BANKWOOD LANE WASTE TREATMENT
AND PROCESSING CENTRE

APPLICATION FOR ENVIRONMENTAL PERMIT VARIATION UNDER THE ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS 2016 (AS AMENDED)

EMISSIONS MANAGEMENT PLAN

ECL.041.01.01/EMP
October 2018
Version: Issue 1

EMISSIONS MANAGEMENT PLAN

BANKWOOD LANE INDUSTRIAL ESTATE, BANKWOOD LANE, ROSSINGTON, DONCASTER

TABLE OF CONTENTS

ACRONYMS / TERMS USED IN THIS REPORT

Attero	Attero Recycling Limited
BAT	Best Available Techniques
BREF	Best Available Techniques Reference Document
CCTV	Closed Circuit Television
EA	Environment Agency
ECL	Environmental Compliance Limited
EMP	Emissions Monitoring Plan
EMS	Environmental Management System
EP	Environmental Permit
EWC	European Waste Code
PPMR	Planned Preventative Maintenance Regime
SSSI	Site of Special Scientific Interest
WT	Waste Treatments

1. INTRODUCTION

1.1. REQUIREMENT FOR AN EMISSIONS MANAGEMENT PLAN

1.1.1. Environmental Compliance Limited ("ECL") has been commissioned by Attero Recycling Limited ("Attero") to produce an Emissions Management Plan ("EMP") as part of the variation application for their site (Bankwood Processing Site) at Bankwood Industrial Estate, Rossington, Doncaster, DN11 0PS.

1.1.2. The purpose of this variation is to increase the maximum annual waste throughput from 200,000 tonnes to 400,000 tonnes. The daily capacity of the site would exceed 50 tonnes per day and as a result of this Environmental Permit variation the site would change its status from a waste facility to that of an Installation. To account for this increased waste acceptance, Attero propose to expand the Environmental Permit boundary as shown on the Site Layout Plan (ECL.041.01.01-002), which is submitted as part of this variation application. In addition, Attero wish to develop the waste recycling operations and focus on producing Refuse Derived Fuel (RDF) and Solid Refuse Fuel (SRF), in so doing wish to include a Directly Associated Activity in the form of air drying of the SRF fraction of waste treated at the site.

1.1.3. As part of this variation application, Attero wish to rename their site as Bankwood Lane Waste Processing and Treatment Centre, herein after to as the Installation.

1.1.4. As part of Attero's application to vary the conditions of its existing Environmental Permit (EPR/EB3207LH, Issued 09/05/2016), an EMP has been prepared. The EMP will form part of Attero's Environmental Management System ("EMS").

1.1.5. This EMP has been written to meet the requirements of the Environment Agency's ("EA") online guidance –'Control and monitor emissions for your environmental permit' (updated in May 2018, accessed in July 2018 and the EA Sector Guidance IPCC S5.06 'Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste' (Issue 4, 2004). The Waste Treatments Industries Best Available Techniques Reference Document ("BREF") (August 2006) will be considered as it covers installations associated with a number of waste treatments, including recovery and disposal of waste. The Waste Treatments BREF BAT Conclusions published in August 2018 will also be considered.

1.1.6. This EMP addresses the following issues:

- the materials and/or activity which could produce fugitive emissions;
- identification of potential sensitive receptors;
- process controls and procedures;
- potential corrective actions; and
- record keeping.

1.1.7. The EMP provides information on the potential fugitive emissions impacts from the Installation and the mitigation measures to be implemented. These measures are linked to the Installation's EMS and will include operational and control measures for normal, as well as abnormal conditions.

1.1.8. The EMP also provides a management framework comprising of proactive and reactive measures to manage and control potential fugitive releases from the Installation. This proactive approach will facilitate the ongoing development of operational procedures and controls as part of an on-going commitment to improving environmental performance. Reactive procedures will also be established within the EMP for the logging, evaluation and implementation of corrective actions in the event of any fugitive emission related complaints being received.

1.1.9. WYG were commissioned by Attero to undertake an Air Quality Assessment related to the proposed redevelopment of the site, which is contained within Section 9 of this variation application submission and should be read in conjunction with this Emission Management Plan.

2. DESCRIPTION OF THE SITE AND PROCESS

2.1. SITE LOCATION AND SETTING

2.1.1. Attero is located on Bankwood Lane, Rossington, Doncaster, DN11 0PS, and is centred on National Grid Reference 460526 399122. The exact location of the proposed Installation is indicated on Drawing ECL.041.01.01-01 Site Location Plan contained within Section 8, which is provided as part of this permit variation submission.

2.1.2. The site is situated within Bankwood Lane Industrial Estate and the surrounding land uses are provided in Table 1 below. At present, the closest human receptors are residents in the New Rossington area.

Table 1: Summary of Surrounding Land Uses

Boundary	Description
North	Residential (Bessacarr), schools, places of worship, retail park, Potteric Carr Wetlands
East	Residential (Rossington), allotments, places of worship, The Warren Golf Course, River Torne, playing fields, agricultural farm
South	Bankwood Lane Industrial Estate, residential (New Rossington), schools, cemetery, River Torne, agricultural farm
West	Potteric Carr Wetlands, agricultural farm

2.2. DESCRIPTION OF THE PROCESSES

2.2.1. As a result of the permit variation application, Attero will fall under the listed activities detailed in Table 2 under the Environmental Permitting (England and Wales) Regulations 2016 ("EP Regulations") as amended.

Table 1: Proposed Schedule 1 Activities

Activity listed in Schedule 1 of the EP Regulations	Description of Specified Activity
Section 5.4 A(1) (a) (ii)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste-water treatment(a)— (ii) physico-chemical treatment;
Section 5.4 A(1)(b)(ii)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities, and excluding activities covered by Council Directive 91/271/EEC – (ii)pre-treatment of waste for incineration or co-incineration.

2.2.2. Attero is also proposing to increase the annual throughput to 400,000 tonnes. This will enable approximately 350,000 tonnes of SRF/RDF, 45,000 tonnes of recycled material (wood, plastic, paper/cardboard, metals, soils and hardcore) and 5,000 tonnes of non-recyclable waste to landfill.

2.2.3. In addition, Attero wish to develop the waste recycling operations and focus on producing Refuse Derived Fuel (RDF) and Solid Refuse Fuel (SRF), in so doing wish to include a Directly Associated Activity in the form of air drying of the SRF fraction of waste treated at the site.

2.2.4. Waste treatment at the site consists of:

- sorting and separating waste types both mechanically and by hand;
- recycling various waste types, including metals, wood, plastics and aggregates;
- shredding non recyclable material to recover the waste as fuel products;
- blending waste materials to produce useable products (e.g. soils or fuels);
- drying waste to improve fuel quality reduce the moisture content of waste outputs. This would be carried out by passing warm air through/over waste materials; and
- baling of waste materials for export as fuels.

2.2.5. The waste management operations to be carried out at the site as specified in Annex I and Annex II of the Waste Framework Directive 2008, and specified in the existing Environmental Permit, are detailed below:

- **R13**: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced);
- **R3**: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes);
- **R4**: Recycling/reclamation of metals and metal compounds;
- **R5**: Recycling/reclamation of other inorganic materials;
- **D9**: Physico-chemical treatment not specified elsewhere which results in final compounds or mixtures which are disposed of by an of the operations numbered D01 to D12;
- **D15**: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced);
- **D14**: Repackaging prior to submission to any of the operations numbers D1 to D13.

3. POTENTIAL SOURCES

3.1. The potential sources of dust and litter emissions from the site include:

- movement of transport vehicles into and out of site;
- tipping of waste materials;
- storage of the waste materials prior to processing;
- the main operation and processing activities, including shredding, blending, drying and baling material; and
- loading of finished product.

4. POTENTIAL SENSITIVE RECEPTORS

4.1. CONSIDERATIONS FOR IDENTIFYING SENSITIVE RECEPTORS

4.1.1. To determine the severity of dust/litter nuisance which may arise from the Installation, the sensitivity of the receiving environment and potential receptors must be considered.

4.1.2. The degree of sensitivity in a particular location is based on the characteristics of the land use, including the reason why people are at the particular location (e.g. for work, recreation or residence). It is influenced by the meteorological conditions at the site and surrounding area. Additionally, the degree of sensitivity depends on the distance from the dust source as the closer the receptor is to the source, the higher the potential for nuisance will be at the location.

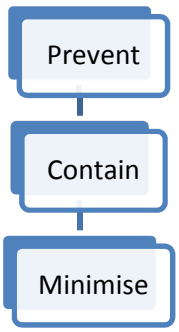
4.1.3. A summary of the immediate environmental setting is provided in Table 1. Potential sensitive receptors within a 1km radius of the Environmental Permit ("EP") boundary are shown on the Sensitive Receptors Plan (Drawing Reference ECL.041.01.01-03) contained within Section 8 of this variation application submission. It can be seen that the nearest receptors are local residents and also workers at the adjacent construction and industrial sites.

5. OPERATIONAL AND PROCESS CONTROLS

5.1. EMISSION MANAGEMENT STRATEGY

5.1.1. Attero's EMP strategy is to prevent any dust nuisance through good working practices and adhering to high housekeeping standards. A strategy based on the hierarchical structure shown in Figure 1 will be used at the Installation.

Figure 1: EMP Strategy



5.2. EMISSIONS CONTROL MEASURES

5.2.1. The following general management techniques will be employed at the Installation:

- staff will be suitably trained in the conditions of their Environmental Permit and EMS;
- the site will be managed in accordance with an EMS which is reviewed regularly to ensure it remains appropriate and up to date; and
- a good housekeeping regime will be implemented through the site buildings and storage areas.

5.2.2. Table 3 details the environmental risk assessment undertaken for dust arising at the Installation. It can be observed that the control measures reduce the overall risk to medium to low.

Table 3: EMP Risk Assessment and Control Measures

Potential Source	Identified Receptor(s)	Pathway	Control Measures	Probability of Exposure	Consequence	Overall Risk
Vehicle movements	Human population in surrounding area	Releases to Air	All vehicles transporting material must be sheeted or enclosed upon arrival at site until removed for visual inspection of all loads. All vehicles will be limited to 5 mph on site. All traffic will use a designated route on site to reduce vehicular movements on site. The designated route will be dampened using a hose if necessary depending on weather conditions. Good standard practices will be adopted, such as avoiding abrupt changes in alignment and regular clearing, wetting and maintenance of yard surfaces. The site entrance will be visually inspected daily to ensure that muddy or loose debris is not present and therefore, will not be carried onto the public highway from site. If required, a road sweeper will be used. A water bowser will be located on site during the Summer months due to the potential increased risk of dust resulting from extended periods of dry weather.	Medium. Control measures should prevent any dust nuisance from reaching the identified receptors.	Dust nuisance	Low
Tipping of waste material	Human population in surrounding area	Releases to Air	Any tipping activity will be supervised by an Attero competent person. Drop heights will be controlled during all tipping of waste materials to reduce dust generation. Material will only be offloaded in the dedicated tipping areas within the site and will take place whenever possible inside the existing building and proposed new building to prevent or minimise fugitive emissions to air reaching sensitive receptors.	. Medium. Control measures should prevent any dust nuisance from reaching the identified receptors.	Dust/litter nuisance	Low to medium.
Storage of waste materials prior to processing	Human population in surrounding area	Releases to Air	Minimisation of the height at which waste is handled should reduce the distance the dust/litter could be blown and dispersed by winds. In coming waste will be processed as efficiently as possible to minimise large volumes of waste being stored on the site at any one time. The waste storage areas have been positioned within the site and will take place whenever possible inside the existing building and proposed new building to prevent or minimise fugitive emissions to air reaching sensitive receptors.	Medium to high. Control measures should prevent any dust nuisance from reaching the identified receptors.	Dust/litter nuisance	Low to medium.

Table 3: EMP Risk Assessment and Control Measures (Cont.)

Potential Source	Identified Receptor(s)	Pathway	Control Measures	Probability of Exposure	Consequence	Overall Risk
Storage of waste materials prior to processing (Cont.)	Human population in surrounding area	Releases to Air	The Operator has constructed an approximately 7m high litter fences at specific locations within the site and its boundary and storage will take place whenever possible inside the existing building and proposed new building to prevent or minimise windblown litter escaping the site. The litter fence is to be progressively expanded to cover areas of the perimeter to include the additional external storage areas proposed in the permit variation application. The litter fences are inspected daily in order to be kept in good state of repair at all times. The site fencing and barriers are kept clean using wet methods. Stockpiles of fine material are stored within the confines of the buildings whenever possible and waste skips stored externally will be covered or enclosed. Depending on weather conditions, routine spraying of stockpiles and road surfaces with a handheld hose will take place to dampen the material to reduce dust emissions.	Medium to high. Control measures should prevent any dust/litter nuisance from reaching the identified receptors.	Dust/litter nuisance	Low to medium.
Main operations and processing activities – shredding, blending, drying and baling,	Human population in surrounding area	Releases to Air	All main operations and processing activities will be undertaken within the confines of the Installation and whenever possible inside the existing building and the proposed new building. All machinery will be maintained in good working as per the Planned Preventative Maintenance Regime (“PPMR”). Any malfunction or breakdown leading to fugitive emissions will be dealt with promptly and operations modified or suspended until normal working practices can be restored. There is a possibility of water injection into the shredder being undertaken during exceptionally dry conditions. A daily visual inspection shall be undertaken by a nominated person to monitor any fugitive emissions and instigate any control measures, such as water suppression, if necessary. An example of the Daily Site Monitoring Check Sheet is provided in Appendix I of this EMP. The frequency of the daily checks will be increased when activities with a high potential to produce dust are being carried out and/or if prolonged dry or windy conditions are experienced.	Medium to high. Control measures should prevent any dust nuisance from reaching the identified receptors.	Dust nuisance	Low to medium.

Table 3: EMP Risk Assessment and Control Measures (Cont.)

Potential Source	Identified Receptor(s)	Pathway	Control Measures	Probability of Exposure	Consequence	Overall Risk
Loading of finished product	Human population in surrounding area	Releases to Air	All loading of finished product will be supervised by an Attero competent person. Even loading of vehicles will be undertaken to prevent any loss of material. In the unlikely event of a loss of containment of finished product, spill equipment will be readily available.	Unlikely. Control measures should prevent dust/litter nuisance from reaching the identified receptors.	Dust/litter nuisance	Not significant

6. COMPLAINTS

6.1. RESPONSE TO COMPLAINTS

6.1.1. If a dust/litter complaint is received at the installation, the incident will be fully investigated which may include the following:

- undertaking a site inspection to establish whether any visual signs of dust can be observed at the present time;
- viewing Closed Circuit Television ("CCTV") footage at the time of the event if specified within the complaint;
- reviewing the daily site monitoring check sheet to confirm checks have been completed and to note whether any abnormal activities or observations were recorded; and
- discussions with site operatives to establish any changes to normal operating conditions.

6.1.2. Corrective and preventative measures will be implemented if the complaint is substantiated and followed up if deemed necessary, such as increasing the frequency of water suppression techniques.

6.1.3. If required, Attero will attend resident liaison meetings to ensure comments from the local community can be addressed and the corrective and preventative measures which have been implemented at the site are communicated to those concerned.

6.2. RECORDS

6.2.1. EMP records are kept in accordance with the procedures established as part of the EMS.

6.2.2. The type of information that will be recorded relates to:

- an overview of the complaint received, what they relate to and any remedial action taken;
- sensitive receptors in particular the type of receptors, location relative to the suspected dust source and an assessment of the impact on the receptors; and
- identification of any circumstances, which compromise the ability to prevent dust nuisance and a description that will be taken to minimise the impact.

6.2.3. Any external or internal non-conformances raised against the requirements of the Environmental Permit or other relevant legislation, are recorded on an Improvement Action Report. These are then followed up by the Site Manager, as appropriate, to address the concern identified and to prevent occurrence or re-occurrence. Details are recorded on the Improvement Action Report, to ensure they are effectively closed out. These are reported/reviewed as part of Management Review meetings.

7. EMP REVIEW

7.1. The continuing effectiveness of the EMP will be reviewed annually by the Site Manager for the site.

7.2. The reviews will take into account compliance records, complaints history, site records and any recent sensitive developments on neighbouring land. The plan will be amended as necessary, including any changes to the control measures.

APPENDIX I
DAILY SITE
MONITORING CHECK SHEET

DAILY SITE MONITORING CHECK SHEET

ASPECT	COMMENTS	ACTION TAKEN	RESPONSIBLE PERSON
Meteorological Conditions			
Details of Operations			
Visual Observations			
Presence of Dust & Details of Suppression Systems In Place			
Presence of Odour			
Presence of Pests/Litter or Mud			
Presence of Noise and/or Vibration			
Any Other Comments:			

Name: _____ Signature:_____ Date:_____