



Dust Emissions Management Plan

Newthorpe Quarry

Newthorpe Aggregates Ltd.

Document Reference: 391/1—R1.2 - DEMP



Minerals Waste Environment

The Mineral Planning Group Ltd. The Rowan Suite, Oakdene House, Cottingley Business Park, Bingley, West Yorkshire BD16 1PE

01274 884599/884699 headoffice@mpgyorks.co.uk

www.mpgyorks.co.uk

**Document Title:** Dust Emissions Management Plan

**Document Reference:** 391/1—R1.2 – DEMP

Site / Project: Newthorpe Quarry

Client: Newthorpe Aggregates Ltd.

#### **Document Versions**

1.1 30/10/2024

1.2 31/10/2024

Prepared by: MS

Checked by: CH

Approved by: CH

The Mineral Planning Group Ltd. has prepared this report in accordance with the instruction of, and exclusively for the use of, its commissioning client. Any other person or body using the information contained herein does so at their own risk.

The opinions expressed with this report are the true and professional opinions of The Mineral Planning Group Ltd. The content of this report may, in part, be based upon information provided by others, including the commissioning client, and on the assumption that those parties, when requested, have truthfully and accurately provided all relevant information. No section or element of this report may be removed or reproduced in any form without the written

© The Mineral Planning Group Ltd. 2024



#### 1.0. Introduction

- 1.1. This Dust Emissions Management Plan (DEMP) supports an application for a Bespoke Environmental Permit for the Use of Waste in a Deposit for Recovery Operation at a site known as Newthorpe Quarry, near Newthorpe, North Yorkshire at grid reference SE 45984 32068.
- 1.2. A Waste Recovery Plan has been submitted and approved by the EA (ref: EPR/KB3404TJ/A001) and the proposals were confirmed as a Recovery operation. It is intended that the Bespoke Permit should mirror the Standard Rules Permit SR2015No.39, as all details match this Standard Rules Permit except for the maximum volume of waste to be imported.
- 1.3. The proposed engineering operations constitute a Recovery operation to use inert waste to achieve the final contours and restoration design approved in Planning Permission NY/2019/0165/ENV.
- 1.4. The deposit of waste for Recovery would achieve the approved contour levels and restoration design. The depth of waste would vary across The Site in order to assimilate into the existing landform. The total quantity of waste required is approximately 2 million tonnes, which would be completed over a 9-year period at a rate of approximately 220,000 tonnes per annum. Soils have previously been stripped and stored at The Site and would be replaced on completion of infilling, creating a suitable growing medium for agricultural fields, hedgerows and tree planting, as well as a suitable material to engineer drainage into. The final topography would assimilate into the surrounding landscape and facilitate restoration.
- 1.5. This document contains the procedures to be implemented in order to assess and minimise the potential impacts from dust produced by The Site, and the



control measures in place to mitigate any risk. It will identify the operations which could have a potential impact upon air quality in the locality and detail the operational control measures which are implemented to minimise any impacts.

- 1.6. The DEMP is based on the Environment Agency internal guidance template entitled "What to include in your dust management plan" (November 2022), set out at GOV.UK website guidance page entitled "Control and monitor emissions for your environmental permit".
- 1.7. The activities would be carried out under the codes R5, R10 and R13.
- 1.8. The dust control measures stated in this document will be used by and trained out to all management, employees including office staff and security and contractors on Site and will be utilised as part of daily operations. Training will be delivered by the Site Manager, TCM or an external company. The DEMP and all other management plans will be stored in the Site office and electronically. Training will be delivered to any new staff / contractors, including security, annually, or, as a result of a complaint or change in operational procedures. Reviews and maintenance of the DEMP will be carried out by senior management, the Site Manager and / or the TCM.
- 1.9. The Site is bounded to the north and east by woodland and scrub, with a small section of the northern boundary being adjacent to a railway line with a strip of trees and fencing. The southern boundary is adjacent to agricultural fields.
- 1.10. Incoming waste (once it has passed WAC / WAP) is directed to the area currently undergoing restoration, and temporarily stored or moved directly to its final position. Waste is unloaded and moved into place using on-site plant and machinery. All operations match those in the Standard Rules Permit



SR2015No.39, and therefore consist only of temporary storage of wastes, recycling or reclamation and land treatment resulting in benefit to agriculture or ecological improvement.

- 1.11. The list of accepted wastes codes fall into three categories, based on their potential to produce dust. The category assigned to each waste code does not determine if an incoming waste will be dusty, but highlights the potential likelihood of a load being relatively dustier, to inform this DEMP:
  - High risk of dusty waste
  - Moderate risk of dusty waste
  - Low risk of dusty waste

The table below shows the accepted wastes and colour codes the categorisation as shown above.

| Waste Code | Description   |  |  |
|------------|---|--|--|
| 01         | Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals |  |  |
| 01 01 02   | Wastes from non-metalliferous excavation  |  |  |
| 01 04 08   | Waste gravel and crushed rocks than those containing dangerous substances                             |  |  |
| 01 04 09   | Waste sand and clays  |  |  |
| 10         | Wastes from thermal processing  |  |  |
| 10 01 05   | Gypsum (solid) only   |  |  |
| 10 01 15   | Bottom ash and slag from co-incineration  |  |  |
| 10 02 01   | Wastes from the processing of slag  |  |  |
| 10 02 02   | Unprocessed slag  |  |  |
| 10 09 03   | Furnaces slag (ferrous)   |  |  |



| Waste Code | Description  |  |  |  |
|------------|--|--|--|--|
| 10 10 03   | Furnace slag (non-ferrous)   |  |  |  |
| 10 12 08   | Waste ceramics, bricks, tiles and construction products (after   |  |  |  |
| 10 13 14   | thermal processing) Wests consists   |  |  |  |
| 10 13 14   | Waste concrete   |  |  |  |
| 17         | Construction and demolition wastes   |  |  |  |
| 17 01 01   | Concrete   |  |  |  |
| 17 01 02   | Bricks   |  |  |  |
| 17 01 03   | Tiles and ceramics   |  |  |  |
| 17 01 07   | Mixtures of concrete, bricks, tiles, and ceramics  |  |  |  |
| 17 03 02   | Road base and road planings only other that those containing coal tar  |  |  |  |
| 17 05 04   | Soils and stones   |  |  |  |
| 17 05 06   | Dredging spoil   |  |  |  |
| 17 05 08   | Track ballast  |  |  |  |
| 19         | Wastes from waste management facilities, off-site wastewater treatment plants and the preparation of water intended for human consumption and water for industrial use |  |  |  |
| 19 08 02   | Washed sewage grit (waste from de-sanding) only  |  |  |  |
| 19 12 05   | Glass  |  |  |  |
| 19 12 09   | Minerals (such as sand and stones) from the treatment of waste aggregates that are otherwise naturally occurring minerals  |  |  |  |
| 19 12 12   | Other wastes (including mixtures of materials) from the mechanical treatment of wastes other than those mentioned in 19 12 11  |  |  |  |
| 20         | Municipal wastes   |  |  |  |
| 20 02 02   | Soil and stones (topsoil, peat, subsoil, and stones)   |  |  |  |

Table 1: Waste Codes

### 2.0. The Site

2.1. The Site's location and permit boundary for the operations is shown edged in green on Drawing Reference: 391/1 – Permit -1.



### 3.0. Sensitive Receptors

- 3.1. The pathway for dust would be through emissions to air. Any potential dust emissions are limited to the following activities:
  - Transporting materials / on site vehicle and plant movements.
  - Loading / unloading of materials.
  - Stockpiles of material stored on The Site.
  - Emplacement of materials

# 3.2. <u>Sensitive Receptors</u>

- 3.3. The main sensitive receptors that have the potential to be impacted by air emissions / dust are shown on Drawing ref: 391/1 Permit -3.
- 3.4. The following sensitive receptors / locations are situated within 1km of The Site:

| Receptor                       | Distance (approximate)    |
|--------------------------------|---------------------------|
| Public Right of Way (footpath) | 0.42km west (in woodland) |
| Leeds-Selby Railway Line       | 0.1km north               |
| A1(M)                          | 0.25km south              |
| Residential receptors:         |                           |
| Along Hall Lane                | 0.2km northeast           |
| Brookfield House               | 0.3km north               |
| Along Great North Road         | 0.5km southwest           |



| Newthorpe Farm                           | 0.65km north    |  |  |  |
|--|-----------------|--|--|--|
| Along Gorse Lane                         | 0.8km northeast |  |  |  |
| Keeper's Cottage                         | 1km northeast   |  |  |  |
| Commercial receptors:                    |                 |  |  |  |
| Squires Cafe Bar and Caravan Camping     | 0.85km east     |  |  |  |
| Speedstyle UK Motorcycle Clothing Outlet | 0.85km east     |  |  |  |
| Taylor Caravans                          | 0.37km south    |  |  |  |
| A1 Dog Training Centre                   | 0.67km south    |  |  |  |
| PSR Car and Commercial Repairs           | 0.75km south    |  |  |  |
| Best Western Hotel                       | 0.4km southwest |  |  |  |
| Micklefield Motocross Track              | 0.7km west      |  |  |  |

Table 2: Sensitive Receptors

3.5. The Site does not fall within an Air Quality Management Area.

# 4.0. Other Local Contributors of Dust/Emissions

4.1. The table below sets out other potential sources of dust / emissions within the surrounding area. These are also shown in Plan ref: 391/1 – Permit -3

| Receptor                                   | Distance             |
|--|----------------------|
| Onsite Aggregate Recycling                 | Within Site boundary |
| Leeds-Selby Railway Line                   | 0.1km north          |
| Agricultural practices on surrounding land | Adjacent to site     |
|  | boundary             |
| Micklefield Motocross Track                | 0.7km west           |

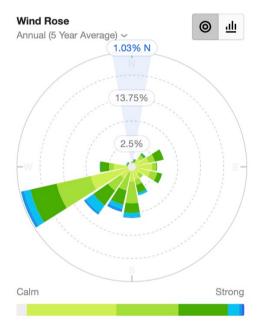
Table 3: Other sources

4.2. The potential for dust emissions to mobilise at The Site is not likely to have a significant cumulative impact in relation to other potential sources of off-site dust



emissions. It is recognised that aggregate recycling also takes place at The Site (under a separate, already approved Permit) and has no record or history of giving rise to dust issues. Therefore, and with regard to the fact that aggregate recycling inherently gives rise to greater risk of emissions than recovery infilling, it can be concluded that the proposed activities would not lead to an unacceptable cumulative impact with the inclusion of modest dust control measures.

#### 5.0. Wind Rose



Wind Rose (Source: willyweather.co.uk)

5.1. The nearest available wind rose data<sup>1</sup> is from a weather station located approximately 0.9km northeast of The Site, at an elevation of approximately 29m AOD. It is considered that this weather station is generally representative of Newthorpe as a whole and in the absence of data to the contrary, is suitable for

7

<sup>&</sup>lt;sup>1</sup> https://wind.willyweather.co.uk/yh/north-yorkshire/newthorpe.html



assessing prevailing wind directions for The Site.

5.2. There is a low risk of dust being mobilised to air and leaving the Site boundary. Notwithstanding this, based on the prevailing south-westerly wind direction, should dust be mobilised and leave the site boundaries it would be most likely to impact the Leeds-Selby railway line, as well as the residential receptors to the northeast of The Site along Hall Lane and Gorse Lane. The likelihood of residential receptors being impacted by any mobilised dust is low, as the site is screened by a line of trees that shelter the site from external receptors. However, dust mitigation measures are proposed, as described in Section 9.

#### 6.0 Operations and Waste Acceptance

### 6.1 <u>Waste Acceptance and Rejection Procedures</u>

- 6.1.1 Training will be provided by the site management (or TCM) to all employees, subcontractors, other waste carriers and customers regarding the waste types which are acceptable at the site, and the characterisation required.
- 6.1.2. Carrier registration details will be taken for any new haulage operators bringing waste to the site and the details will be periodically checked via the Environment Agency's website to ensure that they are still registered.
- 6.1.3. The acceptance procedure is based on a two-tier system, with the material inspected at source by Newthorpe Aggregates Ltd, at the facility on initial receipt and after unloading. This is to ensure that the material conforms with the description on the waste transfer note.
- 6.1.4. The acceptance criteria forms part of the process of ensuring that material accepted into the facility conforms to the description given on the waste transfer



note. The material will be inspected before unloading by the weighbridge clerk, and after unloading by the accepting machine operator to ensure compliance.

- 6.1.5. The acceptance criteria will comply with the permitted list of waste codes that can be accepted and will include:
  - test results to show that the waste is uncontaminated;
  - source/place of origin of the waste;
  - supplier and transporting agent; and
  - method of acceptance.
- 6.1.6 The procedure for non-compliant waste is segregation and quarantine. The waste will be placed in a designated area and non-compliant material will be placed into a designated skip or bay depending on the nature of the material.
- 6.1.7. All non-compliant material will be disposed of at an appropriately licensed facility, with a record kept of how the quarantine procedure has been implemented.
- 6.1.8 On arrival at the site the driver will report to the site office. The load will be visually inspected to ensure that the composition of the waste complies with the documentation and that it is in a satisfactory condition.
- 6.1.9 Operators arriving at site without a valid waste carriers registration will not be allowed to unload waste.
- 6.1.10 If unsuitable waste is discovered before deposit the materials will not be unloaded and will be rejected by the operator and returned to the producer.
- 6.1.11 If the load is acceptable the driver will be instructed to unload it within the designated area.



- 6.1.12 Waste is inspected again during unloading to ensure that it complies with the acceptable wastes within the site permit.
- 6.1.13 Should non-permitted waste be deposited within a load delivered to site, then where possible, the material will be re-loaded into the vehicle and the driver shall be asked to leave the site.
- 6.1.14 Should it not be possible to re-load any non-conforming waste material deposited on site then it will be retained in the quarantine area until such time as it can be removed to a suitable facility.
- 6.1.15 Persistent non-compliance with the terms of the site permit by a contractor may result in the contractor being banned from the site for a specified length of time to be determined by the site management.
- 6.1.16 Non-permitted waste, discovered after the carrier has left the site, shall be removed from the waste processing area and placed in the quarantine area prior to its removal from site.
- 6.1.17 All staff who work on the site shall be made aware of the acceptable categories of waste allowed to be deposited. Site staff shall be responsible for inspecting each load. To ensure compliance with this, periodic spot checks shall be made by the site manager / TCM.
- 6.1.18 No material will remain in the quarantine area for longer than seven days without agreement from the Environment Agency.
- 6.1.19 All waste transfer notes, weighbridge tickets and carriers registration checks will



be retained in the site office for inspection upon request.

6.1.20 Details of non-compliant waste arriving at or deposited on site will be recorded in the site diary or daily log including a description of the waste and where the waste was taken once it left the site. This diary or daily log will be retained in the site office for inspection.

6.1.21 Training in the form of tool-box talks and practical demonstrations will be delivered periodically by the TCM / site management and details of this training recorded and retained in the site office for inspection.

## 6.2 <u>Waste Handling</u>

- 6.2.1 After WAC/WAP are passed, the materials will be unloaded into the quarry void, or temporarily stockpiled and moved by plant equipment and machinery. It is acknowledged that some waste material may come directly from the aggregate recycling area, which operates under a separate Permit. Any material transferred from the aggregate recycling operations will have already passed the WAC / WAP for The Site as a whole, therefore will be suitable to deposit in the quarry void.
- 6.2.2 In dry and windy conditions any stockpiles of waste containing potentially dusty materials will be dampened down using a water bowser / hose pipe to ensure that dust is not created and dispersed.
- 6.2.3 The following plant and equipment (or equivalent) will be used on site for the movement of waste. Plant is only operated by trained drivers / operators. Training includes the requirement for daily checks for the specific plant operated in order to ensure they are operated safely and to prevent the failure of equipment which could have potential adverse impacts on the operations of the



site and / or the environment.

- Cat D6N Dozer
- Volvo A30 Dump Truck
- Volvo EC210 Excavator
- 6.3 <u>Site Boundary Plan</u>
- 6.3.1 The boundary of the Site is shown in drawing ref: 391/1 Permit -2.
- 6.4 Waste Quantities
- 6.4.1 The Site will import, store and deposit up to 220,000 tonnes of waste per annum.
- 6.4.2 The Site operates under an Environmental Management System (EMS) that would be updated over the lifetime of the operations in-line with the Environment Agency's current guidance or any operational changes.
- 6.4.3 The EMS would be strictly adhered to with Waste Acceptance Criteria and Procedures being tightly controlled, and any appropriate measures identified as required to control potential impacts from the operations at the Site implemented.
- 6.5 Stockpiles of material
- 6.5.1 Stockpiles of waste would be short-lived, and only used when waste cannot be emplaced immediately into its restoration location prior to unloading.
- 6.5.2 As The Site is a quarry, all stockpiling would be carried out on the quarry floor (or lower areas that have already seen some infilling), and therefore would be below current ground level. Stockpiles would not extend above the surrounding natural ground levels, which will assist in ensuring any dust generated from them is



largely contained within The Site.

#### 6.6 Permitted Waste Types

- 6.6.1 The waste types accepted at The Site are listed in document ref: 391/1 NTS R1.1. It is acknowledged that there is a separate environmental permit operating within the site in relation to aggregate recycling. However no additional consideration of already accepted wastes, in terms of dust, is necessary.
- 6.6.2 Other than those codes listed in Table 1, no other waste codes would be accepted at the Site.
- 6.7 Prohibited Wastes
- 6.7.1 The following wastes shall not be accepted for recovery at the site:
  - Any waste in liquid or sludge form
  - Wastes consisting solely or mainly of dusts, powders or loose fibres.
- 7.0 Source Pathway Receptor Routes
- 7.1 The following table sets out the source pathway receptor model for the site, as well as recommended mitigation measures:

| Source | Pathway | Receptor | Type of impact | Mitigation Measures |
|--------|---------|----------|----------------|---------------------|
|        |         |          |                |                     |



| Vehicles        | Air transport – | Local human  | Harm to human        | Minimisation of drop heights onto    |
|-----------------|-----------------|--------------|----------------------|--------------------------------------|
|                 | inhalation or   | population   | health –             | the ground, including from machine   |
|                 | deposition      | and flora    | respiratory          | buckets. The use of water to         |
| the site        |                 | aa           | irritation, nuisance | dampen down haul roads and           |
|                 |                 |              | and/or illness.      | operational areas, for which a water |
|                 |                 |              | aria, or inflood.    | bowser and water supply will be      |
|                 |                 |              |                      | maintained on site at all times.     |
|                 |                 |              |                      | Vehicles to be sheeted on arrival.   |
|                 |                 |              |                      | Border of trees / woodland on north  |
|                 |                 |              |                      | and eastern boundaries.              |
|                 |                 |              |                      | and eastern boundaries.              |
| Debris falling  | Air transport – | Local human  | Harm to human        | Regulatory controls and best-        |
| off vehicles    | inhalation or   | population   | health -             | practice measures to minimise        |
|                 | deposition      | and habitats | respiratory          | source strength. Sheeting of         |
|                 |                 |              | irritation, nuisance | vehicles, maintenance of haul roads. |
|                 |                 |              | and/or illness.      |                                      |
|                 |                 |              |                      |                                      |
|                 | As above        | As above     | As above             | Minimisation of drop heights.        |
| vehicles        |                 |              |                      | Unloading of materials will not be   |
|                 |                 |              |                      | undertaken during extremely windy    |
|                 |                 |              |                      | weather conditions. Border of trees  |
|                 |                 |              |                      | / woodland on north and eastern      |
|                 |                 |              |                      | boundaries.                          |
| Vehicles        | As above        | As above     | As above             | Minimising on site limits to 10mph – |
| traversing      |                 |              |                      | use of water to dampen down road     |
| around the site |                 |              |                      | surfaces. Maintenance of haul        |
| on haul roads   |                 |              |                      | roads. Continuous visual monitoring  |
|                 |                 |              |                      | by site staff. Border of trees /     |
|                 |                 |              |                      | woodland on north and eastern        |
|                 |                 |              |                      | boundaries.                          |
|                 |                 |              |                      |                                      |
| Mud             | As above        | As above     | As above             | Initial part of access road is       |
| deposited on    |                 |              |                      | concrete. Wheel washing facilities   |
| highway and     |                 |              |                      | (high pressure hose and bowser /     |
|                 |                 |              |                      | IBCs) can be provided as and when    |



| roads            |          |                 |                      | needed (eg. wet weather).              |
|------------------|----------|-----------------|----------------------|--|
| Temporary        | As above | As above        | As above             | Stockpiles, if present, will be below  |
| Stockpiles       |          |                 |                      | surrounding ground levels. Border      |
|                  |          |                 |                      | of trees / woodland on north and       |
|                  |          |                 |                      | eastern boundaries to be               |
|                  |          |                 |                      | maintained.                            |
|                  |          |                 |                      |  |
| Vehicle, plant,  | As above | As above        | As above             | Only the necessary number of           |
| generator,       |          |                 |                      | vehicles are used at any one time      |
| emissions        |          |                 |                      | and idling is not permitted whilst     |
| (particulates)   |          |                 |                      | vehicles are not used. All vehicles    |
|                  |          |                 |                      | and plant maintained to                |
|                  |          |                 |                      | manufacturer recommendations.          |
|                  |          |                 |                      |  |
| Moving of        | As above | As above        | As above             | Typically carried out immediately, or  |
| waste into final |          |                 |                      | directly from adjacent stockpiles.     |
| position         |          |                 |                      | Minimise drop heights, dampen          |
|                  |          |                 |                      | down materials. Border of trees /      |
|                  |          |                 |                      | woodland on north and eastern          |
|                  |          |                 |                      | boundaries to be maintained.           |
| Dust arising     | As above | As above, and   | As above, and        | Visible observation of sources of      |
| from external    |          | site operatives | causing difficulties | dust if these are outside of The Site. |
| sources          |          |                 | in monitoring The    | Contact other businesses if required.  |
| (aggregate       |          |                 | Site's own dust.     | Additional monitoring of The Site to   |
| recycling, MX    |          |                 |                      | ensure other emissions do not mask     |
| Track, railway   |          |                 |                      | emissions from The Site itself, if     |
| etc. – see       |          |                 |                      | deemed necessary by the Site           |
| Table at para.   |          |                 |                      | Manager. Record in site diary.         |
| 4.1 and Plan     |          |                 |                      |  |
| ref: 391/1 –     |          |                 |                      |  |
| Permit 3         |          |                 |                      |  |
|                  |          |                 |                      |  |

Table 4: Source-Pathway-Receptor



#### 7.2 <u>Vehicles on site</u>

- 7.2.1 Vehicles on site, their movement, unloading, or accidental spillages have the potential to create dust. Therefore, mitigation measures are proposed to break the Source-Pathway-Receptor link. These include vehicle speed limits, concreted access road area and a water bowser for dampening down haul roads and stockpiles. These remove, to a large extent, the Source, as well as removing the Pathway. The above measures also reduce the likelihood of mud or other debris being tracked onto the public highway.
- 7.2.2 Equally, particulate emissions from vehicles and plant are reduced to the greatest extent possible by preventing idling and maintaining plant and vehicles to manufacturer recommendations.
- 7.2.3 The emissions ratings for on-site plant are as follows:
  - Cat D6N Dozer EU Stage IV Emissions Rating
  - Volvo A30 Dump Truck EU Stage IIIA Emissions Rating
  - Volvo EC210 Excavator Tier 4F Standard
- 7.2.4 Stockpiles can also be wetted down as needed using the on-site water bowser.
  Site operatives, under instruction from the Site Manager / TCM, will use the bowser by either opening the tap and driving around The Site, or attaching a hose pipe and directing water to where it is needed.

#### 8.0 Community Engagement

8.1 The nearest residential property is situated approximately 0.2km to the northeast of The Site boundary. There is a low probability that dust emissions from the operation could impact upon the nearest residential property, due to the



management in place, as well as The Site's setting with trees on the northern boundary and 'bunding' on the northern side of the railway line. However, it is acknowledged that this residential receptor is within the prevailing wind direction from The Site. Therefore, in the event of dust emissions being detected leaving the site boundary, a member of the management team would be sent to inform residential properties and businesses.

In the event of any complaint from householders or local businesses, an investigation will be undertaken into the circumstances. Where the complaint resulted from activities within the site, steps will be taken where possible to reduce the impact of, or remove, the dust source. Any investigation will be concluded within 24 hours and the complainant will be informed of the outcome by the end of the next working day and any mitigation measures taken. The Company will maintain a daily record of complaints and investigations, together with any mitigation measures taken.

#### 9.0 Dust Control Measures

9.1 The Site's topography, location and boundaries minimise the likelihood of windblown dust leaving The Site.

9.2 The Site has a mobile water bowser, for use in all climatic conditions. The water bowser has a capacity of 5,000l, can be re-filled from the on-site lagoon, and water is distributed to the areas needed using a hose and pump (if required) directly from the mobile bowser. During dry / drought conditions, or as a result of equipment failure or other extraneous event, additional mitigation measures would be followed, at the discretion of the Site Manager, including: sourcing a further bowser (or re-filling during the shift) if required, halting site operations and stopping acceptance of waste on site.



- 9.3 The bowser is used to dampen down all areas of The Site as required. If any of the dust control measures should fail, then a review of processes by the Site Manager / TCM will take place that may include: updating or implementing new procedures, stopping accepting waste, halting site operations, or including additional mitigation measures, if necessary.
- 9.4 Regular inspections of The Site perimeter ensure that any windblown debris is removed at the earliest possible opportunity, though this is considered very unlikely given the nature of the materials to be imported.
- 9.5 The dust control measures include:
  - 10mph speed limit for all vehicles travelling through The Site.
  - Sheeting of vehicles transporting potentially dusty loads to The Site, and all vehicles visually inspected upon entering and leaving The Site.
  - Site layout designed to minimise the transportation of material around The
     Site, and all other site haulage roads shall be maintained to a good condition to reduce dust emissions.
  - Waste Acceptance Criteria and Procedures (WAC and WAP) are included in The Site's EMS and are strictly adhered to.
  - Use of water bowser and hoses / pumps to damp down stockpiles; vehicle running surfaces to prevent excessive dust formation, especially during dry and windy conditions.
  - Cleaning of any spillages using wet cleaning methods.
  - Stockpiles kept to a minimum as operating conditions allow.
  - Drop heights always minimised to prevent dust emissions.
  - Regular maintenance of all plant and equipment.
  - Stockpiles always below surround ground levels.
  - Every member of staff is trained on the importance of keeping a clean and



tidy site and takes responsibility for this under the Site Manager who has overall responsibility.

- Exhausts of all new mobile plant introduced to the site to be directed away
   from the ground.
- Wheel / vehicle washing facilities (high pressure hose / jetwash). These are used on an 'as-needed' basis, though during particularly wet periods, or, if a vehicle has become dirtied from sources outside of The Site, the Site Manager can enforce cleaning of all vehicles before leaving The Site for as long as is required. In any event, all vehicles are assessed before leaving The Site to check if they need to be cleaned. If the wheel washing facilities becomes ineffective and mud is seen to be leaving The Site, operations causing the issue may be ceased until a solution is found (such as additional wheel cleaning or upgrading the equipment), or conditions change.
- 9.6 During unusually dry and / or windy conditions capable of raising dust (typically when sustained wind speeds are above 13mph), and, at the discretion of the Site Manager / TCM, stockpiles (or other areas) that have the potential to generate dust would be wetted down. This would be carried out as often as is necessary to prevent excessive dust generation. During exceptional weather conditions, the stockpiles would be wetted down before closing the Site each day, if it is considered that dust could be generated outside of operational hours. In extreme weather-related circumstances (for example prolonged periods of excessive high temperatures (above 30°c) or strong winds (above 30mph)), operations at the Site may be reduced, and activities that could potentially spread dust and particulates may be avoided during these times. This will be at the discretion of the Site Manager.



9.7 Should conditions mean that the risk of dust leaving the site boundary becomes exceptionally high, the Site Manager / TCM has the discretion to cease operations and receipt of wastes until dust can be brought under control. The Site's operations would not re-commence until such time as dust can be controlled suitably. There are no specific 'triggers' for such an event, as there is no quantitative monitoring of dust. The cessation of operations / acceptance of waste due to dust concerns would be based on a combination of factors, including weather conditions, current site capacity, nature of incoming waste streams, etc. However, it is the intention that measures would be pro-active, in that visual monitoring, as well as continual vigilance by all staff members would mean that controls can be enacted before an issue occurs, and therefore before a complaint is received.

# 10.0 Monitoring of Dust

- 10.1 Visual inspections would be carried out around the site boundary at the start and end of each working day, as well as at least once during the day. Monitoring would be carried out by trained operatives or the TCM / site management. Inspections would be carried out on foot around the entire boundary, where accessible. Where the boundary itself cannot be accessed, the nearest possible viewpoint would be used.
- 10.2 A daily checklist sheet is followed by the Site Manager/operatives. There will be a range of mitigation measures put in place to ensure that procedures at The Site do not have an adverse impact, as a result of dust, on the limited number of surrounding receptors, including flora and fauna. However, should the visual monitoring identify a dust issue, the following would be taken into account:
  - Over and above the daily checks, all plant and equipment would be



checked for excessive dust or abnormal operations. Any abnormal operation would likely lead to a shutdown of the plant or equipment and remediation measures enacted to repair the equipment or change it's operational usage.

- If any operations are identified as causing or likely to cause visible dust emissions across the boundary of The Site, this will be escalated to the TCM
   / Site Manager and those operations will be modified, reduced or suspended until effective remedial action can be taken or the conditions giving rise to the emissions have been moderated;
- Handling of material may be suspended near to the site boundaries
- 10.3 All operational staff, as part of their induction, are made aware of their roles and responsibilities. Site operatives will continuously carry out visual dust emission inspections whilst the Site is in operation and will report to the Site Manager for advice if required. Where, in the opinion of the Site Manager, dust is being generated beyond an acceptable level, additional mitigation measures would be implemented.
- 10.4 As well as visual monitoring for dust, the Site's boundary would be formally inspected on a daily basis to safeguard against material having the potential to cause a nuisance outside of the Site boundary. The Site boundaries would be checked visually before operations begin, during operations, and at the close of operations every day, and any mitigation measures required would be implemented immediately to prevent excessive dust from leaving The Site.
- Dust emission incidents and any corrective action should be recorded in the site diary. The site diary should record the following:



- Wind strength and direction.
- Activities being carried out at the time of the incident.
- Nature of the emission (fine dust, grit, etc.).
- Extent of emission (density, distance travelled, etc.).
- Impact on any surrounding receptors.

### 11.0 Dust Contingency Measures

#### 11.1 Elevated Dust Issues

- 11.1.1 Dust issues identified are reported to the Site Manager / TCM at the earliest opportunity and an investigation into the source of the elevated dust levels would be carried out at the earliest opportunity and, in any event, within one working day of it being reported. The outcome of the dust investigation and any proposed actions required will be reported in The Site diary and actioned at the earliest possible opportunity.
- 11.1.2 Any operational failings would be assessed to consider where retraining of staff may prevent or reduce the likelihood of an incident reoccurring, and the retraining would be actioned at the earliest opportunity. Training will be documented in the site diary and a training record created and maintained with appropriate review dates specified. In addition, the need for additional monitoring or new physical dust controls (such as additional fencing for example) would be reviewed and implemented if deemed necessary.
- 11.1.3 Any dust monitoring that may be required as part of an investigation will be carried out by a suitably qualified consultant. The Site Manager will inform the Environment Agency, where necessary, during / after the process following an elevated dust issue complaint.



### 11.2 <u>Emergency Plans</u>

11.2.1 Any emergency with regards to dust management would be the loss of control of dust emissions which could have an unacceptable impact on the identified sensitive receptors.

11.2.2 If an event is considered an emergency, the Site Manager would immediately assess the situation and a decision would be made as to whether the Site should suspend operations until the elevated dust issue is controlled. The measures required would be considered on a case-by-case basis. Operations would not be restarted until an investigation into the cause of the emergency is completed, and any required operational or mitigation measures have been altered or updated.

#### 11.3 <u>Complaints Procedure</u>

- 11.3.1 Any complaints made about operations on the Site must be made by telephoning the operator, the Environment Agency hotline, or in writing (or by email).
- 11.3.2 To gather enough information to enable a proper investigation, all complaints received must provide, as a minimum, the level of detail required by the complaints form. All complaints will be responded to within 5 working days of receipt.
- 11.3.3 Complaints will be investigated by the operator and reviewed and / or escalated to senior management or the TCM to find a cause of the complaint using information from the site diary to determine the cause. As necessary, operational procedures will be updated, and staff will receive refresher training on procedures. The Site Manager will assess whether the complaints are justified and if changes are required to the operations to reduce any potential impact.



11.3.4 A copy of the complaint, investigation and responses will be recorded and made available to the Environment Agency for inspection.

11.3.5 Any complaints received by The Site directly will be notified to the Environment Agency by using the hotline telephone number or national email address and / or the notification form in Schedule 5 of the environmental permit. A copy of the sent notification form and any attachments will be retained by the operator's head office.

# 12.0 Responsibilities and Review

12.1 It is the responsibility of the Site Manager to oversee the operations on site and to be sufficiently trained and familiar with the management systems at The Site. The Site Manager will have the responsibility of ensuring that all staff are sufficiently trained and that annual refresher courses are run and completed by appropriate trainers (typically TCM / Site Manager). The Site Manager provides training, including dust management training, on induction and also has toolbox talks throughout the year, when necessary, prior to annual refresher training. The Site Manager is also responsible for ensuring appropriate control measures are in place to reduce the potential for dust impact. Regular meetings will be held to discuss ongoing and planned operations that have the potential to generate elevated dust emissions.

12.2 The DEMP and associated control measures are reviewed on an annual basis by the Site Manager or TCM and / or following a complaint or elevated dust issue.

12.3 A copy of the DEMP is stored in the site office and electronically and is available to all members of staff and contractors.



# 13.0 Summary

- The operations at the Site have the potential to, at times, produce dust. However, dust reaching sensitive receptors will be limited by the topography and setting of The Site, in addition to the implemented mitigation measures. In any event, dust will be controlled to confine and prevent its escape and to minimise airborne dispersal.
- 13.2 At this site the main causes of dust relate to movement of HGVs and emplacement of materials into the restoration areas.
- Dust will be controlled by best-practice site management including the employment of experienced operators, use of water suppression, and, if necessary, with cessation of operations in certain weather conditions.
- 13.4 Whilst it is considered unlikely that operations at The Site would give rise to unacceptable dust emissions, particularly beyond The Site's boundaries, a range of appropriate mitigation measures are proposed to control dust emissions if considered necessary.
- 13.5 Notably, The Site has an already Permitted aggregate recycling operation, which is likely to have a greater risk of causing dust than the Recovery operation (but has no history or record of doing so). The existing processing activities taking place at The Site mean that the Recovery operation itself is likely to have a negligible impact on the risk of dust leaving The Site and reaching sensitive receptors, over and above the existing site setting.
- Ongoing visual monitoring of dust emissions and review of operation of the DEMP, with appropriate updating, will ensure continuing effective dust management at The Site without any adverse dust impacts off site.