

- The affected public areas outside the site shall be cleaned.
- Traffic shall be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures shall be taken to clear any such sources as soon as practicable.

5.8 Adverse Weather Conditions

Heavy rainfall: Waste reception and sanitisation of ABPR wastes processed at Biowise shall be undertaken inside. Stabilisation and maturation of compost will be undertaken outdoors on concrete hardstanding with sealed drainage. All other waste materials are processed outside on impermeable concrete hardstanding with sealed drainage.

In the event of continuous heavy rainfall all waste management operations may continue subject to a site risk assessment carried out by the site manager and recorded in the site diary, to ensure minimum operation requirements are still available. Non-conforming wastes will

be stored in a sealed, lidded container/bin on an impermeable surface to ensure there is no contamination of local surface water.

Strong winds: Winds will not affect those activities which take place indoors. External operations will be limited by wind strength and direction as determined by the site Odour Management Plan. Controls within the OMP will determine which activities can take place in order to mitigate odorous emissions from site.

In the event of a potential or actual dust nuisance being identified during the daily visual assessment, 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.

High temperatures: High temperatures may affect Fugitive Emissions through dry weather. 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.

Snow, Frost & Ice: Snowfall, frost and ice are unlikely to affect Fugitive Emissions.

5.9 Accident Management

Accident management has been identified and accounted for separately within the site specific Accident Management Plan (BIO03).

5.10 Housekeeping

Good housekeeping practices on site to minimise the potential for fugitive emissions will include:

- The removal of all waste from the non-stockpiled tipping floor area at the end of each operating day by shovel loader;
- Regular inspection of drainage system and cleaning when deemed necessary;
- General housekeeping and inspection procedures maintained; cleaning of all surfaces that come into contact with waste (including containers) on a regular basis. Disinfectant is used as required.
- Maintaining the clean and dirty areas at the IVC reception hall in order to comply with ABP regulations. Wheels of waste delivery vehicles are washed and disinfected before leaving the reception building and footwear washes are provided at the exits of IVC reception hall.

Refer to Management System (BIO02).

6.0 MONITORING

Biowise will ensure, by the implementation of a monitoring plan, that fugitive emissions from the site are limited and where possible stopped and that by effective mitigation the impacts of any fugitive emissions shall be reduced. The monitoring of fugitive emissions shall include:

- Thorough site inspection once a week (minimum);
- End of day litter checks/picks; and
- Prompt response to any complaints.

Operatives shall be fully conversant with the contents of the Permit, the Management System and Fugitive Emissions Management Plan and will be relied upon to remain observant and to draw attention to any non-conformances, adverse operating conditions and any mitigation or management failure.

6.1 Monitoring Records

Biowise shall keep records of site inspections and monitoring. Any adverse operating conditions, non-conformances, complaints and mitigation/management failure resulting in an accident or non-compliance with the Permit shall be recorded in the site diary.

WRM Limited
18 Manor Square, Otley, LS21 3AY.

Tel: 01943 468138

Email: info@wrm-ltd.co.uk Web: www.wrm-ltd.co.uk

Copyright and Non-Disclosure Notice

The contents and layout of this report are subject to copyright owned by WRM (©WRM Limited), save to the extent that copyright has been legally assigned by us to another party or is used by WRM under licence. To the extent that we own the copyright in this report, it may not be copied or used without our prior written agreement for any purpose other than the purpose indicated in this report.

The methodology (if any) contained in this report is provided to you in confidence and must not be disclosed or copied to third parties without the prior written agreement of WRM. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests.



A Sustainable Future. Today.

www.wrm-ltd.co.uk

01943 468138