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SCOTT BROTHERS LTD

DUST MANAGEMENT PLAN

THORPE THEWLES

NOVEMBER 2020

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DUST MANAGEMENT PLAN

THORPE THEWLES

NOVEMBER 2020

PREPARED BY: Matthew Barnett



APPROVED BY: Alison Cook



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CONTENTS

1	INTRODUCTION	1
2	SITE LOCATION AND SETTING	2
3	POTENTIAL SOURCES OF DUST	3
4	OPERATIONAL DUST CONTROL MEASURES.....	6
5	DUST MANAGEMENT	8
6	MONITORING	11
7	COMPLAINTS PROCEDURE.....	12

APPENDICES

Appendix 1	Dust Complaint form
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1 INTRODUCTION

- 1.1 Scott Bros Ltd propose to operate a waste recovery operation at a site in Thorpe Thewles. Soils will be imported to raise the level of the site to re-profile depressions in the land and to form a capping layer above a historic landfill.
- 1.2 The site location and proposed permit boundary of the facility are shown on drawing 'Thorpe Thewles - Site Boundary'.
- 1.3 The purpose of this Dust Management Plan (DMP) is to identify potential sources of dust from activities at the site, and to describe the control measures that will be implemented.
- 1.4 The DMP considers day-to-day operations and all foreseeable circumstances (e.g. adverse meteorological conditions) which may exacerbate dust conditions at the site.
- 1.5 The Plan includes:
 - Consideration of all the potential dust producing activities at this site;
 - Identification of sensitive receptors; and
 - Details of the dust control measures that will be implemented to minimise the risk of affecting any of the receptors.
- 1.6 Scott Bros will nominate appropriate members of staff to enforce this DMP, with responsibility for compliance resting with the technically competent manager.
- 1.7 Section 2 of this document details the site setting and receptors within the vicinity of the site which may be sensitive to emissions of dust.
- 1.8 The activities that are to be undertaken at the site and associated potential sources of dust are detailed in Section 3.
- 1.9 Section 4 describes the operational controls that will be in place at the site to ensure that dust production is minimised at each stage of waste acceptance and recovery.
- 1.10 The management procedures that will be in place to ensure that dust production is prevented are detailed in Section 5.
- 1.11 Details of the monitoring that will be undertaken on site is provided in Section 6.
- 1.12 The site complaint procedure is described in Section 7.

2 SITE LOCATION AND SETTING

- 2.1 The site is located on land Adjacent to Durham Road in Thorpe Thewles, Stockton-on-Tees, TS21 3JN. The National Grid Reference (NGR) for the site is NZ 39731 23696.
- 2.2 The site is located within a rural setting, approximately 6 km to the north west of Stockton-on-Tees. The site is bordered by farmland to the north and west, Durham Road to the east, and a residential property to the south.
- 2.3 The site is located within the local authority area of Stockton-on-Tees Borough Council. The site is not located within an AQMA.
- 2.4 A number of receptors are located within 1km of the site that may be affected by any dust that is produced during activities. These are listed in Table 2.1.

Table 2:1 Sensitive Receptors within 1km		
Receptor	Direction	Distance
Residential		
Thorpe Thewles	South	Adjacent
Properties along Middle Bank	South	520m
Commercial		
The Vane Arms	South East	310m
The Hamilton Russel Arms	South	370m
Ellehcim Pace Your Pooch	East	620m
John Foster Gunmaker	South	900m
Stables	South	950m
Environmental		
Drain	West	Adjacent
Thorpe Beck	South	195m
Wynyard Woodland Park	North East	630m
Maudlin Gutter	West	640m
Letch Beck	South West	740m
Thorpe Wood LNR (Local Nature Reserve)	North East	900m
Infrastructure		
Durham Road	East	Adjacent
A177	East	110m
Middle Bank	South	345m
Wynyard Road	South East	500m

- 2.5 There are no schools, care homes or hospitals within 1km of the site.
- 2.6 The dominant wind direction in the area is from the south west.
- 2.7 The measures that are detailed within this document ensure that sensitive receptors within the vicinity of the site will not be affected by emissions of particulates.

3 POTENTIAL SOURCES OF DUST

Site Activities

- 3.1 The site is a former landfill that closed in the early 1970s. Subsidence over the years has caused the land to become unusable and numerous depressions have formed.
- 3.2 The primary purpose of the waste recovery activity is to raise the level of the agricultural land by an average of 0.6m, in order to re-profile depressions in the land and to ensure sufficient coverage of capping material above the in-situ landfill.
- 3.3 The site will accept up to 27,576 tonnes of non-hazardous and inert waste soils, suitable for use in land reclamation and capping.
- 3.4 Placement and spreading of the suitable wastes will be undertaken to pre-agreed levels followed by limited compaction (only through tracked plant).
- 3.5 Wastes will be delivered to the site via road using HGVs. Delivery vehicles will be sheeted.

Waste Types

- 3.6 The wastes accepted on to the site for the land improvement recovery work will be soils. Only waste codes deemed acceptable to a waste to land recovery operation (as per standard rules permit SR2015 No 39) are in the list of acceptable wastes into this site.
- 3.7 The acceptance of wastes consisting solely or mainly of dusts, powders or loose fibres is prohibited.
- 3.8 The full list of waste codes is listed in Table 3.1, below.

Table 3.1 Wastes to be Accepted on Site	
Waste code	Description of waste
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 09	waste sand and clays
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 05	soil (including excavated soil from contaminated sites) stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03

Table 3.1 Wastes to be Accepted on Site	
Waste code	Description of waste
17 05 06	dredging spoil other than those mentioned in 17 05 05
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE
19 12	wastes from the mechanical treatment of wastes
19 12 09	minerals (for example sand, stones)
19 12 12	soil substitutes other than that containing hazardous substances only (not aggregate and gravels)
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL,
20 02	garden and park wastes
20 02 02	soil and stones

3.9 A source-pathway-receptor conceptual model has identified the likely sources of dust and the risks to sensitive receptors. This is detailed in Table 3.2 below.

Table 3:2 Source-pathway-receptor Conceptual Site Model			
Source	Pathway	Receptor	Control Measure
Vehicle movements	Windblown or Tracked out of site by vehicle movements	Residential and commercial properties	All vehicles carrying soils, entering / exiting the site will be covered. Vehicles will pass through a wheel wash before exiting the site to avoiding mud being tracked onto the road. Site roads will be maintained to minimise dust being disturbed. Dampening / sweeping undertaken where necessary.
Waste stockpiles	Wind whipping of material	Residential and commercial properties	Stockpiling of soil wastes is not expected to be a requirement of the daily site operations and will only occur if site conditions prevent direct placement of the waste. Drop heights will be kept to a minimum. Where they are used stockpiles will be profiled and shielded to minimise wind whipping Stockpiles will be positioned away from receptors. Stockpiles dampened with water where necessary. Reducing storage volumes will reduce the surface area over which particulates can be mobilised.
Tipping of material	Wind whipping of material	Residential and commercial properties	Minimising drop heights. Dampening of material where necessary.
Placement	Wind whipping of	Residential	Materials will be dampened where necessary.

Table 3:2 Source-pathway-receptor Conceptual Site Model

Source	Pathway	Receptor	Control Measure
of waste	loads or Disturbance by site plant	and commercial properties	Materials subject to correct compaction.

- 3.10 The wastes accepted will predominantly be clay based and not likely to cause dust issues whilst they retain their natural moisture content. All efforts will be made to utilise the wastes in the deposit activity as soon as possible to prevent the wastes from drying out.
- 3.11 Farming activities within the vicinity of the site also have the potential to produce dust. Other than this, there will be no other local contributors of dust.

4 OPERATIONAL DUST CONTROL MEASURES

4.1 The potential for site operations to generate dust can be minimised by operating in accordance with best practice measures. The following measures are in place to manage dust on-site.

Waste Pre-Acceptance

4.2 Pre-acceptance procedures will ensure that only compliant waste types are accepted at the site for use in the recovery activity.

4.3 Third parties will be required to provide Scott Bros, in advance, with all necessary information/documentation to satisfy the requirement of the Waste (England and Wales) Regulations 2011 (as amended), including duty of care, and the conditions of the Environmental Permit. This will include details of whether the waste is dusty or powdery and wastes that may form excessive dust will be rejected.

4.4 A record of all pre-acceptance documentation will be maintained in the Scott Bros site main office (Scott Business Park, Haverton Hill Road, TS23 1PY).

Waste Acceptance

4.5 Hard surfacing will be provided at the site entrance to minimise dust formation by passing vehicles.

4.6 The operator will make a visual inspection of all waste loads, before directing the driver to the appropriate unloading area.

4.7 Any loads that are found to consist of dusty wastes will be prevented from tipping and rejected from the site.

4.8 All vehicles accessing the site will be sheeted when carrying potentially dusty load.

4.9 A speed limit will be applied on site to minimise the mobilisation of any dust as a result of vehicle movement.

Waste Storage and Placement

4.10 Upon off-loading, operatives will carry out a visual inspection to determine the presence of any potential non-conforming waste.

4.11 A bowser will be used to dampen wastes in the event that dust is generated during tipping.

4.12 Care will be taken when moving waste during very dry and windy conditions to prevent the generation of dust, for example with additional damping down. During times of

high winds stockpiles will not be disturbed. If necessary operations will be suspended until condition improve of further remedial measures can be put in place.

- 4.13 Soils and wastes will be placed into stockpiles as soon as possible if required (stockpiling will only occur if site conditions prevent direct placement of material).
- 4.14 The orientation of long stockpiles will be placed in the direction of the prevailing wind and the height of stockpiles will be kept to a minimum.
- 4.15 Stockpiles of soils will be located away from sensitive receptors.
- 4.16 Drop heights will be minimised during any loading, tipping or transfer of material to reduce the chance of any dust on the ground becoming airborne;
- 4.17 The speed of all vehicles and site plant will be kept to a set site speed limit to minimise disturbance of dust
- 4.18 All site plant will have upward facing exhausts and radiator cowls to reduce the generation of dust.
- 4.19 Staff operating plant and equipment will receive training on the potential dust sources and how to prevent emissions.
- 4.20 Dust suppression of stockpiles may be carried out using a water bowser if deemed necessary.
- 4.21 Staff will sweep any areas of dusty material around the site entrance, using brushes, or a road sweeper will be utilised.
- 4.22 All equipment will be subject to regular maintenance to ensure that it is in suitable working order.

Transport

- 4.23 Delivery vehicles will follow a designated route to the tipping area, then back to the weighbridge prior to exit from the site. This will aid in avoiding any double handling of material.
- 4.24 Vehicles will adhere to the speed limit to minimise the generation of dust.
- 4.25 If vehicle movements generate dust, the bowser will be used to dampen the surfaces.
- 4.26 Vehicles will pass through a wheel wash before exiting the site.
- 4.27 All loaded vehicles entering or leaving the site will be enclosed, sheeted or covered.

5 DUST MANAGEMENT

Visual Inspection

- 5.1 Site personnel will maintain a visual awareness for dust emissions throughout the working day.
- 5.2 A visual inspection of the working areas of the site will be undertaken at least once per day to identify the presence of any dust. Observations will then be recorded in the site logbook.
- 5.3 The site access road will be monitored for the presence of dusty materials or mud.
- 5.4 If dust emissions are observed onsite, a member of staff will undertake cleaning or dampening as required. The mechanically propelled road sweeper may be brought in if dust emissions are substantial.
- 5.5 In the event of abnormal levels of onsite dust creation and off-site deposition, a senior member of staff will be notified, and remedial actions will be undertaken immediately. These include an investigation into the source of the dust and sweeping / dampening or other remedial action as appropriate.
- 5.6 Additional dust mitigation measures (e.g. regular use of the bowser) will be employed based on weather conditions (i.e. high wind speeds during periods of dry weather) and visual observations.

Infrastructure

- 5.7 The site is equipped with a hard-surfaced entrance road. Suitable running surfaces will be provided across site consisting of hard surfacing or compacted inert aggregate surface.
- 5.8 The site access road will be inspected daily, and a motorised sweeper brought in to clear any mud, litter or debris when required.
- 5.9 Mobile plant will be cleaned at the end of each day.
- 5.10 During working hours, an awareness of meteorological conditions will be maintained. In the event of prolonged high temperatures and dry conditions, stockpiles may be dampened periodically to ensure the risk of dust generation is minimised.
- 5.11 The weather forecast will be checked before activities that may result in the production of dust will be undertaken. These activities may be delayed if adverse weather conditions are predicted (e.g. high winds, high temperatures and dry conditions).

- 5.12 All equipment on site will be subject to regular maintenance in accordance with manufacturer's guidelines.
- 5.13 Surfacing will be maintained and kept in good repair.
- 5.14 Records of inspections, tests and monitoring will be kept on-site and made available to the Environment Agency if requested.
- 5.15 Any incidents in relation to dust emissions will be recorded in the Site Log. Records will be made available to the Environment Agency upon request.

Water Supply

- 5.16 A water bowser will be brought to site as required. Stockpiles and access routes will be dampened as and when necessary to reduce the chance of dust generation.
- 5.17 Instances of dampening will be recorded in the Site Log.
- 5.18 Vehicles exiting the site will be cleaned as necessary to remove any mud on the wheels. A wheel wash is provided at the site entrance.

Training

- 5.19 All staff will undergo training on the prevention of dust emissions and will be aware of their responsibilities in minimising the generation of dust in site operations.
- 5.20 The performance of site personnel and dust mitigation measures will be reviewed on a regular basis. High standards of housekeeping will be maintained at all times.
- 5.21 A physical copy of this plan will be kept on site at all times and made available to employees. A digital copy will also be held.
- 5.22 The Dust Management Plan shall be made available to the Regulator on request.

Emergency Procedure

- 5.23 In the event of an emergency, the Technically Competent Manager will be contacted, and mitigation measures implemented as necessary.
- 5.24 In the event of failure of equipment vital to the dust suppression, replacement equipment will be sourced promptly, and maintained on site until such time that the equipment is repaired or replaced.
- 5.25 Operations may be suspended if substantial amounts of dust are being produced from the site. The decision to temporarily cease operations will be based on the observations, knowledge and experience of the technically competent manager.

Mitigation measures would be implemented promptly, and an investigation taken where necessary.

Review

- 5.26 The Dust Management Plan will be subject to review and revision in the future to reflect developments in good practice. The review will be undertaken by a senior member of staff.
- 5.27 Senior staff will ensure that this DMP is enforced and that all employees are suitably trained. Failure to do so could result in adverse environmental conditions and enforcement actions by the Environment Agency.

6 MONITORING

- 6.1 The implementation of the mitigation measures that are outlined in this plan will ensure that the risk of dust is minimised.
- 6.2 Currently the risk of dust emissions is not deemed significant enough to warrant routine quantitative monitoring at or around the site and daily visual inspections are considered sufficient.
- 6.3 Visual monitoring for particulates will be undertaken at least once per day. This will form part of daily site checks. These daily checks will be recorded in the Site Log. Site staff will be cognisant of any dust that is being generated during the working day.
- 6.4 Any airborne dust seen leaving the site boundary will be reported to the Technically Competent Manager immediately. The cause will be investigated, and mitigation actions arranged to reduce emissions. This will include identifying the source of dust, the application of measures such as dampening / cleaning as necessary and then an observation to ensure that dust is no longer escaping the boundary.

7 COMPLAINTS PROCEDURE

- 7.1 All complaints received will be handled, recorded and corrective actions implemented as per management procedure Scott Bros Ltd/MP/06.
- 7.2 The complaint will be recorded in the Site Log. Notes will be made of the date, time and nature of the complaint.
- 7.3 In the event that a complaint is received regarding emissions of dust from the site, an investigation will be undertaken by site staff and management to determine the cause.
- 7.4 Details of the actions that are taken in response to the complaint will also be noted within the Site Log.
- 7.5 The results of the complaint investigation and the measures taken to resolve the complaint will be made available to the Environment Agency upon request.
- 7.6 Should complaints continue, the site operations will be reviewed and revised to prevent further emissions. In the event of a high number of complaints, consideration will be given to forming a liaison group which can be used to report to local residents regarding the dust issues and actions that will be taken.

APPENDIX 1
Dust Complaint Form

Appendix 1 – Dust Complaint Form

Complainant Details	
Time & Date	
Name of Complainant	
Address	
Postcode	
Telephone Number	
Complaint Ref Number	
Complaint Details	
Investigation Details	
Investigation carried out by	
Date & time investigation carried out	
Weather conditions	
Wind direction and speed	
Investigation findings	
Feedback given to Environment Agency and/or local authority	
Date feedback given	
Mitigation	
Details of actions that were taken	
Does the dust management plan need to be updated	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	

STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BURY ST EDMUNDS

6 Brunel Business Court
Eastern Way
Bury St Edmunds
Suffolk
IP32 7AJ
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial
Estate Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

2 West Regent Street
Glasgow
G2 1RW
Tel: +44 (0)141 433 7210

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

SHEFFORD

PI House
R/O 23 Clifton Road
Shefford
Bedfordshire
SG17 5AF
Tel: +44 (0)1462 850 483

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International offices:

ALMATY

29/6 Satpaev Avenue Regency
Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310

MOSCOW

21/5 Kuznetskiy Most St.
Moscow
Russia
Tel: +7(495) 626 07 67