# DUST MANAGEMENT PLAN

## Morris & Co (Handlers) Ltd

Bankwood Lane

New Rossington

Doncaster

South Yorkshire

DN11 0PS

Permit number: EPR/JP3190CL

Issued: 30/08/2007

Grid Reference: SK 60607 98912

## Revision History

| Issue | Date | Comments | Author | Approved by |
|---|---|---|---|---|
| 1.0 | Jun 2020 | Dust Management Plan created | Jo Mcanulty | Tom Morris |
| 2.0 | Sept 2020 | 1. Updated to read "The site processes incinerator ash to recover metal content **and on occasions may** process used beverage cans or MBT to separate metal grades." | Jo Mcanulty | Tom Morris |
| 3.0 | Dec 2021 | Section 2 – Waste operators and Receptors updated<br>Section 3.2 – waste type processed updated to read "metal from incinerator ash" | Jo Mcanulty | Tom Morris |
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# 1 INTRODUCTION

The following document outlines the Dust Management Plan (DMP) that has been put in place for the monitoring and control of dust at Morris & Co (Handlers) Ltd at Bankwood Lane, New Rossington, Doncaster, DN11 0PS. The DMP forms part of the environmental management system that Morris & Co operates to ensure their operations comply with their environmental permit. The DMP is a living document subject to on-going review, with updating as appropriate.

This DMP has been produced in accordance with the Environment Agency's (EA) Control and Monitor Emissions for your Environmental Permit[1] guidance and relates to the waste materials accepted, stored and treated at the site which may produce fugitive emissions.

The site processes incinerator ash to recover metal content and on occasions may process used beverage cans or MBT to separate metal grades. The metal treatment operations at the site are covered by an environmental permit, EPR/JP31990CL.

Dust, and particulate matter arising from incinerator ash processing operations, can cause an impact which if it does, can cause complaints. Dust is small particulate matter between 1 and 75 microns and is produced by the processing of incinerator ash by the action of shredding. The amount of dust generated is a factor of the nature of the material and the method of handling.

Dust emission is the process by which the dust becomes airborne. The most significant cause is windblown. Once dust is created and becomes airborne, air currents disperse it. Fine dust particles can be deposited over a wide area. Obviously, the production of dust is not welcomed. In addition to being an irritant and health hazard, dust is a loss of product and can impact equipment resulting in additional plant breakdown, repair and maintenance. It is in Morris & Co's interest to control and reduce dust to a minimum. The control of dust at a site is based on the effective implementation of best practices. This assessment identifies the causes of dust and describes the methods which will be involved in the management of dust at the Rossington site to reduce the likelihood of dust being produced, and blown within or beyond the boundaries of the site to a minimum.

## 1.1 Dust Management Aims

The aim of the DMP is to:

a) Minimise dust generation and migration from the site
b) Ensure nuisance caused to nearby receptors from dust is kept to a minimum
c) Ensure that operations at the site have consideration for potential dust generation
d) Specify monitoring and record keeping requirements

# 2 SITE SETTING

The site is located on an existing industrial area located at Bankwood Lane, Rossington, Doncaster, DN11 0PS. The site is located south of Doncaster on an industrial area with easy access to M18 and A1.

The surrounding area to the west of the site has had development over the last 10 years, Amazon distribution centre is 700m to the west and residential development has infilled between Amazon and Morris & Co's site. The nearest residential properties are now located

[1] https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#history

>50m to the west, with their gardens abutting the site boundary. The next nearest residential properties are approximately 200m to the south on Bankwood Cresent.

The treatment of waste is performed on the open external yard area.

There are also other waste operators in the vicinity as below:

Key

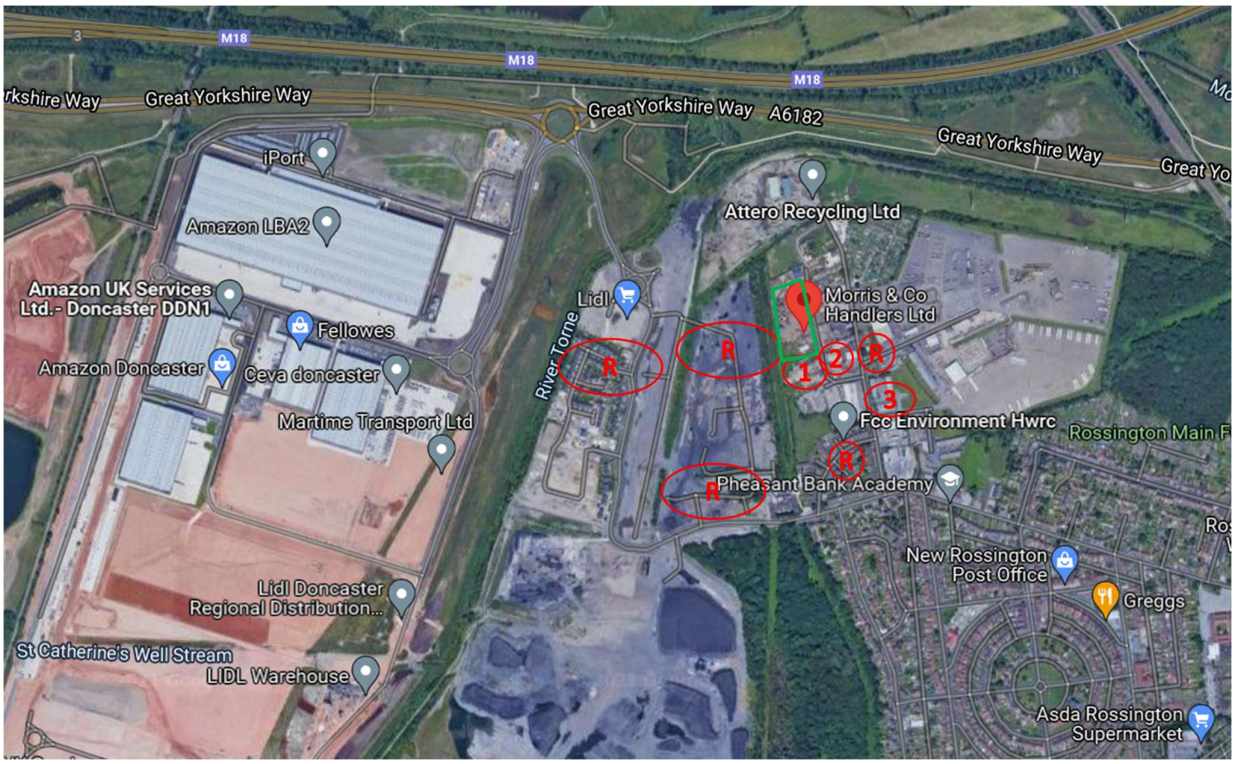
1. Waste treatment and transfer station (Eco Power Environmental)
2. Household Waste Recycling Centre

## 2.1 Sensitive Receptors

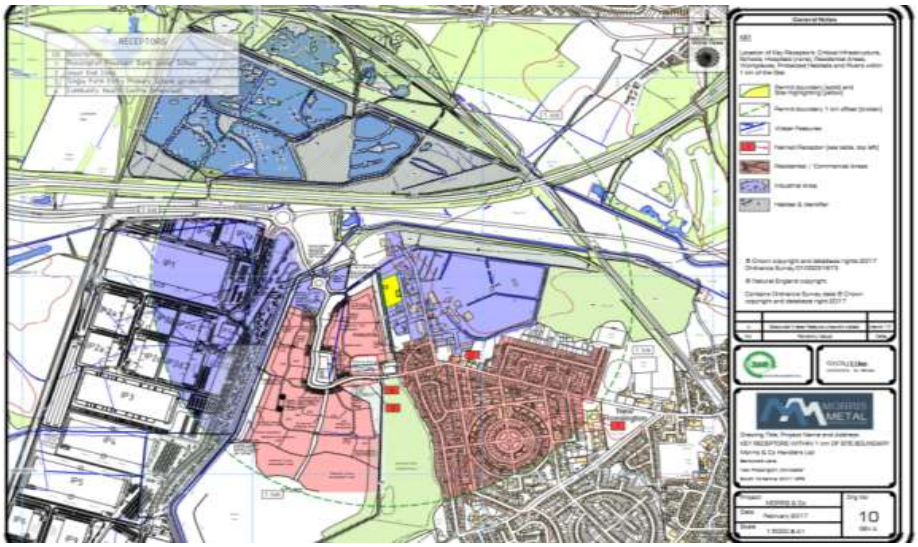
There are potential sensitive receptors within 200 metres of the site:.
Key:

1. Parker Skip Hire
2. Commercial Vehicle Breakers
3. GL Filtration

R. Residential




Drawing No.10 provides the location of key receptors, critical infrastructure, schools, hospitals, residential areas, workplaces, protected habitats and rivers within 1km of the site.



### 2.2 Wind Direction

The following section identifies the prevailing weather conditions on site, in particular the wind direction in order to predict the path of likely aerial dispersion of dust generated on site.

Information on wind direction has been derived from https://www.wunderground.com/ using the nearest weather station at Castle Close Station, Doncaster.

Results of data 20th Dec 2019 – 20th Jun 2020, frequency of wind direction relating to wind speed

| Wind Speed | North | North East | East | South East | South | South West | West | North West |
|---|---|---|---|---|---|---|---|---|
| 0-4 mph | 1% | 1% | 0% | 1% | 0% | 0% | 1% | 3% |
| 5-9 mph | 6% | 6% | 0% | 5% | 1% | 7% | 2% | 5% |
| 10-14 mph | 0% | 4% | 2% | 1% | 5% | 10% | 10% | 1% |
| 15-24 mph | 0% | 0% | 0% | 0% | 8% | 10% | 2% | 0% |

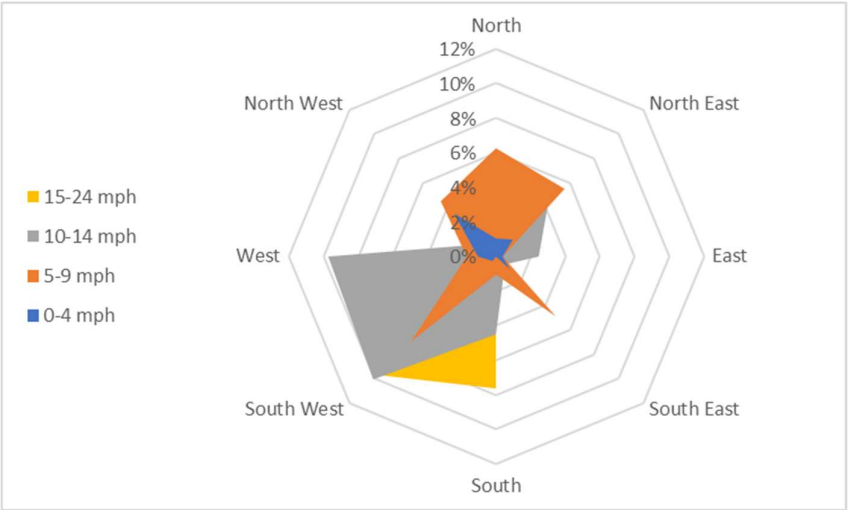



**Figure 1 – Wind Direction Rose relating to wind speed (20 Dec 2019 – 20 Jun 2020)**

## 3 DUST CONTROL MEASURES

The following section outlines the control measures that will be undertaken on site to mitigate dust emissions from the identified sources of generation. Morris & Co recognise that where possible dust should be minimised or prevented.

### 3.1 Dust Generating Activities

Potential dust emissions for the site may be generated from activities associated with:

- Processing - Shredding of incinerator waste
- Handling and movement of stockpiles
- Wind blowing across stockpiled materials and
- Vehicle movements in/out of the site

### 3.2 Dust Control

In order to minimise potential generation of dust from the site, the following preventative or reactive control measures shall be implemented for the separately identified potential dust generating activities. In addition to these, general measures shall also be undertaken.

The management of dust within the site is undertaken by:

Avoidance/Containment

- All material entering and leaving site in fully enclosed vehicles
- All treatment of metal from incinerator ash is performed inside a building
- All loads of material that may result in dust sheeted before leaving site
- Good housekeeping to keep clean and tidy site
- 3 sided walled bays to improve containment when stored
- External boundary near stored material, overall height 8 metres
- Debris netting around perimeter

Suppression

- Atomised mobile mist air cannon
    - During shredding of material that has been identified as dusty
    - Where dust emissions have been observed by the Site Manager or site operatives during routine site inspections
    - Where dust emissions or particulates are observed leaving the site boundary
    - Following any dust complaints received
- Yard surface dampened with water during dry periods such as in the summer months

Other

- Transport management to keep dusty material moving
- Maintain all dust control equipment and record any maintenance activities
- Daily inspection of yard recorded on the Environmental Site Checklist

**Processing**

- Shredding is the main processing operation with the potential to generate the most dust. Shredding is predominately performed inside a building. If any mobile outdoor shredding is performed it is supported by the use of mobile water mist air cannon.
- Plant is kept clean to avoid a build up of dust on the machines which may be dropped on yard areas or cause wind-blown dust.

**Handling and movement of stockpiles**

Dust from the handling of material on site and movement of stockpiles will be reduced or controlled by:

- Regular sweeping of roads and operational yard areas.
- The operational open yard areas are dampened down as necessary with water.
- Spillages on open yard areas will be cleared up immediately.
- Material is directly moved by loading shovel from the storage location and fed into the shredding equipment.
- Double handling of material will be avoided where possible.

**Stockpiled materials**

- Atomised mist air cannon available for use on stockpiles (as necessary).
- Material stored in 3 sided walled bays and the walls are higher than the stored material
- Back wall with stockpiled material i.e boundary fence 8m high with debris netting

**Vehicles movements in/out of the site**

- A loading shovel is used to load vehicles removing material from site. Mist air cannon can be used during loading as necessary. Any spillages during loading will be cleaned up as part of routine housekeeping measures. All vehicles will be sheeted upon loading.
- The small yard and narrow space means vehicle speeds are reduced to 10mph or below
- Yard surfaces are concreted

### 3.3 Future Proposed Dust Control Measures

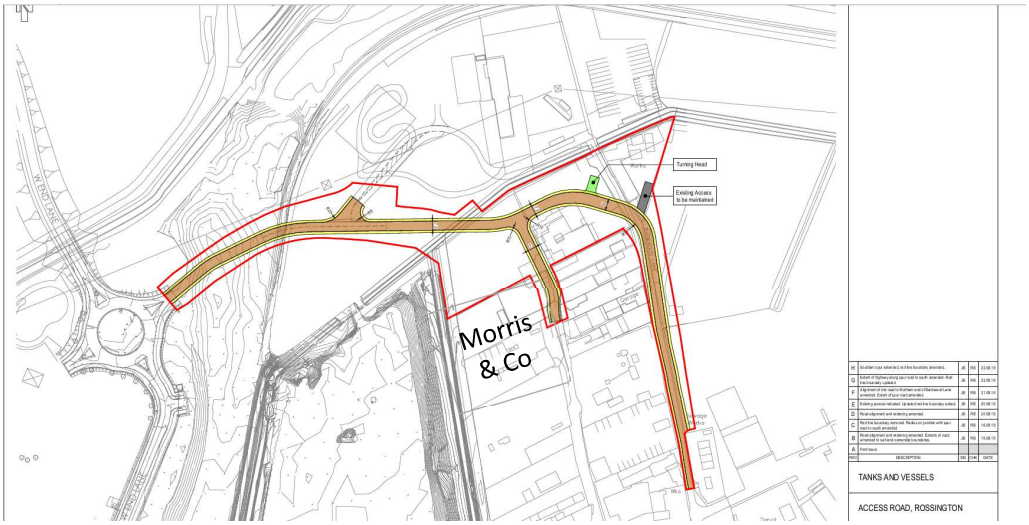
- New Access Road

Planning Permission 18/02114/FULM was granted by Doncaster CC on 21 April 2020.

*Detailed planning application for the demolition of existing buildings and construction of a new adoptable two way road to link Bankwood Lane Industrial Estate to the West End Lane Roundabout, Rossington, including change of use to form land swap with allotment land. Bankwood Lane New Rossington Doncaster*

Benefits:

- Articulated vehicles delivery and collecting from Morris & Co will no longer need to drive through the residential area thus reducing impact on residential properties:
  - No articulated vehicle movements
  - Dust impact from travelling vehicles removed
  - Noise from vehicles reduced




## 4 MONITORING AND REPORTING

### 4.1 Dust Monitoring

The following steps are taken:

- Dust monitoring at the site boundary will be carried out as part of the routine daily site inspections with any observations recorded on the Environmental Site Checklist and retained onsite.
- All plant is inspected daily and cleaned down regularly after use to prevent the build up of dust on machinery parts and hot exhausts.
- Operational staff remain vigilant for visual dust and particulate emissions during the treatment process. Where dust emissions are identified during the shredding process, the mobile air mist cannon is operational to reduce dust levels on site.
- Where dust emissions are observed leaving the site boundary, material will be dampened down before the treatment process resumes.
- No dust monitoring will be carried out outside operational hours. Where regular complaints are being received outside of operational hours over a period of two weeks, stockpiles will be dampened prior to the end of shift.

### 4.2 Response to Dust Events

Where dust is identified as an issue at the site during daily site inspections, an inspection will be carried out by the Site Manager to determine the cause.

Visual monitoring along the site boundary will be increased to twice daily until the issue is resolved.

Due to the height of the wall around the site, additional netting around the boundary of the site and the treatment of shredding performed inside a building from August 2020, the likelihood of dust and particle emissions impacting sensitive receptors in close proximity to the site is considered LOW and therefore no other form of dust monitoring is proposed for the site.

Where dust emissions are continually identified as an issue at the site and complaints are received as a result, the Site Manager will review the mitigation measures and monitoring techniques detailed in this DMP in order to improve detection and prevent emissions discharging from the site.

### 4.3 Records

The following records are maintained and held for 6 years:

- results of the daily inspections are recorded on the Environmental Site Checklist
- housekeeping completed is recorded on the Environmental Site Checklist
- Plant and equipment maintenance is recorded on the Maintenance and Service Record

### 4.4 Complaints

Morris & Co operate to ISO9001 and ISO14001 standards. All complaints received concerning dust and particulate emissions at the permitted site will be dealt with in accordance with the company's EMS complaints procedure.

The Environment Agency will be informed within 24 hours of detection of any emissions which has caused, is causing or may cause significant pollution. Any complaints received by the Environment Agency relating to dust emissions from the site will be dealt with as soon as is reasonably possibly upon notification.