

FIELD HOUSE QUARRY, HOUGHTON-LE-SPRING

DUST ACTION PLAN

INTRODUCTION

Field House Quarry is located to the east of Houghton-le-Spring and it is operated by A McAll and Sons.

The site is operated in accordance with an Environment Agency IPPC permit reference number. This permit includes a Fugitive Emissions Risk Assessment and Management Plan and the site is operated in accordance with a Dust and Emissions Management Plan. If the site is operated in accordance with the DEMP then the risk is identified as 'low'.

This Action Plan is aimed at supplementing the DEMP in the permit and identifies the operations, pathways and mitigation measures that will be adhered to in order to mitigate the risks to identified sensitive receptors.

SITE OPERATIONS AND POTENTIAL FOR DUST ARISING

The site operations relate to the importing of inert materials into the site for the restoration of the quarry void. It also includes the recycling of the material where appropriate.

The development includes the following site operations which could result in dust arising from the site:

- Movement of HGV and wagons over the haul road and within the quarry void
- Tipping of inert materials in the compound area and at the quarry face
- Screening of the inert materials as necessary
- Occasional crushing of the inert materials
- The compaction of the inert material in the void to create the restoration profiles
- Movement of plant and machinery around the site.

NEAREST RESIDENTIAL PROPERTIES/ SENSITIVE RECEPTORS

The nearest sensitive receptors include residential properties.

In addition, there are nearby ecological sensitive receptors and the nearest is the High Haining SSSI. The are as follows:

- Field House Farm, 300 m to the south west. This is in the ownership and control of the applicants
- High Haining Farm. 95 metres to the north of the quarry. It is on the other side of the ridge to the quarry void.
- Middle Haining. 270m to the north of the quarry. It is on the other side of the ridge to the quarry void
- High Haining SSSI is located immediately adjacent to the eastern boundary of the site.

PATHWAYS FOR FUGITIVE EMISSIONS OF DUST

Dust and particulate matter may be carried in the air from the site.

Dust (30 microns and over) will drop out of the atmosphere approximately 400 metres from the site. (IAQM guidance) Particulate matter (30 microns and under) may be carried in the air approximately 1000m from the site.

The prevailing wind direction will result in properties and sites to the north-east of the site being at higher risk of deposition.

RISK OF FUGITIVE EMISSIONS OF DUST

Fugitive emissions of dust may arise from the site in dry and windy weather.

This risk of dust arising from the site may vary during the site operations as follows:

Risk of arising from the haul road:

- This will occur through the life of the site due to the HGV and wagons using the haul road

Risk of dust arising from the site operations:

- Through the majority of the life of the site, when operations are being undertaken in the compound in the quarry void, the risk of arisings will be minimised as the working area enclosed by the surrounding quarry
- When operations are undertaken on the site edge, particular the operations to place the final growing medium, the risk may be greater as the operations are in an exposed position.

The nearest residential properties are at low risk of experiencing any fugitive emissions due to their location and proximity to the quarry.

High Haining SSSI is immediately adjacent to the site and is down wind from the operations. However, an assessment by OS Ecology in 2022 identified that the SSSI had not experienced any adverse effects from the operations to date and, as the operations have not changed, there is no reason to believe that this situation will change.

MEASURES TO ADDRESS THE FUGITIVE ARISING OF DUST

The following measures will be undertaken to ensure that dust emissions do not leave the site. They are as follows for the haul road:

- Access road to be well maintained filling in potholes and compacting areas of loose material.
- The speed of vehicles traveling along the access and haul road will be limited to 10mph to prevent dust being 'kicked up' by the tyres.

In the quarry they are as follows:

- The drop heights associated with tipping the imported material into the compound will be minimised to prevent dust arising.
- The drop heights associated with tipping material into the void for restoration will be minimised
- Haul road will be kept in a good condition and free of potholes
- Stockpiles of waste material process material or secondary aggregate will be dampened down with water in dry and windy conditions.
- Any restored land will be seeded in accordance with the HMP as soon as possible
- The screener incorporates a dust suppression system and it will be serviced in accordance with the manufacturers instructions; stockpiles will be dampened down as necessary

- Any crusher hired into the site will include its own dust suppression system
- A water bowser will be bought onto the site if necessary
- In particularly dry and windy weather conditions, if dampening down of surfaces does not address dust arising then the operations will be suspended.

MONITORING MEASURES TO BE UNDERTAKEN

The following measures will be undertaken to reduce the risk of fugitive emission of dust:

- All operatives will be briefed to monitor daily activities to ensure that fugitive emissions do not leave the operational areas or the confines of the quarry.
- The Site Manager will be charge of ensuring that this monitoring is undertaken on a daily basis
- The Site Manager will complete a daily log to identify the monitoring and actions taken

ACTION TO BE TAKEN

If daily monitoring identifies dust leaving the site and/or if there is a complaint that dust is leaving the site the following procedures will be followed:

- Details of the complaints name and telephone number will be taken to allow the Site Manager to keep the complainant updated
- The matter will be investigated as son as possible and within eh same working day.
- When the source of the dust has been identified the relevant actions, as detailed above, will be undertaken. If necessary works will cease until a water bowser can be bought onto site
- The complainant will be informed of what actions have been taken within 48 hours of receiving the complaint.
- If a further complaint is received, and it is evident that the initial measures have not addressed the issues, the Site Manager will contact the Monitoring and Enforcement Officer at Sunderland County Council to discuss and identify additional measures that can be taken to address the issue. Operations will be recommenced until these agreed measures have been put in place.