



POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND AND WALES) REGULATIONS
2010

PERMIT OF PROCESS

THIS IS TO CERTIFY that the use of bulk cement in the manufacture of concrete blocks

Operated by: INTERFUZE LTD, 80 HIGH STREET, SYSTON, LEICESTERSHIRE, LE7 8GQ

(National Grid Ref: SK 6233119 and shown in Appendix I which forms part of this permit)

has been duly permitted in accordance with Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 subject to the conditions outlined in this document.

Name of Operator: Interfuse Ltd

Registered Office 80 High Street, Syston, Leics. LE7 8GQ

This Permit shall apply only to the installation detailed above. This Permit, consisting of thirteen pages, shall be subject to replacement, variation or amendment, as may be considered appropriate by Charnwood Borough Council at any time, according to provisions of Regulations, 18, 20, and 34 of the Environmental Permitting (England and Wales) Regulations 2010.

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

Signed on behalf of Charnwood Borough Council

.....
 Ann Green, Specialist Environmental Health Officer
 (the delegated officer for the purpose)

Dated 21st March 2011

Counter-signed.....

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

Introductory note

This introductory note does not form a part of the permit

The following Permit is issued under Regulation 13(1) of the Pollution Prevention and Control (England and Wales) Regulations 2010 (S.I 2007/3538), as amended, (“the EP Regulations”) to operate an installation carrying out one or more of the activities listed in Part 2 of Schedule I of the EP Regulations, to the extent authorised by the Permit:

Section 3.1, Part B (b)

"Any activity of blending cement in bulk or using cement in bulk other than at a construction site, including the bagging of cement and cement mixtures, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products”.

Status Log

Detail	Date	Comment
Permit issued	2 April 1993	
Variation Notice	28 March 1996	Revised permit issued
Variation Notice	21 January 1998	Revised permit issued
Variation Notice	20 January 2004	Revised permit issued
Variation Notice	10 July 2006	Revised permit issued
Variation Notice	26 February 2009	Revised permit issued
Variation Notice	21 March 2011	Revised permit issued

Origins of the conditions contained in the permit

The Secretary of State has issued various guidance notes to local authorities to assist with determining those conditions which represent ‘best available technique’ in the different circumstances which apply to each installation. The conditions within this permit have largely been derived from the following guidance note;

PG 3/1 (04) Blending, Packing, Loading, Unloading and Use of Bulk Cement

PROCESS DESCRIPTION

PURPOSE

The purpose of the process is to produce concrete blocks from cement and other ingredients, using an automated batching plant.

PLANT DETAIL

The plant consists of the following:-

- (a) Aggregate receiving hopper
- (b) Covered aggregate conveyor
- (c) Enclosed 4 round aggregate storage bins situated over an enclosed weigh belt
- (d) Covered feed conveyor to skip

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- (e) Aggregate skip hoist
 - (f) Mixer situated on mixer platform above the block machine inside the main building
 - (g) One cement silo with WAM reverse jet filter dust arrestment equipment, high level alarm and safety valve. Silo capacity 90 tonne. Service contract held with R W Vessey, Thurmaston.
 - (h) One pulverised fuel ash (PFA) silo with WAM reverse jet filter dust arrestment equipment, high level alarm and safety vane. Silo capacity 90 tonne. Service contract held with R W Vessey, Thurmaston.
 - i) Screw conveyors and weigh hopper (for cement and PFA)
 - j) Water Pump and storage tank
 - k) Wet holding hopper beneath mixer
 - l) Metering conveyor
 - m) Block making and curing equipment (within block making building)

The layout of the site is shown in Appendix 2/22

PLANT OPERATION

Raw materials include 15mm furnace bottom ash, fines, gravel, sand, granite, limestone, lytag, cement (OPC) and pulverised fuel ash (PFA). The raw materials are delivered by outside haulage with sheeted lorries and are off-loaded into the respective storage bays at the site.

Cement and PFA are both delivered by the manufacturers in sealed bulk tankers and are discharged under pressure into their respective marked silos.

The material from the storage bays are carried by a front loading shovel and tipped into a receiving hopper. It is transferred by covered conveyor up to four round covered aggregate storage bins, below which is an enclosed weigh belt. After the required amount of aggregate has been discharged onto the weigh belt, it is transferred by a covered feed conveyor into the skip.

The skip hoist is then moved up by cable to the mixer unit situated on a platform above the block machine inside the main building. The material is then released by a sealed hatch door into the mixer.

Cement and PFA are discharged from the silos by sealed screw conveyors into a weigh hopper and then into the mixer beneath, water is then added to the mix as required. The mixed material is discharged into a wet holding hopper and released into the block machine.

The blocks are moulded and pass from the block machine on steel pallets. These pallets are then transferred by a finger car train into the ovens for curing. The heat for the ovens is provided by a non-pressurised gas fired boiler which heats a hot oil pipe system within the curing chambers. The blocks are cured over approximately 24 hours at around 50 ° celcius.

The block machine, curing ovens and cubing machinery are housed within the industrial building. Finished blocks are stored in the yard.

The block manufacturing activities regulated under this permit incorporates:

- The storage of raw materials, (namely sand, aggregate, cement)
- The transportation and loading/unloading of these materials
- The mixing and batching of these materials
- The storage and disposal of any waste arising from the activity
- Any plant, machinery or equipment designed to prevent pollutant emissions to the environment.

PRINCIPLE EMISSIONS

Table I

Emission Point	Emissions
1. Bulk cement silo	Particulate
2. PFA silo	Particulate
3. Gas-fired boiler	Combination products
4. Curing oven stacks	Steam, volatiles from curing blocks (trivial)
5. External fugitive sources such as: <ul style="list-style-type: none"> I. storage bays, II. feed hoppers, III. conveyors, IV. mixer V. waste storage area VI. roadways 	Particulate

End of Introductory Note.

The above named company is permitted to operate a cement batching activity subject to compliance with the following conditions:

Permit Conditions

Emission Limits, monitoring and other provisions

I. The following emission limits and monitoring frequencies shall be complied with:

Row	Particulate matter	Emission Limit	Type of monitoring	Monitoring frequency
1	Whole process	No visible emission across the site boundary	Operator observations. To be recorded in a log book under condition 2 below.	At least daily
2	Silo inlet and outlets	No visible emission	Operator or driver observations. To be recorded in a log book under condition 2 below. To also include start & finishing times	Every delivery

NB. Observation points must provide an unimpeded view of the emission points listed in table I above and at appropriate points around the installation boundary.

Monitoring, investigations and recording

2. All inspections and assessments shall be recorded in a log book on a daily basis. Details of visual assessments shall include the following information when a visible emission to atmosphere is apparent: -

- I. Date and time of observation
- II. Wind direction
- III. Weather conditions
- IV. Position of observation
- V. Assessment
- VI. Identification of observed plant

Where the assessment is that there are no visible emissions, items ii), iii) and iv) need not be recorded.

3. The log book must be retained by the operator for a minimum of two (2) years and made available for examination by a duly authorised officer of Charnwood Borough Council on request.
4. Any historical records kept off-site shall be made available for inspection within one working day on request from a duly authorised officer of Charnwood Borough Council.

Visible emissions

5. All emissions to air from the installation, other than steam or condensed water vapour, shall be free from persistent visible emissions and droplets.
6. Visual assessments of emissions shall be made on a random basis, at least daily, by the operator. The visual assessment shall be made having regard to the piece(s) of plant or equipment in operation at the time and should include cement and PFA silos, loading points, aggregate conveyors, aggregate storage bins and arrestment plant. The time, location and result of the assessments shall be recorded in a log book required by condition 2. In the event of one or more visible emission being observed, immediate action shall be taken to determine the cause of the emission and action shall be taken to abate the emission.
7. There shall be no visible emissions from any source beyond the site boundary.
8. Where in the opinion of a duly authorised officer from Charnwood Borough Council, there is evidence of airborne dust from the process off-site, corrective action shall be taken immediately. If the source is uncertain the operator shall undertake an inspection and assessment, and where deemed necessary by Charnwood Borough Council, undertake ambient monitoring to identify the process operations giving rise to dust. The monitoring method shall be agreed with Charnwood Borough Council. Once the source is known, corrective action shall be taken without delay.

Abnormal events

9. A list of key arrestment plant and a written procedure for dealing with its failure shall be prepared by the operator and provided to a duly authorised officer of Charnwood Borough Council on request.
10. When any visible airborne emission is observed or when any abnormal emission, malfunction or breakdown likely to lead to an abnormal emission, is found, the operator shall:-
 - i. Investigate and undertake remedial action **immediately**
 - ii. Adjust the process or activity to minimise the emissions
 - iii. Promptly record the events and actions taken in the log required by condition 2 and
 - iv. If corrective action is not immediately effective then action to mitigate any effects shall be taken.
11. All malfunctions or breakdowns leading to an abnormal emission likely to have an effect on the local community or failure of key arrestment plant shall be notified to Charnwood Borough Council immediately by telephone. A record shall be made of the incident within the logbook required by condition 2.

Emissions from silos

12. The silo filtration plant shall be designed to operate to an emission standard of less than 10mg/m^3 for particulate matter. The silo filtration plant shall be maintained to ensure this emission limit is met.
13. Visual assessment of emissions from silo inlet connections and the silo arrestment plant shall be undertaken throughout the duration of bulk deliveries. Particular regard shall be made to the first and last five minutes of the delivery. The results of the assessment and the start and finish times of all deliveries shall be recorded in the log book required by condition 2.

Inspection of filtration plant

14. The reverse air jet filters shall be inspected at least once a month by the Plant Supervisor and mechanically checked on a six-monthly basis by a qualified maintenance fitter. If defects are detected, corrective action shall be taken promptly and wherever possible before another delivery occurs. The operator shall record in the log book (required by condition 2) all cases where deliveries are made prior to corrective action being taken.
15. Failure of any part of the silo management system including high level alarms, reverse-air jet filter and pressure relief valve shall lead to a full investigation by the operator and corrective action taken immediately before another delivery takes place. Details of the inspections and any action taken shall be recorded in the logbook required to be kept by condition 2.

Control Techniques

Silos

16. Bulk cement and all other cementitious materials and PFA held on site shall be stored in silos.
17. All silos shall be vented to suitable arrestment plant. Suitable plant is deemed to be a reverse air jet filter.
18. Each storage silo shall be equipped with visual and audible high level alarms to warn of overfilling. The correct operation of such devices shall be checked weekly or before each delivery, whichever is the longer interval and the results recorded in the log book required by condition 2.
19. Each silo delivery inlet point shall be clearly marked with the delivery pressure to be applied and the nature of the material contained therein.
20. The connection of transfer lines to the tanker discharge point and silo delivery inlet point shall be checked before the transfer of cement commences. The transfer of cement shall only commence once it has been established that the connection to these points will prevent the emission of cement dust. Any

emissions occurring from the transfer line during bulk deliveries shall be recorded in the log book required by condition 2.

21. No particulate emissions shall be visible during silo filling deliveries. If emissions of particulate matter are visible from ducting, pipe-work, the pressure relief device or dust arrestment plant during silo filling, the operation shall cease, the cause identified and rectified prior to further deliveries taking place. Tanker drivers shall be informed of the correct procedure to be followed.
22. Seating of pressure relief valves on the silos shall be checked at least once a week or before a delivery takes place whichever is the longer interval.
23. Immediately it appears that a pressure relief valve may have become unseated during silo filling, the delivery must cease and no further delivery shall take place until the problem is rectified. The valve shall be examined and reset or a replacement fitted if necessary. Tanker drivers shall be informed of the correct procedure to be followed.
24. Deliveries from road vehicles to silos shall only be made using tankers fitted with an on-board (truck mounted) relief valve and filtration system – such that venting air from the tanker at the end of a delivery will not take place through the silo.
25. During delivery from tankers, the venting of air to the silo shall be at a limited rate to avoid pressurisation of the silo. Particular care shall be taken at the end of deliveries. Only tankers with sufficient valve work to allow gradual release and controlled venting shall be used.
26. All silos shall be fitted with an automatic system to cut-off delivery in the event of pressurisation or over-filling.

Stockpiles and ground Storage

27. Storage areas where there is regular movement of vehicles shall be hard-surfaced and kept in good repair to prevent or minimise visible emissions.
28. Aggregates shall be stored in aggregate storage bays that shall be enclosed on three-sides. The bay walls shall be a minimum height of 2.5m to reduce wind entrainment of product. Materials shall not be piled higher than the external wall of the bay and shall not be forward of the bay. Spillage of aggregates outside these storage areas shall be cleared immediately.
29. Aggregates delivered to the site shall be sprayed with water if necessary to prevent the generation of dust.
30. Where water is used for dust suppression, an adequate supply of water shall be available and the system shall be provided with frost protection.

Conveying

31. All conveyors shall be: -
- i. Of sufficient capacity to handle maximum loads,
 - ii. Totally enclosed to prevent wind whipping,
 - iii. Arranged to minimise free-fall at all times,
 - iv. All transfer points shall be enclosed,
 - v. Provided with belt scrapers for keeping the return belt clean and a means of collecting materials removed by this cleaning operation.
32. Planned preventative maintenance schedules shall include conveyor systems. Conveyor systems shall be inspected weekly. Recordings of findings and of any action taken shall be kept in the log book kept required by condition 2.

Process operations

33. The transfer of cement, other than delivery to silo storage, shall be by a fully enclosed mechanical screw feed conveyor.
34. The pan mixer unit shall be fully enclosed to prevent emissions of particulate matter to atmosphere.

Fugitive Emissions

35. External surfaces of the process buildings, ancillary plant, yards and storage areas shall be inspected monthly and cleaned if necessary to remove deposited material. Particular attention shall be paid to external support structures, roofs and guttering. Where necessary, to prevent or minimise airborne emissions, these deposits shall be dampened prior to removing.
36. Cleaning operations shall be carried out by wet sweeping methods or vacuuming in order to minimise emissions of particulate matter to air. Dry handling of dusty spillages shall not be permitted other than in a fully enclosed building. A record of the inspection and cleaning shall be kept in the log book kept in accordance with condition 2.
37. All external spillages of liquids and finely divided materials shall be cleaned up immediately. Liquid spillages shall be contained and cleaned up by the use of a suitable absorbent material. Spillages of finely divided or powdery material shall be removed by means of vacuum cleaning using an industrial grade vacuum cleaner or by wet cleaning methods. Dry sweeping is not permitted.
38. Major spillages shall be dealt with on the same day using, for example, wet handling methods or a vacuum cleaning system. It shall not normally be necessary for a vacuum cleaning system to be available on site at all times, provided that such equipment can be obtained in the event of a major spillage on the same day that it occurs. Measures to minimise emissions such as dampening the surface to create a crust shall be taken immediately.

Roadways

39. All hard surfaced roadways and yards shall be inspected regularly for signs of wear or damage. Damaged areas shall be repaired as soon as practicable. A routine repair and maintenance programme shall be devised and implemented to ensure roadways and yards are kept in good condition.
40. Roadways in normal use and any other area where there is regular movement of vehicles shall be hard-surfaced, kept clean and in good repair in order to prevent or minimise fugitive emissions. Hard surfacing shall comprise Macadam or concrete.
41. 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.

Appropriate Management Systems

42. The activity shall operate in accordance with an effective management system to ISO 14001. This shall include a commitment to achieving compliance with the permit conditions and ensuring LAPC considerations are taken account of in the day-to-day running of the process. It may include establishing objectives for improved environmental performance by setting targets, measuring progress and revising the objectives according to results. The system shall include managing risks under normal operating conditions and in accident and emergency situations.

Training

43. All staff with duties related to the control of emissions to air shall receive formal training which shall include how to deal with conditions likely to give rise to visible emissions, such as in the event of spillage, action to minimise emissions during abnormal conditions, emergency procedures and reporting requirements.
44. The operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person. These documents shall be made available for inspection to a duly authorised officer of Charnwood Borough Council on request.

Maintenance

45. A written maintenance programme shall be kept with respect to pollution control equipment and shall include regular maintenance of conveyors and cleaning of process buildings. A record of the maintenance undertaken shall be kept and be made available for inspection to a duly authorised officer of Charnwood Borough Council, on request.

46. Essential spares and consumables shall be held on site or shall be available at short notice from guaranteed local suppliers for all plant and the equipment concerned with the control of emissions to the air.

General Conditions

47. If the operator proposes to make a change in the operation of the installation, he shall, at least 14 days before making the change, notify Charnwood Borough Council in writing. The notification must contain a description of the proposed change. In this condition 'change of operation' means a change which may affect the substances or concentration of substances being emitted to air.
48. The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation which is not regulated by any other condition of this permit.

END OF CONDITIONS

Appendix I/022

Site Location



Explanatory Notes

This note does not form a part of the permit but contains guidance relevant to it.

Inspections

Regular inspections will be made by officers of Charnwood Borough Council (without prior notice), in order to check and ensure full compliance with this permit.

BAT (Best Available Techniques)

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 conditions of the Permit are subject to the implied condition that the Operator shall use the best available techniques for preventing or, where that is not practicable, 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.

Health and Safety at Work and Other Statutory Requirements

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 some Waste Disposal Licences.

Submission of Information

Note that the Permit requires the submission of certain information to the Local Authority (LA). In addition, the LA has the power to seek further information at any time under Regulation 60(1) EP Regulations provided that it acts reasonably.

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with Requirement 46(1) EP Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the LA serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introduction will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Where the Operator ceases or intends to cease the operation of the activity (in whole or in part) the LA should be informed in writing. Such notification must include the information specified in Regulation 24 or Regulation 25 and Part 1 of Schedule 5 of the EP Regulations.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the LA considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit.

Annual Subsistence Fee

In accordance with Regulation 65(1) of the EPR Regulations the holder of a permit is required to pay a fee for the subsistence of the permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 22 of the EPR Regulations, if you fail to pay the fee due promptly, Charnwood Borough Council may revoke the permit. You will be contacted separately each year in respect to this payment.

Talking to us

Please quote the Permit Number if you contact Charnwood Borough Council about this Permit. To give a Notification under Conditions 11 the Operator should use the telephone number 01509 634636 or any other number notified in writing to the Operator by Charnwood Borough Council for that purpose.

Appeals in relational to Environmental Permits

1. 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 within 6 months from the date of the permit issue.
2. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the EP Regulations and should be addressed as follows:
The Planning Inspectorate
Environment Team, Major and Specialist Casework
Room 4/04 Kite Wing
Temple Quay House,
2 The Square,
Temple Quay,
Bristol, BS1 6PN

3. An appeal brought under Regulation 31(b) 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.
4. There are no forms or charges for appealing. However for an appeal to be valid, appellants are legally required to provide information as detailed in paragraphs 2(1) and (2) of Schedule 6 of the EP Regulations., namely:
 - I. A statement of the grounds of appeal
 - II. A copy of any relevant permit
 - III. A copy of any relevant correspondence between the appellant and the regulator
 - IV. A statement indicating whether the appellant wishes the appeal to be in the form of a hearing or dealt with by way of written representations.
5. In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal, to direct the local authority either to vary any of these other conditions or to add new conditions.