



**POLLUTION PREVENTION AND CONTROL ACT 1999  
POLLUTION PREVENTION AND CONTROL (ENGLAND AND WALES)  
REGULATIONS 2000**

**PERMIT OF PROCESS**

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**THIS IS TO CERTIFY THAT** the process of blending, packing and loading of bulk cement.

at: **Hanson Aggregates Loughborough Premix, Ashby Road East, Shepshed,  
Loughborough, LE12 9BU**  
National Grid Reference: SK 483177

has been duly permitted in accordance with Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 subject to the conditions outlined in this document.

**Name of Operator: HANSON QUARRY PRODUCTS (EUROPE) LTD**  
**Registered Office: THE RIDGE, CHIPPING SUDBURY, BRISTOL BS37 6AY**

This Permit shall apply only to the premises occupied by the applicant, as specified and described in the Application for Permit submitted to the Borough of Charnwood. This Permit, consisting of ten pages, shall be subject to replacement, variation or amendment, as may be considered appropriate by the Borough of Charnwood at any time, according to provisions of Regulations 12, 15, and 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000

The conditions contained herein shall apply from the date of the Permit unless otherwise stated.

**Refer to Variation Notice Ref 020/00 dated 13 October 2000**  
**Refer to Variation Notice Ref.012/03 dated 14 November 2003**  
**Refer to Variation Notice Ref.020/07 dated 3 August 2007**

Directorate of Housing and Health, Environmental Health  
Southfields Road, Loughborough, LE11 2TX

**HANSON AGGREGATES, CHARNWOOD PREMIX, ASHBY ROAD EAST,  
SHEPSHED, LOUGHBOROUGH LE12 9BU****I.0 Process Description****I.1 Purpose**

The purpose of the process is the blending, storage and use of bulk cement in the batching of ready-mixed concrete.

This process is included in Schedule 1, Chapter 3, Section 3.1, Part B of the Pollution Prevention and Control (England and Wales) Regulations 2000. The conditions in this Permit are based on the Secretary of State's Guidance Note PG3/1(04).

**I.2 Plant Operation**

Figure 1/065 indicates the location of the site. Figure 2/065 shows the details of the site layout. Stone and/or sand are fed into the plant via lorry or loading shovel fed dump hopper. The aggregates are then weighed and conveyed to the mixer truck loading point.

Cementitious powders are delivered to site in bulk tankers. They are blown into three purpose-built sealed silos equipped with self-cleaning vent filters. Cement is conveyed from the silos via enclosed screw conveyors to the cement weigh hopper and then to the mixer loading point to join the aggregates.

Cement deliveries are planned to coincide with usage, in order to ensure sufficient capacity is available. The silo filters which contain the cement whilst releasing the air used for transporting are checked daily and maintained in accordance with manufacturers' instructions. The filters are of the reverse air flow type and are self-cleaning.

During the unloading of cementitious powders, checks are made for malfunction to the filter system. In the event of a malfunction, unloading is stopped immediately and does not recommence until any problems have been identified and rectified.

**I.3**

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<b>Emission Points</b>		<b>Emission</b>
1.	3 bulk storage silo filters and relief valves	Particulate
2.	Fugitive emissions from storage bays and haulage roads, etc.	Particulate

**2.0 Emission Limits and Controls**

- 2.1 All emissions to air other than steam or water vapour shall be colourless and free from persistent mist.
- 2.2 All emissions to air shall be free from persistent fume.
- 2.3 The pressure switch and activation circuit in the silos shall be tested by an appropriate engineer every 6 months to ensure that they activate at the correct pressure setting. The valve in the delivery pipe shall be tested at least every month by a designated and competent member of staff to ensure that it is operating correctly.
- 2.4 Details of all checks and inspections of the pressure switch and delivery pipe valve serving each silo shall be recorded in the log book on the day of inspection.
- 2.5 Any new or replacement silo filtration plant shall be designed to operate to an emission standard of less than 10mg/m<sup>3</sup> for particulate matter. Manufacturers' specifications for any new or replacement silo filtration plant shall be provided to the local authority within one month of installation.
- 2.6 New silos shall be fitted with automatic protection systems. Any alternative arrangements that may offer equivalent protection against particulate releases must be agreed with the local authority prior to commissioning.
- 2.7 Tankers delivering to silos must be fitted with onboard relief valves and filtration equipment from 1 July 2007.
- 2.8 There shall be no visible emission of dust across the site boundary that has arisen from the process itself.

**3.0 Monitoring, Sampling and Measurement of Emissions**

- 3.1 Regular visual assessments of dust emissions shall be made on a random basis, at least daily, by the operator. The assessments shall be made having regard to the possible sources of dust emissions which shall include storage areas and plant.
- 3.2 Visual assessments of emissions shall be made during charging of silos with cement, having regard to the possible sources of emissions.
- 3.3 If an adverse emission of dust is released a visual assessment shall be made. The visual assessment shall be recorded in the log book, as required by condition 3.4. The log book shall include the following details regarding visual assessments.
- a) The date and time of observation.
  - b) Weather conditions
  - c) Wind direction
  - d) Assessment of the severity of the release
  - e) Identification of the observed area or plant.
  - f) Remedial action taken (if appropriate)
  - g) Name of the person completing the log book.
- 3.4 The results of all monitoring and inspections shall be recorded in a log book retained by the operator for a minimum of two years and made available by the operator for examination by Charnwood Borough Council if requested.

**4.0 Materials Handling**

- 4.1 Bulk cement and other cementitious materials shall be stored in silos which must only be vented through the reverse jet filters or manual pressure relief systems.
- 4.2 All sealed unit reverse jet filters fitted to the silos shall be inspected and serviced at least every 6 months. Visual inspections of the filters must be made at least once a week. This equipment shall only be operated in conjunction with a pressure-sensitive switch which is capable of effecting immediate closure of the valve in the delivery pipe to cause delivery to cease. If defects, significant binding or unusual pressure fluctuations are detected, corrective action shall be taken promptly and wherever possible before another delivery commences. All cases where deliveries are made prior to corrective action being taken shall be recorded in the log book
- 4.3 Visual assessment of emissions from the arrestment plant to the silo shall be undertaken while all bulk deliveries are made.
- 4.4 Storage silos shall be equipped with audible and visual high level alarms to warn of overfilling. The correct operation and use of all such alarms shall be checked prior to every delivery by a designated competent person. Any faults shall be recorded in the log book. Where a fault has the potential to cause an emission it must be reported and remedied before the delivery is allowed to take place.

The alarms shall be adequately maintained to activate when the remaining capacity in the silos falls below the following:-

- a) Silo 1 - 9 tonnes
- b) Silo 2 - 9 tonnes
- c) Silo 3 - 7 tonnes

Where a fault is discovered, the log book shall record:-

- a) The name of the person who carried out the check.
  - b) A description of the defects.
  - c) Action taken to remedy the fault.
- 4.5 Care shall be taken during delivery from tankers to avoid venting of air to silos at a rate which is likely to result in over-pressurisation of the silos. Particular problems may arise during the release of air from tankers at the end of deliveries

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and care must therefore also be taken to avoid over-pressurisation of silos when venting air from tankers at this stage. These can be alleviated by the use of tankers with sufficient valve work to allow a gradual release to occur and by carefully controlled venting. In order that fugitive emissions are minimised during the charging of silos, care must be taken to ensure that the transfer lines are securely connected to the tanker discharge point and the silos delivery inlet point. Tanker drivers must be informed of the correct procedures to be followed prior to the connection of transfer lines.

- 4.6 Feed hoppers shall be provided with an enclosure around the upper opening sufficient to prevent or minimise dust emissions while material is discharged into the hopper except in the case where dust emissions do not occur due to the dampness of the material being discharged into the hopper.
- 4.7 The transfer of cement and other cementitious materials, other than delivery to site storage, shall be by sealed screw conveyors or air slides.
- 4.8 All accumulations of dust and materials liable to produce dust on roofs, walls and support structures shall be cleared as soon as possible and where necessary to prevent or minimise airborne dust emissions deposits should be damped prior to clearing.
- 4.9 All spillages which may give rise to dust emissions shall be cleaned up promptly, by wet handling. Dry handling of dusty spillages over 5Kg shall not be permitted. Damp materials cleared shall be disposed of to the truck mixer- wash settlement pit on site.. Major spillages should be dealt with using a vacuum cleaning system. It shall not be necessary for vacuum cleaning equipment to be kept on site provided such equipment can be readily obtained on the same day the spillage occurs and interim measures such as dampening are taken immediately.
- 4.10 Arrestment plant fitted to silos shall be of sufficient size (and kept clean) to avoid over-pressurisation during delivery.
- 4.11 Pressure relief valves must be checked weekly to insure that they are properly seated.

**5.0 General Operations**

- 5.1 When abnormal visible dust emissions are observed or when any malfunction or breakdown likely to lead to an escape of dust is found then:
- a) An immediate investigation shall be carried out;
  - b) Prompt remedial action shall be taken;
  - c) The observation, finding result of investigation and remedial action taken shall be entered in the log book required by condition 3.4, and
  - d) If the remedial action is not immediately effective then action to mitigate any effects shall be taken.
- 5.2 In the event of malfunctions and breakdowns causing dust emission and remedial action is unsuccessful, Charnwood Borough Council shall be notified in writing within 24 hours detailing:
- a) The time and nature of the malfunction or breakdown
  - b) The remedial action taken
  - c) The nature, extent and effect of emissions
- 5.3 In the event of breakdown of any arrestment plant the operator shall immediately notify Charnwood Borough Council by telephone.
- 5.4 All hard surfaced roadways and yard areas shall be cleaned at weekly intervals or more frequently during periods of prolonged dry weather using road sweeping equipment.
- 5.5 Supplies of essential spares and consumables for the aforementioned plant and equipment shall be readily available for use.
- 5.6 Staff at all levels shall receive proper training and instruction in their duties relating to control of the process and emissions to air. Particular emphasis shall be given to training for start-up, shut-down and abnormal conditions.
- A record of training for each of those identified personnel shall be kept and made available to the authorised officer of Charnwood Borough Council on request.
- 5.7 A written maintenance programme shall be kept to include regular cleaning of process buildings and maintenance of conveyors. A record of the maintenance undertaken shall be kept and made available for inspection

## EXPLANATORY NOTES

These notes do not comprise part of Permit Serial No.065 but contain guidance relevant to the Permit.

1. You should note that Regulation 12(10) of the Regulations provides that in relation to any aspect of the process not regulated by conditions 1.1 to 5.7 the best available techniques ('BAT') shall be used for the purpose of preventing or, where that is not practicable, reducing emissions into the air.

Section 3(7) of the Regulations describes 'BAT' as meaning the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and the impact on the environment as a whole.

2. This Permit is issued under the Pollution Prevention and Control (England and Wales) Regulations 2000. The responsibility you have under legislation for Health, Safety and Welfare in the workplace remains in force. In addition, the Permit does not relieve you of your obligations to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency Building Regulations approval, or a Waste Disposal Licence.
  3. Any proposed 'change in operation' in the process (within the meaning of Regulation 2(1)) shall be notified to Charnwood Borough Council as required by Section 16(1) of the Regulations.
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