

Permit with introductory note

Pollution Prevention and Control (England and Wales)
Regulations 2000 (as amended)

Installation address

H Cope & Sons Ltd
Moody Lane
Grimsby
North East Lincolnshire
DN31 2PL

Permit Reference: EP/20050004

Contact Details:

Mr Danny Fox
Pollution Control Officer
North East Lincolnshire Council
Freeman House
Freeman Way
Grimsby
North East Lincolnshire
DN32 7AU

Tel: 01472 324787
Fax: 01472 324785

www.nelincs.gov.uk

E-mail danny.fox@nelincs.gov.uk

Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) (S.I.2000 No. 1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part B to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practical, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description and installation regulated by this permit

Process using bulk cement as prescribed by Section 3.1 of Schedule I of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended). H Cope & Sons Ltd operates a concrete batching plant.

Concrete is manufactured by mixing, in carefully controlled proportions, Portland cement or a mixture of cementitious materials in powder form, together with coarse and fine aggregates (gravel, crushed stone or sand), and water. The proportions chosen are determined by the performance or composition necessary to meet the specification or performance requirements. Small amounts of admixtures may be included to modify the properties of the mix.

The major potential for dust generating lies in the handling of ordinary Portland Cement.

Confidentiality

The Permit requires the Operator to provide information to North East Lincolnshire Council. The Council will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the operator considers that any information provided is commercially confidential, it may apply to North East Lincolnshire Council to have such information withheld from the register as provided in the PPC Regulations. To enable North East Lincolnshire Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted.

Surrender of the permit

Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator should be informed in writing, such notification must include the information specified in regulation 20(3) of the PPC regulations.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the PPC regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

Appeal against permit conditions

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 27 and Schedule 8 of the PPC regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square, Temple Quay
BRISTOL
BS1 6PN
Tel: 0117 372 8812
Fax: 0117 372 6093

Please Note

An appeal brought under paragraph (1) (c) or (d) in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

End of introductory note

Permit issued under the Pollution Prevention and Control Regulations 2000

Permit

Permit Number
EP/20050004

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) hereby permits.

H Cope & Sons Ltd ("the operator"),

Whose registered office is


H Cope & Sons Ltd
Moody Lane, Grimsby
North East Lincolnshire
DN31 2PL

To operate an installation at

H Cope & Sons Ltd
Moody Lane, Grimsby
North East Lincolnshire
DN31 2PL

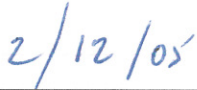
to the extent authorised by and subject to the conditions of this Permit and within the boundary identified in condition A

Signed



Tony Neul
Neighbourhood Improvement Manager
Authorised to sign on behalf of
North East Lincolnshire Council

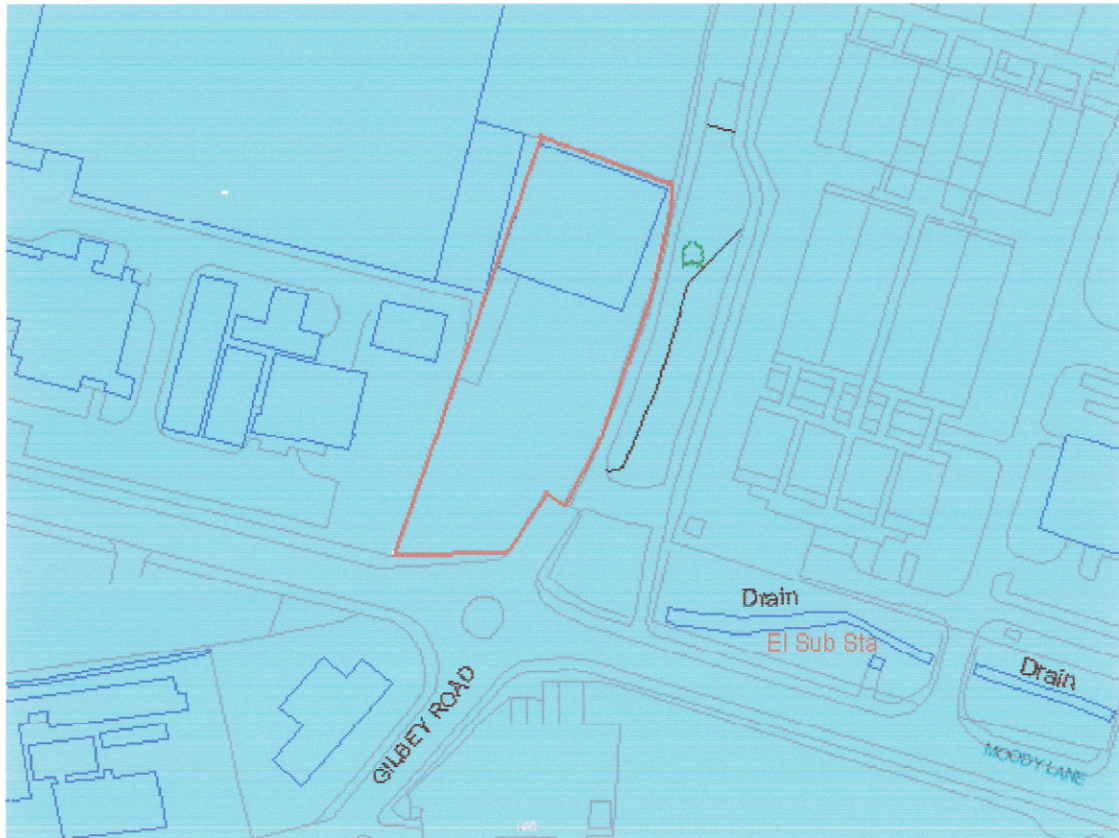
Dated



CONDITIONS

Extent and limit of the installation

- A The operator is authorised to carry out the activities and/or associated as specified and within the boundary shown in red on the plan below:-



Process using bulk cement as prescribed by Section 3.1 of Schedule I to the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended).

The installation comprises two cement silos (10.5m high) each with 60 tonne capacity based upon storing material having a bulk density of 1,200 kg per cubic metre. Reverse jet type filters are located on the top of the silos which are easily maintained.

Cement and other powdered cementitious material are delivered by road. The powdered materials are transferred through a closed system of heavy duty hoses to the storage silo, using compressed air as a carrying medium. Silos are vented to allow air to escape through filters, so controlling dust emission.

The delivery of powder from road tankers relies on a compressor (blower) mounted on the tanker lorry providing a supply of air which is used in three ways:

- To pressurise the tank vessel with air so that inside the vessel there is significant pressure which helps feed the powder out of the tankers. The tank is pressurised at the start of the blow, and is repressurised as necessary during the course of discharging.
- A separate feed from the air supply passes to the distributor system which fluidises the powder around the distributor plate.
- A third feed of air receives fluidised powder and flows from the tanker, along the connecting pipework and into the silo. The powder fed from the distributor system is thus transferred to the silo in the air stream.

The flow of air / material through the pipe depends on the pressure in the blowing line and hence the pressure in the tankers. The pressure required to successfully convey the powders is determined by the resistance to flow and gravity that is to be overcome, which varies depending upon the height to which the powders are being pumped (i.e. the height of the silo) and the pipe length and diameter.

The tanker discharge is controlled by the tanker driver. The driver controls the flow of air to the tanker, the distributor and the silo, to maintain a constant flow of material into the silo without exceeding the flow capacity of the filter system or exerting excessive pressure in the silo (which is not a pressure vessel).

1.0 Monitoring Investigations and Reporting

- 1.1 The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments. The records shall be:
- ✚ kept on site
 - ✚ kept by the operator for at least two years; and
 - ✚ made available for the regulator to examine
- 1.2 Any historical records kept off-site shall be made available for inspection within one working week of any request by the regulator.

2.0 Information Required By North East Lincolnshire Council

- 2.1 Upon receiving an instruction from the regulator the operator will notify the regulator of the next scheduled delivery of cementitious product to allow the regulator the opportunity to monitor the delivery and determine compliance with this permit.

3.0 Visible Emissions

- 3.1 Visual assessments of emissions shall be made frequently, and at least once a day during operations. The time, location and result of these assessments shall be recorded.
- 3.2 Where, in the opinion of the regulator, there is evidence of airborne dust from the process off the site, the operator shall make their own inspection and assessment, and where necessary undertake ambient monitoring with the aim of identifying those process operations giving rise to the dust. The monitoring may either be by a British Standard method or by a method agreed with the regulator. In these situations, determination of wind direction may be required. Once the source of the emission is known, corrective action shall be taken without delay.

4.0 Abnormal Events

- 4.1 The operator shall provide a list of key arrestment plant and shall have a written procedure for dealing with its failure, in order to minimise any adverse effects.
- 4.2 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:
- ✚ investigate and undertake remedial action **immediately**
 - ✚ adjust the process or activity to minimise those emissions; and
 - ✚ promptly record the events and actions taken
- 4.3 The regulator shall be informed without delay:
- ✚ if there is an emission that is likely to have an effect on the local community; or
 - ✚ in the event of the failure of key arrestment plant, for example, bag filtration plant or scrubber units

5.0 Emissions from Silos

- 5.1 All new or replacement silo filtration plant shall be designed to operate to an emission standard of less than 10 mg/m³ for particulate matter.
- 5.2 Operators shall have a procedure in place to ensure that visual assessment of emissions from silo inlet connections and the silo arrestment plant are undertaken throughout the duration of all bulk deliveries. The start and finish times of all deliveries shall be recorded.

6.0 Inspection of Filtration Plant

- 6.1 Silo arrestment plant and arrestment plant serving other process operations shall be inspected at the frequency specified below:

Filtration plant inspection frequency

Filter cleaning method	Frequency of visual inspection
Fitted with reverse jet	At least once a month

- 6.2 The outlet shall be checked for signs that emissions have occurred. The equipment shall also be checked for defects in the air flow or the cam shakers. If emissions or defects are detected then corrective action shall be taken promptly and before another delivery takes place. Any failure of the silo management system (e.g. high level alarms, filter, pressure relief valve) shall lead to full investigation of the operation of the plant and equipment.

Control Techniques

7.0 Silos

- 7.1 All dusty or potentially dusty materials shall be stored in silos, in confined storage areas within buildings, or in fully enclosed containers / packaging. Where the storage is open within a building, then suitable precautions shall be taken to prevent wind whipping.
- 7.2 When delivery to a silo or bulk storage tank takes place, displaced air shall either be vented to suitable arrestment plant (for example cartridge/bag filters) or back vented to the delivery tanker, in order to minimise emissions. Arrestment plant fitted to silos shall be of sufficient size (and kept clean) to avoid pressurisation during delivery.
- 7.3 In order that fugitive emissions are minimised during the charging of silos, transfer lines shall be securely connected to the silo delivery inlet point and the tanker discharge point, in that order. Tanker drivers shall be informed of the correct procedures to be followed.
- 7.4 Bulk storage tanks and silos containing dry materials shall be equipped with audible and/ or visual high level alarms, or volume indicators, to warn of overfilling. The correct operation of such alarms shall be checked in accordance with manufacturers' instructions. If manufacturers' instructions do not specify, then the check shall be weekly or before a delivery takes place, whichever is the longer interval.

- 7.5 If emissions of particulate matter are visible from ducting, pipework, the pressure relief device or dust arrestment plant during silo filling, the operation shall cease; the cause of the problem shall be rectified prior to further deliveries taking place. Tanker drivers shall be informed of the correct procedure to be followed.
- 7.6 Seating of pressure relief devices on silos shall be checked at least once a week, or before a delivery takes place, whichever is the longer interval.
- 7.7 Immediately it appears that the device has become unseated during silo filling, no further delivery shall take place until corrective action has been taken. The pressure relief device shall be examined to check for defects before being re-set and a replacement fitted if necessary.
- 7.8 Tanker drivers shall be informed of the correct procedure to follow.
- 7.9 Deliveries to silos from road vehicles shall only be made using tankers with an on-board (truck mounted) relief valve and filtration system. This means that venting air from the tanker at the end of a delivery will not take place through the silo. Use of alternative techniques may be acceptable provided that they achieve an equivalent level of control with regard to potential for emissions to air.
- 7.10 Care shall be taken to avoid delivering materials to silos at a rate which is likely to result in pressurisation of the silo. If compressed air is being used to blow powder into a silo then particular care is required towards the end of the delivery when the quantity of material entering the ducting is reduced and hence the air flow is increased.
- 7.11 All new silos shall be fitted with an automatic system to cut off delivery in the event of pressurisation or overfilling. Use of alternative techniques may be acceptable provided that they achieve an equivalent level of control with regard to potential for emissions to air.

8.0 Stockpiles and Ground Storage

- 8.1 Storage areas where there is vehicular movement shall have a consolidated surface which should be kept in good repair.
- 8.2 To control dust emissions from stockpiles, storage bays shall be used. Stock shall not be piled higher than the external walls of the bay and shall not be forward of the bay. If necessary, covers or dust suppressants shall be used.
- 8.3 Where dusty materials are stored, stockpiles shall be treated where necessary to minimise dust emissions, using one or more of the methods detailed in Table 4 of Process Guidance Note 3/1 (04). Fixed water sprays shall be installed for long term stocking areas if appropriate.

9.0 Conveying

- 9.1 Where dusty materials are conveyed, the conveyor and any transfer points shall be provided with adequate protection against wind whipping. All transfer points shall be enclosed to such an extent as to minimise the generation of airborne dust.

- 9.2 Conveyors shall be fitted with effective means for keeping the return belt clean and for collecting materials removed by this cleaning operation.
- 9.3 Conveyor belts shall not be overloaded.
- 9.4 Where the free fall of material gives rise to external dust emissions, techniques shall be used at the point of discharge to minimise this.
- 9.5 Planned preventative maintenance schedules shall include conveyor systems.

10.0 Process Operations

- 10.1 Truck mixers shall be loaded in such a way as to minimise airborne dust emissions, for example by loading with wet pre-mixed materials. If they are loaded with dry materials, local dust control measures shall be provided.
- 10.2 When loading with dry materials a ribbon feed technique shall be used. This involves depositing a partial load followed by water in a reiterative way until the full load has been made. For example, 1.5 metres of cement and aggregate followed by water, then another 1.5 metres of cement and aggregate followed by water, and so on (a truck load consists of about 6 metres).
- 10.3 In all cases a rubber sock type chute system shall be used for loading into truck mixers.

11.0 Fugitive Emissions

- 11.1 Dusty wastes shall be stored in closed containers.
- 11.2 The method of collection of product or waste from dry arrestment plant shall be such that dust emissions are minimised.
- 11.3 A high standard of housekeeping shall be maintained.
- 11.4 All spillages which may give rise to dust emissions shall be cleaned up promptly, by wet handling methods. In the event of a major spillage it shall be dealt with on the same day that it occurs, and measures to minimise emissions, such as wetting the surface to create a crust, shall be taken immediately.

12.0 Roadways and Vehicles

- 12.1 Roadways in normal use and any other area where there is regular movement of vehicles shall have a consolidated surface capable of being cleaned. They shall be kept clean in order to prevent or minimise dust emissions. They shall be kept in good repair.
- 12.2 Where necessary to prevent visible dust being carried off site, wheel-cleaning facilities shall be provided and used by vehicles before leaving the site.
- 12.3 Vehicle exhausts on mobile plant shall not be directed below the horizontal.

13.0 Management

- 13.1 Spares and consumables - in particular, those subject to continual wear - shall be held on site, or shall be available at short notice from guaranteed local suppliers, so that plant breakdowns can be rectified rapidly.

14.0 Training

- 14.1 Training of all staff with responsibility for operating the process shall include:
- + awareness of their responsibilities under the authorisation / permit; in particular how to deal with conditions likely to give rise to dust emissions, such as the event of spillage
 - + minimising emissions on start up and shut down
 - + action to minimise emissions during abnormal conditions
- 14.2 The operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents shall be made available to the regulator on request.

15.0 Maintenance

- 15.1 Within 12 weeks of the date of this permit a written maintenance programme shall be provided to the regulator with respect to pollution control equipment; and
- 15.2 A record of such maintenance shall be kept on site and made available for inspection.

End of Permit