# Site address:

# Unit 7, Woolsthorpe Road

# Belvoir

# GRANTHAM

# Lincs NG13 0GN

## DUST & EMISSIONS MANAGEMENT PLAN

## (DEMP)

**Issue & revision Record:**

| Version | Date | Originators | Comments |
|---|---|---|---|
| **25.1** | **8th Jul 25** | **JB/PB** | **Initial plan.** |
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**This is intended to be a *live* document which may be periodically updated. It is correct upon issue. If you have a copy and are not sure if it is the current version, please *contact us* quoting the version number shown in footer and we will advise.**

| Contact | Email | Phone |
|---|---|---|
| **Jenny Britton** | **info@letsrecycleartificalgrass.co.uk** | **07741 909474** |

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## 1. Introduction:

This document has been created as part of our overall Environmental and Waste Management arrangements. We intend to use it as part of our ongoing professional relationships with key stakeholders including Environment Agency. A copy will be displayed on LRAG Ltd staff notice board to be available to our Employees and others working on the site.

We operate from established business premises at Unit 7, Woolsthorpe Road, Belvoir, GRANTHAM, Lincs NG13 0GN. The site is fully enclosed with 24.m high steel palisade perimeter fencing and electric gates to control access. The site is operational 0800-1700 Mon-Fri with limited Saturday activities (mostly housekeeping & maintenance).

End of life sand-filled artificial turf – mainly from football pitches and tennis courts - are delivered to our site by goods vehicle. The products are delivered in standard 2-meter-wide rolls. Upon delivery they are visually inspected and, assuming no issues, unloaded using suitable materials handling equipment and placed in an outside storage area comprising 7 bays. Each bay has a physical separation of not less than 6 m from the next bay. Rolls may be stacked up to 3 meters high.

We have various specialist process machines on site to perform the following operations:

1. Initial separation uses an enclosed process in which the grass carpet is unrolled, subject to controlled medium pressure water spray to remove sand and other loose material which is captured in an enclosed vessel ready for further filtration (see 4 below). The carpet rolls are then automatically re-rolled ready for the next process.
2. Mechanical separation of matting fibres from rubberised backing material using a scavenging process. The machine diverts rubberised backing particles into one enclosed hopper and rubber crumb particles are captured in a 1.5 tonne bag.
3. Matting fibres are further screened by passing the material over a vibrating bed. The fibres pass into a bag and are ready for despatch from site.
4. Sand is dried/screened by passing the material through a graded screen. The screen diverts physical contaminants such as stones into a receiving hopper and the clean sand passes into a 1000l IBC ready for re-use.

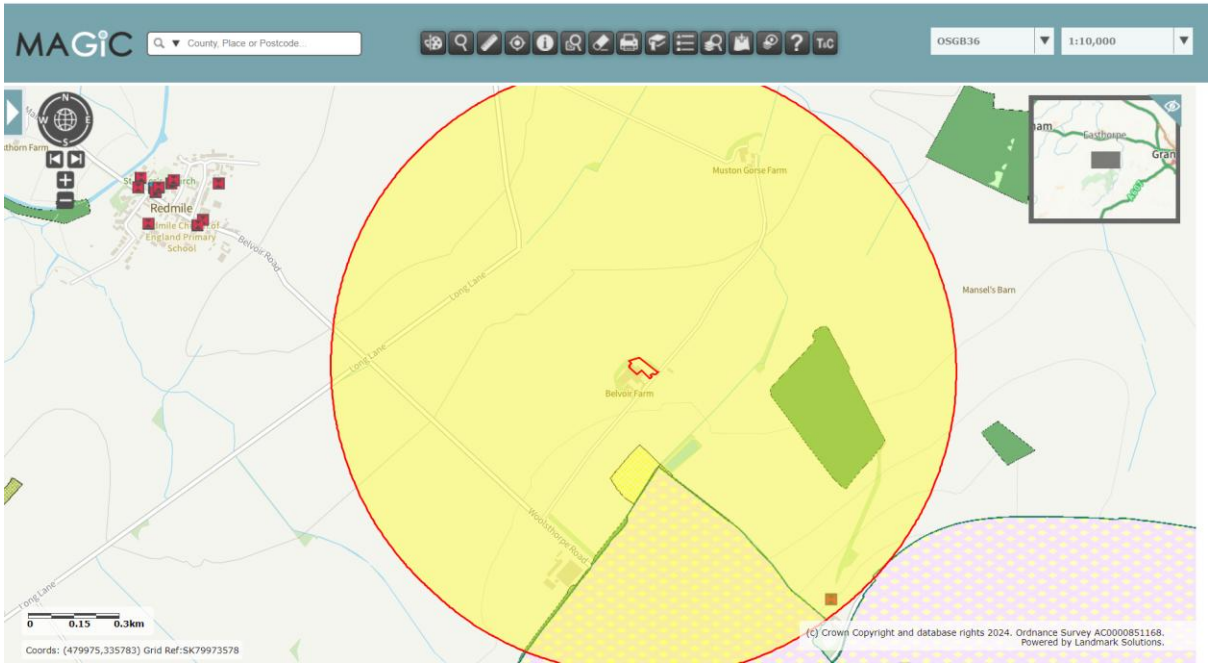
The machinery has been designed and built for this particular task. We have an onsite maintenance team providing both proactive and reactive maintenance.

## **1.1** Sensitive Receptors.

Our site is located within open countryside with only 2 sensitive Receptors within 250 meters of our site boundary.

Table 1.1 distances to sensitive receptors.

| Boundary | Closest property | Approx distance from boundary |
|---|---|---|
| SE | Dwelling along lane | 220m |
| SW | Factory | ≤10 metres |
| | | |




| Receptor reference (see above) | Land use e.g. houses, school, hospital, commercial | Direction from site (North, South, East, West) | Approximate distance from the site boundary (m) | Map Reference |
|---|---|---|---|---|
| 1 | Residential properties | Southeast | 21.8 | Map 1 |
| 2 | Residential property – Muston Corse Farm | Northeast | 714.8 | Map 1 |
| 3 | Commercial - World Decor Supplies Ltd | West | 0 | Map 1 |
| 4 | Commercial - Belvoir Farming Company Ltd | Southwest | 886.6 | Map 1 |
| 5 | Field drain which feeds into Winter Beck then the River Devon | Southeast | 227.7 | Map 1 |

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|---|---|---|---|---|
| 6 | National Forest Inventory - Woodland – young trees | South | 223.3 | Map 1 |
| 7 | National Forest Inventory – Woodland – Mixed mainly conifer And Woodland – Young trees | South | 298.7 | Map 1 |
| 8 | Listed Buildings - The Court House – Grade II | Southeast | 948.4 | Map 1 |
| 9 | Priority Habitat Inventory – Deciduous Woodland - Saltbeck National Forest Inventory – Woodland - Broadleaved | Southeast | 383.2 | Map 1 |
| 10 | Commercial - The Place | Southwest | 69.8 | Map 1 |
| 11 | Woolsthorpe Road | Southwest | 576.5 | Map 1 |
| 12 | Registered Parks and Gardens - Belvoir Castle – Grade II National Forest Inventory – Woodland (mixed mainly conifer) Wood pasture and Parkland BAP Priority Habitat | Southeast | 301.8 | Map 1 |
| 23 | Groundwater abstraction point | South | 250 | Map 1 |

## 2. Operations at Unit 7, Belvoir Business Park. NG13 0GN (summary of):

**2.1** Incoming materials: Brought to site by goods vehicles operated by established haulage contractor. (Euro 5/6 compliant) in curtain sided vehicles.

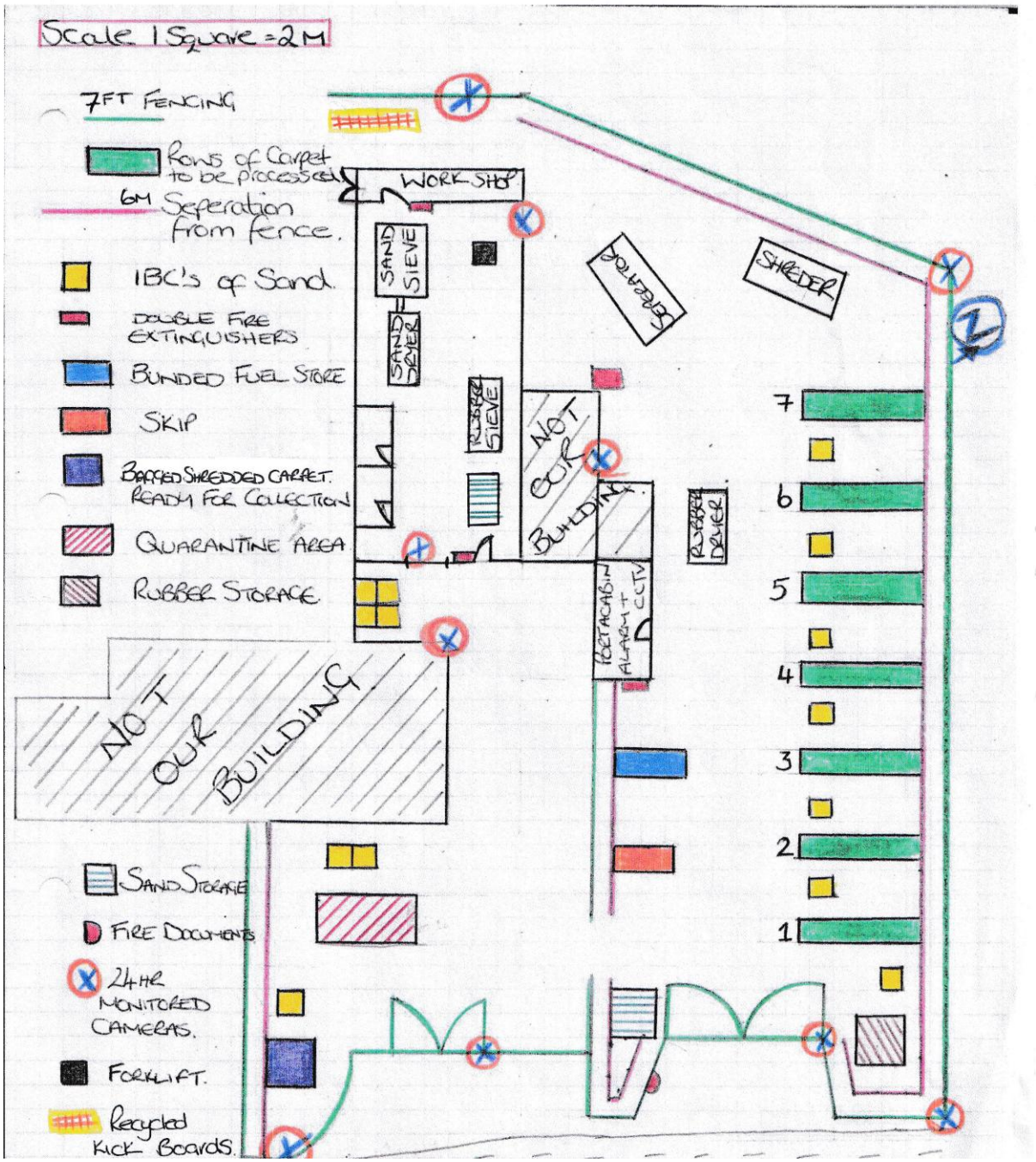
Goods in Inspection/Unloading area is located immediately inside perimeter fence. Vehicles reverse into this area where the consignment and accompanying paperwork is inspected prior to off-loading.

Storage bays: The 7 storage bays (each with 6 m separation) are located along NE perimeter of our site away from the prevailing W wind. The area will comprise of impermeable surface and drainage .

**2.2** Overview of processing, dust and other emission controls: The site is laid out to facilitate efficient processing of materials with the minimum physical movement between processes.

With the exception of sand drying which takes place within commercial building all other activities are in open area zones. Process machinery is electrically powered by either (i) mains supply or (ii) onsite diesel generator. The generator is located away from buildings towards NE perimeter. Process machinery is owned by us having been built to our specification.

## Site Layout Plan



**2.3** Mobile plant & equipment: Materials handling equipment on site comprises (i) telehandler and (ii) counterbalance forklift truck. This equipment is on medium term lease-hire. Maintenance is scheduled with the leasing company following the manufacturers specification.

Plant is used as and when needed, and anti-idling policy is in place minimising the emissions and noise on site.

## 3. Dust & particulate management:

**3.1 Responsibility for implementation of this DEMP.** Primary responsibility lies with Jenny Britton. (WAMITAB COTC Competent person training in final stages). The deputy is Andrew Simpson (WAMITAB COTC Competent person training in final stages).

This DEMP is reviewed weekly or sooner if required by TCM and/or site staff who have been trained what to look for and identify next steps.

**3.2 Sources and control, of fugitive dust.**

Table 3.1: Source-Pathway-Receptor Routes

| Source | Pathway | Receptor | Type of Impact | Where Relationship can be Interrupted |
|---|---|---|---|---|
| Raw material | Dust from vehicle wheels. | Neighbours. | Visual dust and airborne particles | Remove dirt off vehicle before leaving site. Clean site entrance daily. |
| Unloading operations | Dust particles | Neighbours. | Visual dust and airborne particles | Clean and remove any particles from vehicle before leaving site. |
| Yard surface | Dust particles. | Neighbours. | Visual dust and airborne particles | Clean site daily or as needed if sooner. Minimise operations if strong winds. |
| Rubber crumb (backing material) | Airborne particles. | Neighbours. | Visual dust and airborne particles | Clean site daily, rubber crumb is wet so minimum dust is produced. |
| Materials handling equipment emissions | Atmospheric dispersion | Neighbours. | Airborne particles | Regular maintenance and servicing |
| Diesel generator | Atmospheric dispersion | Neighbours. | Airborne particles | Regular maintenance and servicing |
| Cleaning actions | Airborne particles. | Neighbours. | Visual dust and airborne particles | Clean site daily or as needed if sooner. Minimise operations if strong winds. |
| Sand reclaim | Airborne particles. | Neighbours. This activity takes place only within enclosed building. | Visual dust and airborne particles | Clean site daily or as needed if sooner. Minimising strength by misting/water techniques. |
| Storage operations. | Airborne particles. | Neighbours. | Visual dust and airborne particles | Clean site daily or as needed if sooner. Minimise operations if strong winds. |

**Table 3.2: Measures that will be used on site to control dust/particulates (PM10) and other emissions**

| Abatement Measure | Description/Effect | Overall Consideration and Implementation | Trigger for Implementation |
|---|---|---|---|
| Site speed limit | Reducing vehicle movements and implementing "no idling" policy" should reduce emissions and dust particulates. | This is identified in our EMS and is part of our everyday practice. | This is used all the time, except for emergencies such as in the response of a fire. |
| Pro-active and preventative maintenance | Regular maintenance and servicing on all plant and machinery | This is documented and safely stored on site. | Daily, weekly and monthly checks are carried out by skilled maintenance staff. |
| Good housekeeping- regular cleaning of work equipment and production/storage areas with waste controlled. | Regular and consistence housekeeping which is carried out by all site staff daily to minimise the build up of dust and debris. | This is covered by a daily housekeeping check list to be completed and signed by the individual staff member carrying out that duty each day. This promotes a clean and positive environment. This is documented and safely stored on site. | This is used daily, indicating which areas have been cleaned. |
| Monitoring of high winds and/or prevailing wind direction. | Dust and particulates are likely to be greater in times of high winds and by ceasing operations at those times will reduce dust particulates. | This will reduce dust particulates for the time operations have ceased. Daily weather checks are recorded in our daily diary and operations are adjusted accordingly. | This is used all the time. |
| Minimising height of storage piles. | Minimising the height of the storage piles reduces the surface area over which the particulates can be spread. | This is identified in our EMS; the height will not reach higher than 3 metres. | This is always used while the site is operational. |
| Use of water suppression sprays in dry conditions (bowser). | This is a quick easy method to dampen areas. | This minimises dust and particles on the ground and to increase the versatility of using the bowser, attachments can be used to reach larger and further away areas. | This is used as and when needed. |
| Site perimeter/netting | Installing netting around the perimeter fencing helps to capture any dust/debris leaving the site. | This helps to reduce the wind speed over the site which indirectly reduces the potential risk of dust/debris. This can get dirty, so maintenance checks are also carried out weekly. | This is used all the time.<br><br>There maybe times when the netting needs to be removed to be able to install new netting. |
| Water suppression with mist sprays | Installing mist sprays around the internal building to minimise the build up of dust particles and reducing them leaving the site. | This will be sited inside the building close to the sand machines to minimise the build-up of dust.<br>This process uses less water than the use of bowsers. | This will only be used when the sand sieving operation is being used. |

### 3.3 Enclosure of processing and storage areas.

Sand reclaim is already conducted within enclosed building.

Other processing areas are external.

We are hoping to extend the site with a large enough building to enclose the whole operation. But now most of the operations take place outside, each machine is in the process of having a covered area to carry out the operation.

### 3.4 Visual monitoring of particles.

In liaison with external consultants, we propose implementing a dust monitoring policy to monitor build up at key locations, to be carried out at regular intervals.

### 4.0 Particle monitoring equipment

Jenny Britton has primary responsibility for recording and acting where required.
We will look at finding a reliable external company to undertake the particle readings and record the findings.

### 5.0 Action when alarm is triggered.

**1**. Identify source of dust/airborne particles. (If precise source cannot be identified the Site Supervisor will shut down likely sources.
**2**. Investigate what has happened. Additional dust abatement measures may be required.
**3**. Recording findings and outcomes

### 6.0 Reporting of complaints.

We will establish a perimeter notice board giving details of relevant permits etc, operational times of site and who to contact in event of a complaint.
Any complaints will be dealt with in a swift manner and any response within 2 days.

### 6.1 Engagement with the Community

Neighbours are kept up to date with any activities that may affect them. We have an open-door policy where they can contact us at any time if any issue arises. They have our personal phone numbers if they wish to contact us directly.

### 6.2 Reporting of Complaints

We have a complaints form (EMS A5) in which all details of complaints are documented. These are dealt with swiftly and aim to respond within 2 days. Any complaints are discussed and reviewed to see what can be done differently and saved securely onsite.

### 6.3 Management Responsibilities

Complaints are handled by management and reviewed and discussed by all site staff. Contact numbers and email addresses are given to neighbours and contact numbers are on the site information board. Website to be updated with contact details and complaints procedure.

### 7.0 Periodic review.

These arrangements will be periodically reviewed – at least annually.