



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

Permit Number: 3.5/040847/CLP

Installation Address:

**Advanced Minerals Limited
Unit 17C, Wharncliffe Industrial Estate
Deepcar Works, Station Road
Deepcar, Sheffield
S36 2UZ**

In accordance with Regulation 13 of the Environmental Permitting (England and Wales) 2010, Advanced Minerals Limited is hereby permitted to operate a scheduled activity at the address detailed above, namely the cooling and drying of minerals as described in Schedule 1, Part 1, Chapter 3, Section 3.5, Part B, subsection (a) subject to the following Permit.

Signed

Dated this day: 25th May 2010

**Assistant Manager
Authorised by Sheffield City Council to sign on their behalf**

The Secretary of States Guidance PG 3/15b (04) "Mineral Drying and Cooling" has provided the framework for the conditions in this permit

Name & Address of Operator:

Advanced Minerals Limited
Unit 17C, Wharncliffe industrial Estate
Deepcar Works, Station Road
Deepcar
Sheffield
S36 2UZ

Contact: Shaun Birkes (0114) 288 4088

Registered Office:

Advanced Minerals Limited
c/o East Surrey Water PLC
London Road
Redhill
Surrey
RH1 1LJ

Address of Permitted Installation:

Advanced Minerals Limited
Unit 17C, Wharncliffe industrial Estate
Deepcar Works, Station Road
Deepcar
Sheffield
S36 2UZ

Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting the Permit Number:

**Environmental Protection Service
Sheffield City Council
2-10 Carbrook Hall Road
Carbrook
Sheffield
S9 2DB**

Alternatively Email: epsadmin@sheffield.gov.uk

Tel: (0114) 273 4651 or Fax: (0114) 273 6464

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**Explanatory Note to Environmental Permit for Part B Installations.
(This note does not form a part of the Permit)**

The following Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 (S.I. 2010 No.676), as amended, (“the EP Regulations”) to operate an installation carrying out activities covered by the description in Part 2, Chapter 3 Section 3.5, Part B of Schedule 1 of those Regulations, to the extent authorised by the Permit:

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by the EP Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation as defined in the EP Regulations.

Process Changes

As part of your permit you are required to notify the Council of any proposed change in operation at least 14 days before making the change. This must be in writing and must contain a full description of the proposed change in operation and the likely consequences. Failure to do so is an offence.

If you consider that a proposed change could result in the breach of the existing permit conditions or is likely to require the variation of permit conditions then you may apply in writing under Regulation 20(1) of the EP Regulations. Additionally, if this involves a SUBSTANTIAL CHANGE to the installation you will be required to submit an application, pay the relevant fee and advertise the application accordingly. You may serve a Notice on the Council requesting that they determine whether any change that is proposed would constitute a substantial change before you proceed with application.

Variations to the Permit

The Permit may be varied in the future (by the Council serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, a formal Application must be submitted.

Surrender of the Permit

Where the operator of a Part B installation or mobile plant ceases or intends to cease the operation of the activity the operator may notify the regulator of the surrender of the whole permit, in any other case, notify the regulator of the surrender of the permit in so far as it authorises the operation of the installation or mobile plant which he/she has ceased or intends to cease operating. The notification shall contain information as described in Regulation 24 or 25 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, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21 of the EP Regulations. A transfer will be

allowed unless Sheffield City Council 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.

Annual Subsistence Fee

In accordance with Regulation 65 of the EP 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 65 (5) of the EP Regulations, if you fail to pay the fee due promptly, Sheffield City Council may revoke the Permit. You will be contacted separately each year in respect to this payment.

Public Register

The Council is required by Regulation 46 of the EP Regulations to maintain a Public Register containing information on all LAPPC installations and mobile plant. The register is available for inspection by the public free of charge during office hours (Monday to Friday 9.00 am to 5.00 pm) at the following address:

Environmental Protection Service
Sheffield City Council
2-10 Carbrook Hall Road
Carbrook
Sheffield
S9 2DB

Tel: 0114 273 4651

Confidentiality

Sheffield City Council has a duty to consider the question of confidentiality of information supplied to it. If any information supplied is considered confidential, a statement of which information this applies to and the reasons why it is considered confidential should be specified. The Operator is reminded that he may apply to Sheffield City Council for the exclusion of information from the public register under the provisions of the Environmental Permitting (England and Wales) Regulations 2007.

Appeals

Under Regulation 31 of the EP Regulations operators have the right of appeal against the conditions attached to their permit. Schedule 6 of the EP Regulations sets out the detailed procedures.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending Permit conditions.

Notice of appeal against the conditions attached to the permit must be given within six months of the date of the Notice, which is the subject matter of the appeal.

How to Appeal

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide:

Written notice of the appeal;

A statement of the grounds of appeal;

A statement indicating whether the appellant wishes the appeal to be dealt with by written representations procedure or a hearing – a hearing must be held if either the appellant or enforcing authority requests this, or if the Planning Inspector or the Secretary of State decides to hold one.

(Appellants must copy the above three items to the local authority when the appeal is made)

A copy of any relevant application;

A copy of any relevant permit;

A copy of any relevant correspondence between the appellant and the regulator; and

A copy of any decision or notice, which is the subject matter of the appeal.

Where to Send Your Appeal Documents

Appeals should be addressed to:

**The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol BS1 6PN**

In the course of an Appeal process the main parties will be informed of procedural steps by the Planning Inspectorate.

To withdraw an appeal the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority.

Description of Activities

Advanced Minerals Ltd operates a mineral processing plant located at Deepcar in Sheffield as indicated on the plan in Schedule 1 of this Permit.

The activities covered by this permit include the receipt, unloading, storage, drying, screening, batching, blending, packing, loading and dispatch of raw materials and products. The site layout is as indicated on the plan in Schedule 2 of this Permit and the activities and plant and equipment are described below:

Raw Materials

The following raw materials are received:

- 1) Wet calcite sand (approx 2-3% moisture content) is delivered loose in bulk tippers and stored prior to use in the storage bays or covered shed.
- 2) Limestone and chalk powder are delivered dry in pneumatic tankers and blown into four of six silos. Each of the four powder silos has a DCE DLM10/10 m³ dust arrestor fitted with Heath Filtration bags. In addition they are fitted with shut down valves that are operated in an over pressure or high level situation.
- 3) Limestone powders, chalk powder, silica flour and silica sand are delivered in reusable bags or paper sacks on an occasional basis. The waste paper sacks are disposed of by skip to landfill. The bags are reused where possible.
- 4) Alumina silicate glass is received in intermediate bulk containers.
- 5) Up to 6mm wet gravel is delivered by tipper and stored in a small storage bay (about 5 x 5 x 2 metres).
- 6) Wet expanded clay in Intermediate Bulk Containers and plastic sacks, which are stored before the clay is dried as required for production.

Drying

The wet calcite sand is dried in a diesel fired contraflow tube dryer at a rate of up to 10 tonnes per hour. The dried material is transferred via an enclosed bucket elevator to a custom built cooler tube. The dryer and cooler tubes are ducted individually to extractor fans via custom built dust arrestor units fitted with Heath Filtration dust collector bags. Cleaned air is exhausted outside the building via the chimney, which is continuously monitored and results logged using a Goyen EMP7 continuous monitoring system. The stack is located as indicated on the plan in Schedule 2 of this Permit.

The material once cooled is transferred via enclosed bucket elevator to an enclosed reciprocating screen fitted with four decks. The waste screen removes tramp oversize into a bin for waste disposal. Up to three fractions of dried sand are screened off into intermediate bulk containers (IBC's) and are stored before being used in other processes or being reintroduced into the blending process at a later stage. The bulk product is transferred via an enclosed bucket elevator to one of two 22 tonne (approximate) storage silos fitted with audible high level alarms. One of these silos has an IBC filling station.

Blending / Batching

The batching process consists of the two approximate 22 tonne sand silos, two approximate 22 tonne limestone silos and two approximate 30 tonne limestone silos (the four limestone silos are fitted with DCE DLM 10/10m³ dust arrestors) and five IBC dischargers. Varying proportions of the ingredients are fed from the above containers into a weigh hopper via enclosed screw conveyors and an enclosed conveyor belt to make up a 1.2 tonne batch. The batching process produces about eight tonnes per hour. Once weighed out, the batch is transferred to the mixer via an enclosed rope and flight conveyor. When mixed the material is emptied into IBC's for storage. The enclosed mixer and IBC filling station are ducted to a Mikro-pulsaire 25/S/30 dust arrestor. The dust collected by the arrestor is recycled back into the process.

The majority of product is dispatched in re-usable IBC's and a small quantity (less than 2%) is repackaged into 25kg paper sacks.

Secondary Screening Plant

Dried material is loaded from IBC's into a 1 tonne hopper and transferred via an enclosed screw conveyor to an enclosed bucket elevator into a three deck enclosed reciprocating screen. Up to three fractions are screened off and stored in IBC's and the main fraction is transferred by enclosed bucket elevator into a 1 tonne storage hopper which can be emptied via an IBC filling station or a paper sack filling station.

Secondary Mixer

This is a stand alone ½ tonne ribbon mixer which can have a portable IBC filling station or paper sack filling station fitted below it.

Sack Packaging Equipment

These are gravity fed or screw packing machines which can be stand alone items or incorporated with the above described processes.

Tanker filling facility

This is used for loading product into bulk tankers and consists of a two tonne hopper, enclosed screw conveyor and enclosed bucket elevator.

Ancillary Equipment

1) Alumina silicate glass (Screening)

Bulk alumina silicate glass (cenospheres) is received on site in IBC's or shipping containers. When received in shipping containers they are unloaded under cover using a container ramp and fork truck. The container is ducted to an extractor fan via a dust arrestor unit fitted with Heath Filtration dust collector bags. When the IBC's are received on curtain sided vehicles they are unloaded adjacent to the pallet storage area.

The majority of the cenospheres are reprocessed (size-graded) before being added to the batching operation via two of the IBC dischargers feeding into the weigh hopper or being sold on. To reprocess the cenospheres the IBC's are emptied into a

feed hopper that loads into an enclosed bucket elevator that feeds an enclosed reciprocating screen that takes out an oversize fraction which is stored in IBC's for use in the blending process. The main fraction is transferred by an enclosed rope and flight conveyor to an enclosed hopper which can feed an IBC filling station, a sack packing filling station or a second enclosed reciprocating screen which further grades the cenospheres into IBC's. The IBC's can be used in the batching process or dispatched to customers along with the 20kg paper sacks. The feed hopper, IBC filling station and paper sack packing station are all ducted to a DCE 1/10/30 dust arrestor fitted with Heath Filtration dust bags.

2) Secondary Drying Plant

Wet product is received by bulk tipper, IBC's or plastic/paper sacks. A 2 tonne hopper is loaded and the material is transferred by bucket elevator to an "indirect tube dryer", the dryer is ducted via a custom made generic sock type dust arrestor fitted with Heath Filtration dust bags, to the existing chimney stack which is continually monitored and logged. The process is capable of processing 2 to 3 tonnes of material per hour.

Portable Equipment

Certain plant can be used in conjunction with IBC or sack pack filling stations:

Sack Packing Equipment – these are gravity fed or screw packing machines which can be stand alone or incorporated with the above described processes.

Single Deck Rotary Screens – these are gravity fed screens used for trials or small production runs of accurately sized materials.

Size Reduction Equipment – this equipment is mechanically fed and used to reduce the size of larger grades of material.

Ploughshear mixer – is manually loaded and used to coat small amounts of material.

Reprocessing excess Material

The following materials are recycled in-process:

- Material from silo filtration plant is returned into the silo,
- Material from the mixer filtration plant is collected and returned into the batching process via an IBC discharger,
- Material from the cenosphere sieving and unloading plants are collected and returned into the cenosphere sieving plant for reprocessing.

Material collected from the dryer and cooler filtration plants are collected in enclosed IBC's before being sent for waste disposal.

Section 1 - Upgrading

There are no upgrading requirements in this Permit.

Section 2 – Plant and Equipment

- 2.1 The process shall be carried out within the boundary shaded in green as indicated on the site plan shown in Schedule 1 of this Permit.
- 2.2 Permitted activities shall only be carried on using the plant and equipment as detailed in the installation description and on the Installation Layout reproduced in Schedule 2 of this Permit.
- 2.3 Sheffield City Council's Environmental Protection Service shall be notified of any proposed operational changes including any alterations to the process involving the provision of new plant or equipment which may affect emissions. The information shall be submitted at least 14 days before the changes take place.

Section 3 – Emissions Limits and Controls

- 3.1 All releases to air, other than condensed water vapour, shall be free from persistent visible emissions and droplets.
- 3.2 There shall be no visible emission from silo inlets and outlets.
- 3.3 Silos receiving pressurised delivery shall be fitted with reverse jet filtration plant.
- 3.4 Silos receiving pressurised delivery shall be fitted with protection systems incorporating pressure relief valves and high level alarms. Alarms shall be audible and visual.
- 3.5 New and replacement filtration plant at the silos shall be designed to achieve particulate emissions of less than 10 mg/m³.
- 3.6 The concentration of particulate matter in emission to air from the dryer stack shall not exceed 50 mg/m³.
- 3.7 The drier stack height shall be 3m above the height of the ridge of any building within 15 metres, and at least 8m above ground level.
- 3.8 Chimneys and process vents shall not be fitted with any restriction to the final opening, for example, a plate, cap or cowl. A cone fitted to the chimney exit to increase efflux velocity is permitted. The discharge shall be vertically upwards.
- 3.9 Exhaust gases discharged through a stack or vent should achieve an exit velocity which is normally greater than 15m/sec during normal operating

conditions to achieve adequate dispersion.

- 3.10 There shall be no visible emissions of airborne dust from the installation across the site boundary.
- 3.11 Introduction of dilution air shall not be permitted to achieve emissions concentration limits.
- 3.12 The monitor serving the emission stack shall continuously monitor the particulate matter emissions from the process for the whole time the process is operating.
- 3.13 In the event of the probe, datalogger, monitoring unit or any other part of the continuous monitor failing or needing to be repaired, the operator shall notify SCC's EPS.
- 3.14 In the event of the continuous monitor being removed from site for repair, the plant the monitor is serving shall be closed down until such time that a replacement probe or monitor is installed, or the repaired probe or monitor is returned, unless additional control measures are agreed in writing with SCC's EPS.

Section 4 – Monitoring, Sampling and Measurement of Emissions

- 4.1 The operator shall maintain a record containing details of alarm events, visual assessments, inspections and maintenance made in accordance with conditions 4.3, 4.4, 4.5, 4.6, 4.11 and 5.1 of this Permit.
- 4.2 The records required by condition 4.1 of this Permit shall be kept on site for a period of at least two years. The date, time, location, any corrective actions, person carrying out the assessment and results of these assessments shall be recorded. The records shall be made available for inspection by or furnished in writing to Sheffield City Council's Environmental Protection Service upon request.
- 4.3 Arrestment and control plant and equipment serving silos and other process operations shall be visually inspected at the frequencies specified below:

Area for inspection	Frequency of monitoring
Seating of pressure relief valves on silos	Weekly or prior to delivery (whichever longer)
Correct operation of silo alarms	Weekly or prior to delivery (whichever longer)
Continuous monitors	Daily
Visible emissions from drier stack	Daily while plant in operation
Process ducts, Equipment housings, Material transfer points, Inlets and Outlets	Daily while plant in operation
Silo inlets and outlets	Delivery start and finish times. During delivery by driver and operator.
Visible emission from site boundary	Daily

Silos Reverse Jet filter	Monthly
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- 4.4 Immediately it appears that the valve has become unseated during silo filling, delivery shall cease and no further delivery shall take place until corrective action has been taken. The pressure relief valve shall be examined to check for defects before being re-set and a replacement valve fitted if necessary. Details of the event shall be recorded.
- 4.5 Excess air at the end of powder deliveries shall be vented via the delivery tanker, which shall be fitted with on-board pressure relief and filtration. Venting excess air via the silo is permissible only with the prior agreement of Sheffield City Councils Environmental Protection Officer.
- 4.6 The emission limit specified in condition 3.6 of this permit shall be monitored as specified in the table below:

Monitoring	Frequency	Method
Periodic extractive	Annual (or as otherwise agreed in writing by Sheffield City Councils Environmental Protection Officer.	BS ISO 9096:2003
Indicative alarm	Continuous while plant in operation	Goyan EMP 7 continuous monitoring system

- 4.7 Continuous monitors shall be operated, maintained and calibrated in accordance with manufacturers instructions, which shall be made available for inspection by Sheffield City Council's Environmental Protection Service.
- 4.8 The alarm on the continuous monitor shall be set at a level of 75% of the emission limit in condition 3.6. Which are 37.5mg/m3.
- 4.9 Sheffield City Council's Environmental Protection Service shall be notified at least 7 days in advance of any periodic monitoring exercise by submitting a site specific monitoring Protocol detailing the pollution and stack to be tested, the method to be signed and dated of the testing.
- 4.10 Results of periodic monitoring shall be forwarded to Sheffield City Council's Environmental Protection Service within 8 weeks of the date of the exercise.
- 4.11 Adverse results from any monitoring activity shall be investigated by the operator as soon as the monitoring data has been obtained. The operator shall:
- Investigate and identify the cause and undertake remedial action immediately;
 - Re-test to demonstrate compliance as soon as possible after;
 - Notify the Environmental Protection Service at Sheffield City Council
 - Promptly record the events regarding the cause and extent of the problem and the action taken to rectify the situation.
- 4.12 The Environmental Protection Service at Sheffield City Council shall be notified within 24 hours by the operator:

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- 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 abatement plant, for example, bag filtration.
- 4.13 All continuous monitoring readings should be on display to appropriately trained operating staff
- 4.14 Instrument should be fitted with audible and visual alarms, situated appropriately to warn the operator of arrestment plant failure or malfunction.
- 4.15 The activation for alarms shall be automatically recorded.
- 4.16 All continuous monitoring shall be operated, maintained and calibrated in accordance with the manufacturer's instructions, which should be made available for inspection be made available for inspection by the regulator. The relevant maintenance and calibration shall be recorded.

Section 5 – Maintenance

- 5.1 The operator shall keep a written maintenance programme with respect to pollution control equipment that can have an impact on emissions to atmosphere.
- 5.2 Spares and consumables subject to continual wear such as replacements for filtration equipment shall be held on site where they should be stored in accordance with manufactures instructions, or shall be available at short notice from guaranteed suppliers

Section 6 – Materials Handling

- 6.1 All bulk powder materials shall be delivered directly to silos. There shall be no open storage of powder materials.
- 6.2 Transfer lines shall be securely attached to delivery point inlets during silo charging.
- 6.3 Silos shall be fitted with automatic cut-off systems and audible and visual alarms to stop delivery in the event of over-pressurisation or over-filling of the silo.
- 6.4 All external conveyors shall be totally enclosed.
- 6.5 Aggregate bays and hoppers shall be enclosed on three sides.
- 6.6 Aggregate stock shall not be stored above bay wall heights or forward of designated bay areas.

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- 6.7 Transfer of materials at bag and container loading stations shall be through socks inserted to container apertures, or with close fitting couplings to prevent spillage and dusty emissions from draughts or wind-whipping.
- 6.8 Dusty and potentially dusty materials shall be stored in silos, fully enclosed containers, confined storage areas in buildings and in all cases in such a manner as to prevent wind-whipping of particulate matter.
- 6.9 No dry unpackaged material shall be stored in the open except for material that has been screened to remove material of 3 mm and under.
- 6.10 Dusty wastes shall be stored in enclosed containers.

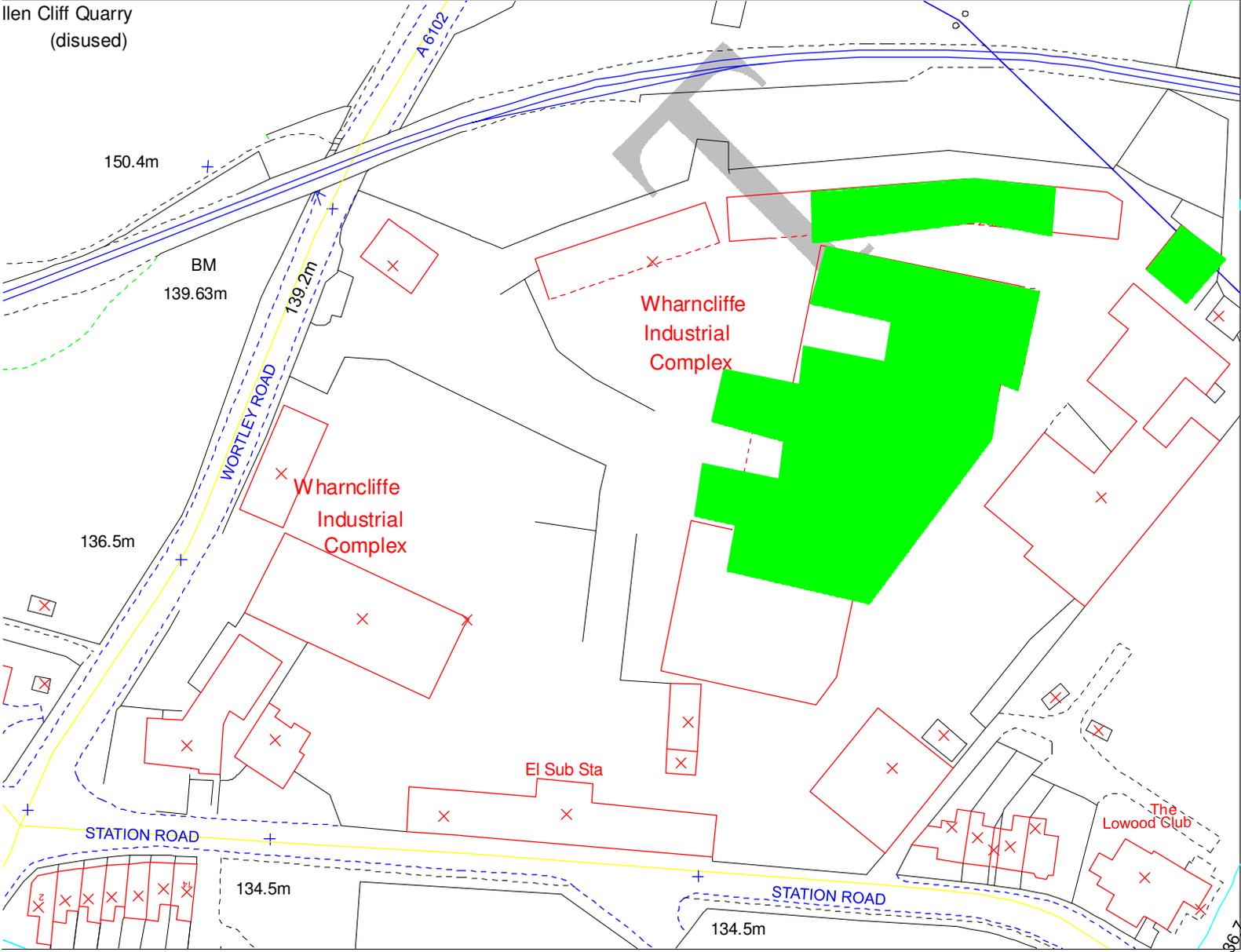
Section 7 – General Conditions

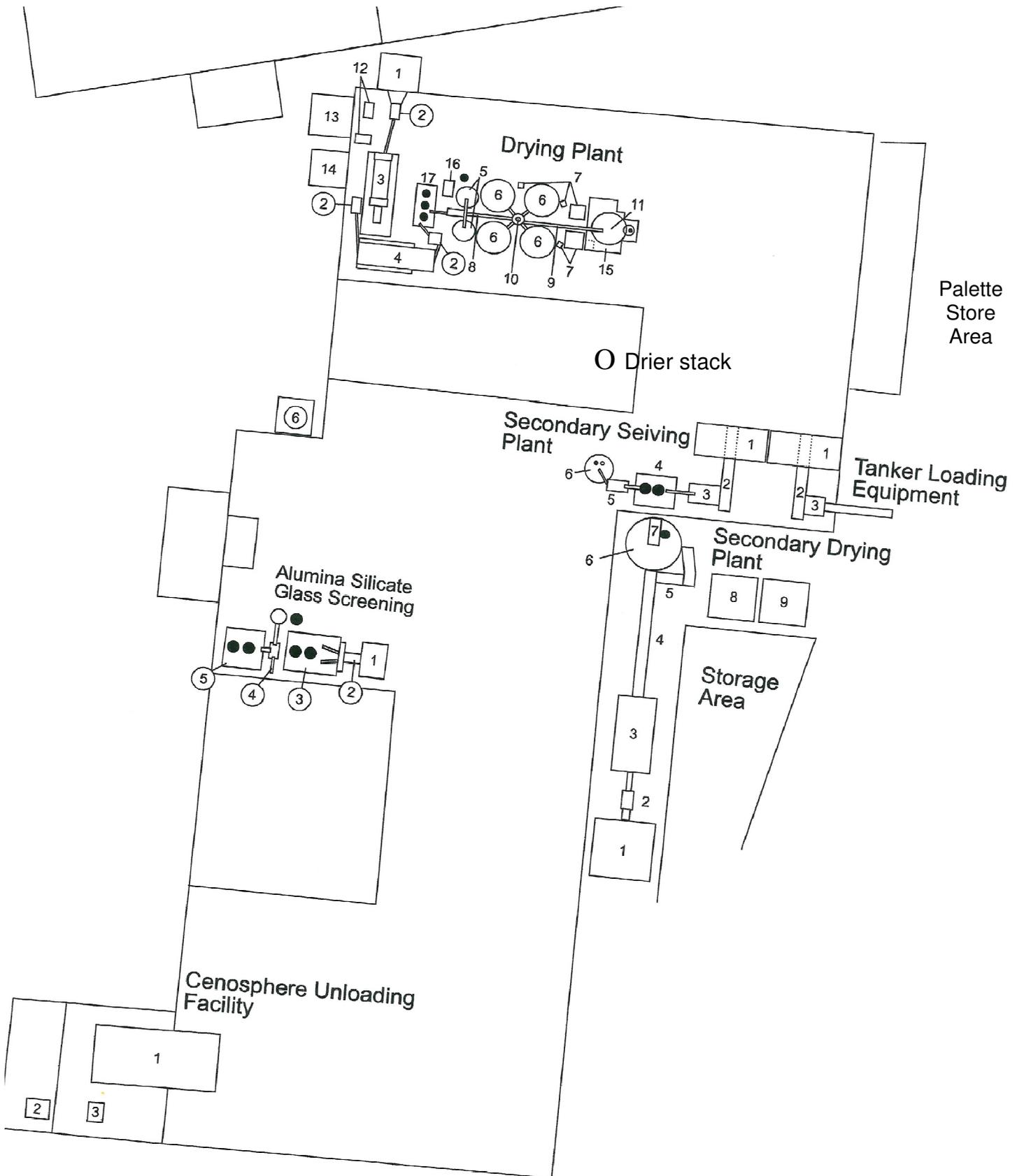
- 7.1 Staff at all levels shall receive training, instructions and supervision necessary for their duties and shall include the following:
- Proper management and supervision for process operations;
 - Responsibilities under the permit;
 - Proper use of equipment;
 - Effective preventative maintenance;
 - Minimisation of emissions at start up and shut down;
 - Actions during abnormal emissions including minimisation of emissions.
- 7.2 The Permit holder shall keep and maintain a statement of training requirements for each operational post and keep a record of the training received by each employee whose actions may have an impact on emissions to atmosphere. These documents shall be made available to Sheffield City Council's Environmental Protection Service upon request.
- 7.3 Tanker drivers shall be informed of the correct procedure to follow during powder deliveries, including actions to be taken if visible emissions occur during silo filling.
- 7.4 External surfaces of the process buildings, ancillary plant and open yards and storage areas shall be kept clean to prevent the accumulation of dusty material in circumstances where dust may become wind entrained. Particular attention shall be paid to roofs, guttering, roadways, external storage areas and yards.
- 7.5 All site roadways where there is regular movement of vehicles shall have a consolidated surface, which shall be kept in good repair.
- 7.6 The building housing the dryer big bag delivery area, silos and abatement plant shall be fully sheeted and maintained structurally sound to prevent fugitive emissions to the atmosphere and to adjoining units. The Permit holder shall routinely inspect and maintain the block work and corrugated

sheeted partitions between the permitted premises and adjoining industrial units to ensure that there are no leaks.

- 7.8 All spillages of potentially dusty material shall be cleaned up promptly by a method that minimises dust emissions (e.g. wet or vacuum methods). Dry cleaning of dusty wastes shall not be permitted.
- 7.9 Exhaust systems of site vehicles shall be directed above the horizontal.
- 7.10 Loading and unloading of containerised cenospheres shall be carried out in the enclosed area as indicated on the Site Layout shown in Schedule 2 of this Permit, with the extraction system operating so as to minimise the generation of airborne dust.
- 7.11 The Best Available Techniques (BAT) shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.

Schedule 1 – Installation Boundary





NOT TO SCALE
See Over For Key

DRYING PLANT

- 1) WET SAND HOPPER
- 2) ENCLOSED BUCKET ELEVATORS
- 3) CONTRAFLOW DRYER TUBE
- 4) COOLER TUBE
- 5) STORAGE SILOS (DRIED BEADS)
- 6) STORAGE SILOS (LIMESTONE GRADES) INTEGRAL DUST COLLECTORS FITTED
- 7) IBC DISCHARGERS
- 8) ENCLOSED CONVEYOR BELT
- 9) ENCLOSED ROPE AND FLIGHT CONVEYOR
- 10) WEIGH HOPPER
- 11) ENCLOSED MIXER
- 12) EXTRACTION FANS
- 13) DRYER DUST ARRESTOR
- 14) COOLER DUST ARRESTOR
- 15) MIXER DUST ARRESTOR
- 16) TRAMP OVERSIZE BIN
- 17) ENCLOSED LOCKER SCREEN

TANKER LOADING EQUIPMENT

- 1) FEED HOPPER
- 2) ENCLOSED SCREW FEEDER
- 3) ENCLOSED BUCKET ELEVATOR

SECONDARY SEIVING PLANT

- | | |
|-----------------------------|-----------------------------|
| 1) FEED HOPPER | 4) ENCLOSED LOCKER SCREEN |
| 2) ENCLOSED SCREW FEEDER | 5) ENCLOSED BUCKET ELEVATOR |
| 3) ENCLOSED BUCKET ELEVATOR | 6) FINISHED MATERIAL HOPPER |

SECONDARY DRYING PLANT

- 1) FEED HOPPER
- 2) ENCLOSED BUCKET ELEVATOR
- 3) INDIRECT DRYER TUBE
- 4) ENCLOSED SCREW CONVEYOR
- 5) STORAGE SILO
- 6) DCE DLM 10/10 DUST ARRESTOR
- 7) GENERIC SOCK TYPE DUST ARRESTOR
- 8) FUEL OIL STORAGE (BUNDED)

ALUMINA SILICATE GLASS SCREENING

- 1) FEED HOPPER
- 2) ENCLOSED BUCKET ELEVATOR
- 3) ENCLOSED ROTARY SCREEN
- 4) ENCLOSED ROPE AND FLIGHT CONVEYOR
- 5) ENCLOSED ROTARY SCREEN
- 6) DUST ARRESTOR

CENOSPHERE UNLOADING FACILITY

- 1) PORTABLE CONTAINER RAMP
- 2) DUST ARRESTOR
- 3) EXTRACTION FAN

ALL PLANTS

-) IBC FILLING POINT
-) PAPER SACK FILLING POINT