

Condition 20 of PP C12/0874/16/MW – The control and monitoring of dust emissions

**Condition 20 i** “Details of design and location of meteorological monitoring station”

Metrological Monitoring Station

The design and use of the station is demonstrated by the detailed information attached as:

Appendix 1 Airborne Particulate Monitor

Appendix 2 Operating instructions

Location

A meteorological monitoring station, measuring wind speed, direction and rainfall, will be installed at the location as shown on Drawing attached.

**Condition 20 ii** “Dust deposition survey undertaken upon the written request of the Mineral Planning Authority for a minimum period of 6 months to measure the dust deposition rate at agreed locations”.

Following installation and commissioning of the Con 20 i equipment the Mineral Planning Authority will be informed whereupon both the period and individual locations will be agreed and implemented.

**Condition 20 iii** “Air quality monitoring regime, including meteorological recording, to be agreed in writing with the Mineral Planning Authority and implemented in accordance with UK National Air Quality criteria for particulates to identify any need for improvements or further control.

- The objective of the regime is to allow the quarry management and the regulator to assess the effectiveness of control measures and to allow necessary action to be taken if the dust mitigation practices or the management system on site does not perform adequately.
- The person nominated for the implementation of the air quality monitoring regime at Penrhyn Quarry is the HSE&Q Manager, his/her deputy or any other person nominated by Welsh Slate Limited.
- The monitoring of PM10 and deposited dust levels will be undertaken using an Osiris Particulate Monitor and a dry foam Frisbee dust deposit gauge, or any other similar equipment, subject to agreement with the Mineral Planning Authority (MPA) the Frisbee unit will be located at 34 Tan y Bwlch as shown on Drawing attached.
- The bottles on the dust deposit gauges will be changed at the beginning of each month, or as close to it as is reasonably practicable and the collected liquid and material will be separated by filtration, with the collected solid material reported as mg/m<sup>2</sup>/day.
- The monitoring of PM10 will occur for a period of one year and deposited dust levels for a period of six months, after which time the MPA and Welsh Slate Limited will review the monitoring results,

Condition 20 of PP C12/0874/16/MW – The control and monitoring of dust emissions frequency and/or procedure.

- If the results of the PM10 monitoring exceed a 24 hour mean of 40 ug m<sup>-3</sup> or deposited dust monitoring exceeds 200 mg/m<sup>2</sup>/day a review of site activities shall be undertaken to identify if they are the cause of the dusty activity.
- Procedures to be adopted if site activity is considered to be the cause of excessive dust levels may include some of the following:-
  - Cessation of the dusty activity
  - Relocation of the activity within the site
  - Water sprays to dampen material being handled
  - Minimise unnecessary handling of material
- The results of any dust monitoring will be forwarded to the MPA on request.

Daily logs of observations will be kept and maintained.

**Condition 20 iv** “Environmental log of dust complaints to be made available to the Mineral Planning Authority upon request”.

This log will include:

- The recording and investigation of all incidents in order to determine the contributory and root cause/s of such incidents
- The ongoing consultation with the complainant in order to keep them aware of all stages of the investigation
- On receipt of a complaint the Mineral Planning Authority will inform the Company where upon an investigation will be undertaken
- On completion the findings will be reported to the Management Team for review and discussion
- Such incidents will be reported at the Local Liaison Group Meeting
- All operatives will receive instructions to the effect that it is the duty of all staff not only any dedicated person to act in a compliant and proper manner
- The Environmental Management System is compliant with ISO 14001:2004 and is independently audited by the British Standards Institute on a six monthly basis in order to confirm compliance
- To establish a link involving the Company the Authority and Complainant with individual nominated persons being the recognised contact points in order to implement any remediation measure that may be considered necessary
- The Environmental log will be reviewed in order to determine the effectiveness of controls

Condition 20 of PP C12/0874/16/MW – The control and monitoring of dust emissions  
**Condition 20 v** “Measures for the suppression of dust caused by the moving and storage of soil, overburden, stone and other materials within the site”.

The following measures will be implemented:

- On site speed limits will be implemented through signage and instructions given during the induction process, which includes all contactors operations and machinery. Any infringements will entail disciplinary action.
- The Quarry Manager or the appointed deputy during the day will assess conditions on an ongoing basis, making use of the meteorological station prior to any adverse change in the weather particularly wind speed, dry conditions when water bowser will be mobilised without delay.
- Provision to be made for additional bowsers should conditions require increased suppression measures.
- Dedicated water bowser on site at all times capable of dowsing water throughout the total site.
- A dedicated and competent person will assess conditions prior to the commencement of operations and if necessary issue specific instructions to the operator of the bowser
- All vehicles to be included in the planned preventative maintenance scheme so ensuring that they are available and fit for purpose.
- All vehicles will be subjected to a pre-start check in order to determine that it is fit for purpose.
- Operations designed in order that traffic movement is minimised within the total site in order to minimise the risk of windblown dust leaving the site perimeter.
- Should the prevailing weather be such that the dust control measures are unable to control dust emissions then operations will either be re-located or ceased until such time as events are brought under control and/or additional water bowsers are employed.

**Condition 20 vi** “The fitting of drilling rigs with efficient dust control measures”.

The following dust control measures will be employed

- All machinery will be assessed as fit for purpose including the incorporation of an efficient dust collection system as a standard fitment.
- The vehicle / equipment will be subject to a pre-start check in order to determine that it is working effectively
- The dust control measures form part of the planned preventative maintenance scheme in order to ensure that they are working efficiently in order to prevent dust arisings.
- In the event that the dust control measures fail then the machine will be shut down until a competent person has repaired and issued confirmation that all is in order
- Daily logs kept and maintained of drilling rig utilisation and use.

Condition 20 of PP C12/0874/16/MW – The control and monitoring of dust emissions  
**Condition 20 vii** “Dust suppression on haul roads, including speed limits”.

- The comprehensive dust suppression measures employed are included in the response to Condition 20 v above
- Daily records are kept and maintained as follows:-
  - Bowser operations
  - Additional bowser operations
  - Prevailing weather conditions
  - Periodic site inspections