Ellgia Scunthorpe
Permit Variation Application
reference ELL/017

Draft
EMISSIONS MANAGEMENT PLAN

(For EA Approval)

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ACRONYMS / TERMS USED IN THIS REPORT

BAT	Best Available Techniques
BREF	Best Available Techniques Reference Document
CCTV	Closed Circuit Television
EA	Environment Agency
FEMP	Fugitive Emissions Management 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 (EMP)

This plan has been produced in response to the Enhanced Pre-application advice issued on 19 April 2019. This EMP addresses the following issues:

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

This document is based on existing site procedures in the current Environmental Management System (EMS) with enhancements designed to take account of the future operations and developments on site, the following procedures relate to this plan:

EMS Reference	Description
EM 01-001	Environmental Policy
EM 01-002	Fugitive Emissions Management Plan
EM 02-003	Waste Acceptance Procedure v2
EM 02-004	Waste Storage and Dispatch Procedure v2
EM 02-005	Odour Assessment Procedure
EM 02-009	Hazardous Materials Storage Procedure (2)
EM 02-013	Noise Assessment Procedure
EM 02-014	Dust Control Procedure V2
EM 02-015	Severe Weather Procedure
EM 03-003	Odour Monitoring Form
EM 03-004	Noise Monitoring Form
EM 03-005	Underground Vessel Inspection Form
EM 03-006	Daily Site Inspection Form v4
EM 03-007	Weekly Site Inspection Form
EM 05-006	Sensitive Receptor Schedules
EM 06-001	Sensitive Receptor Plan
EM 06-002	Odour and Noise Monitoring Location Plan

1.2 Objective

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.

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 as the site develops.

Reactive procedures will also be established within the EMP for the recoding, evaluating, and

implementing of corrective actions in the event of any fugitive emission related complaints being received.

1.3 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 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:

- Storage areas (bays, stockpiles, ponds, etc.)
- Open containers
- Sampling activities
- The loading and unloading of containers
- Transferring/bulking up of material from one vessel to another
- Conveyor systems
- Treatment activities (shredding, screening, crushing etc)
- Pipework and ductwork systems
- Building containment and extraction systems
- Spillages
- Accidental loss of containment from failed plant and equipment
- Tanker and vessels manhole openings and other access points
- Cleaning or replacing of filters
- Wastewater storage

1.4 Site and Geology

Ellgia Ltd is situated on Winterton Road in the northern outskirts of the town of Scunthorpe in North Lincolnshire. The roughly triangular site operates as a waste treatment and transfer facility for non-hazardous domestic, commercial, and industrial waste. The site is currently accessed via an estate road which leads eastwards from Winterton Road to the site entrance set in the centre of the site. The site. The areas outside the site boundary are summarised as follows:

Boundary	Description
North	Appleby Frodingham Ponds, formerly owned by British Steel, land now in receivership
East	Bound by single track railway which forms the western perimeter of British Steel site
South	Unoccupied Scrubland, British steel drainage pond, TES Container Ltd, container storage
West	Bound by Winterton, BOC Warren Road, Mantank Environmental Services (industrial), Thompson Metals (industrial)

Historically, the site lies within an area of former ironstone workings associated with the Scunthorpe iron and steel industry. Anecdotal information indicates that prior to its use as a waste recycling depot the site was formerly used as a piggery.

From data obtained during other surveys taken in the area, together with information shown on the British Geological Survey no superficial deposits are likely and the solid geology is represented by the Frodingham ironstone formation, which is of Sinemurian age (Jurassic).

1.5 Fugitive Emissions Management Approach

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 in 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 Management Plan

2.1 Approach

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 in collaboration with the associated documents referenced in the section above contain:

- An assessment of the risks of fugitive emissions problems, from normal and abnormal situations, including worst case scenarios, for example of 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 Sensitive Receptors

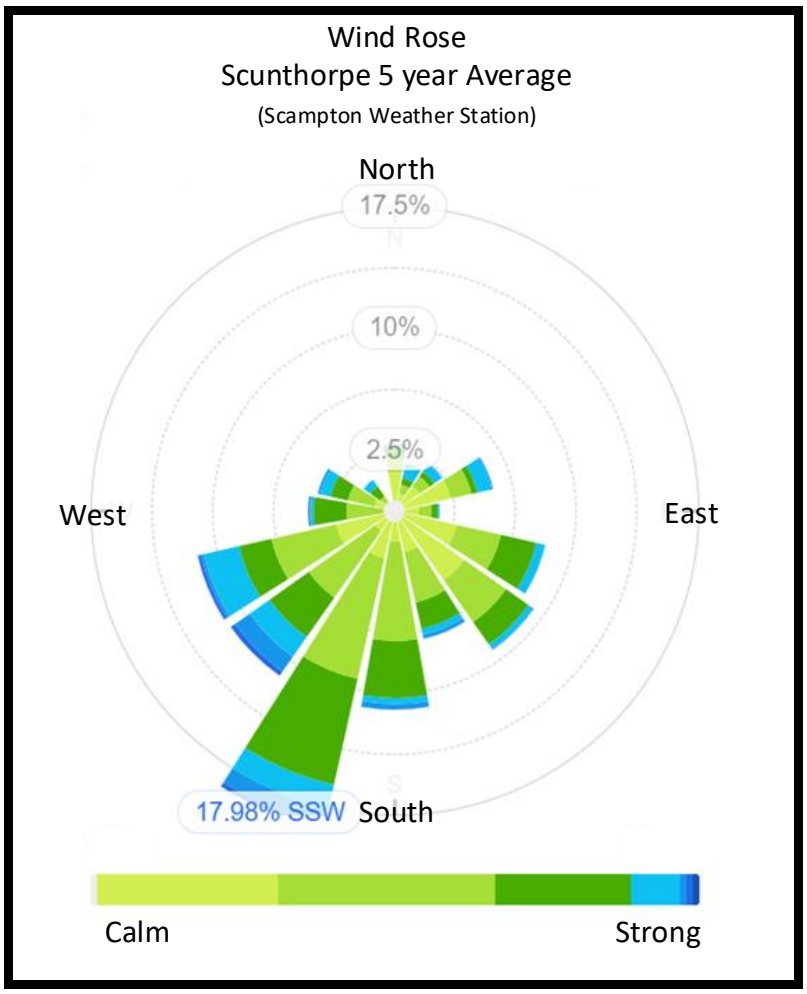
3.1.1 Personnel on Site

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 EMS and the Fugitive Emissions Management Plan FEMP

3.1.2 Neighbours

There are no residential buildings in the immediate vicinity of the site. Neighbouring businesses are likely to be the most sensitive receptors to fugitive emission nuisances. Dust, fumes, and litter will

be particularly noticeable to neighbouring activities. The prevailing winds are West to SSW.



Good relationships with neighbouring landowners and businesses are essential. To anticipate potential problems and avoid them, where possible, before official complaints are made. There are no

Ellgia shall ensure:

- That all the neighbouring businesses 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.

4 CONTROL MEASURES

4.1 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:

- Vehicle movements (vehicles may kick up dust during dry weather).
- The reception and pre-treatment of the waste which will occur on a concrete pad or in a building

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 spray the source of the dust emission with additional water or stop the waste handling operations giving rise to the emission and suppress the aerial emission from the waste. The incident and the remedial action shall be recorded in the site diary.

The actions which will be taken to prevent or minimise dust emissions in the first instance are as follows[1]

- 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 as well as wastes 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 will 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 (see OP05 – Monitoring Schedule). In the event of a potential or actual dust nuisance being identified, then appropriate remedial actions will be implemented as stated in the paragraph above.
- 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.

4.2 Odour

Odour has been identified and accounted for separately within the site-specific Odour Management Plan EM-02-005

4.3 Bioaerosols

Bioaerosols are defined as aerosols, aeroallergens, or particulate matter of microbiological, plant or

[1] Environment Agency. Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste. Sector Guidance Note S5.06

animal origin. Bioaerosols can interact with living systems through infective, allergenic and/or toxic mechanisms. The biological agents that have been examined in relation to bioaerosol exposures associated with waste handling and treatment processes include pathogenic or non-pathogenic spores, live (viable) or dead (non-viable) bacteria, fungi, viruses, bacterial endotoxins, mycotoxins, and peptidoglycans. Although other types of biological component may also be present as airborne particles such as algal fragments, protozoa and nematodes, these have not been considered in studies of bioaerosols emitted by the waste industry.

As the proportion of organic waste received on site is very low and the turnaround time of such waste is generally within 24 hours, the risk of bioaerosol emissions is considered to be very low at present. Should proportion of organic waste or processing change, a risk assessment of bioaerosol emissions shall be undertaken.

4.4 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 least at weekly intervals by the site manager (EM-05-005) and shall be recorded in the site diary.

On detection or notification of pest infestations, or evidence of such, immediate action shall be taken to secure the attendance of a professional pest control contractor, to eliminate the pest infestation. The incident and the remedial action shall be recorded in the site diary.

4.5 Control of Scavenging Birds and Other Scavengers

Measures shall be implemented and maintained throughout the operational life of the site to control and monitor the presence of scavenging birds and other scavengers.

On detection or notification of scavenging animals or flocks of scavenging birds, immediate action shall be taken to remove or deter them from the site. The incident and the remedial action shall be recorded in the site diary.

4.6 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. If 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.

Netting is installed in areas susceptible to windblown litter emissions and barriers, cages and nets are used wherever practicable on processing equipment. The site infrastructure is monitored and reviewed by the management team on a continuous basis, and should it be deemed necessary to install any further measures at any time in the future this shall be implemented.

4.7 Surface Water Control

All surface water and process water is contained within the constructed drainage system, all impermeable surfaces drain to interceptors as shown on drawing ELL/SCU/FPP/013. Clean water passes to the site drainage pond, tank residues are removed to licensed facilities as appropriate.

4.8 Mud on the Road

Whenever the site is receiving or dispatching 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.

The site has a dedicated road sweeper which is employed daily to clean site roads and impermeable surfaces thereby minimising the potential for vehicles to leave site with mud on wheels.

ln 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.
- The cause of the mud/debris escape investigated.
- 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.

4.9 Adverse Weather Conditions

Fugitive emissions are unlikely to be affected by rainfall, high temperatures or ice and snow. Strong winds are likely to increase the risk of dust and or litter emissions and an specific Severe weather procedure is included in the EMS, which includes provision for cessation of operations under certain conditions see (EM-02-015).

4.10 Accident Management

Accident management has been identified and accounted for separately within the site- specific Accident Management Plan (EM-01-003).

4.11 Housekeeping

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

- Blown down and cleaning of all processing equipment at the end of each day
- Regular cleaning and maintenance of all guards, netting fencing, and other containment

measures
- Regular maintenance of all misting and dousing systems
- Daily operation of road sweeper
- Regular inspection of drainage system and cleaning when deemed necessary;
- General housekeeping and inspection procedures maintained and daily and weekly inspections

5 MONITORING

5.1 Management System

Detailed monitoring of fugitive emissions and recording of incidents and corrective actions will be carried out as part of the Environmental Management System and the various monitoring and recording procedures therein. Ellgia will ensure 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.

5.2 Monitoring Records

Ellgia shall keep records of any site inspections/monitoring carried out. 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 and the EMS.

6 DAILY SITE MONITORING CHECK SHEET

Parameter	Comments	Action Taken	Person Responsible
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