

**Application for an Environmental Permit
CAMBRIAN QUARRY**

Fugitive Emissions Plans

Mud and Dirt Management Plan

**Reference No. 2304/426/C v1.1 (Dated 29/08/2014)
Section 1**

ASH Resource Management (Cambrian Quarry) Ltd



Oaktree Environmental Ltd

Oaktree Environmental Limited -Registered in the UK - Company No. 4850754

North West Office, Unit 5, Oasis Park, Road One, Winsford Industrial Estate Winsford, Cheshire CW7 3PP

Tel: 01606 558833 Fax: 01606 861182

E-mail: sales@oaktree-environmental.co.uk Web: www.oaktree-environmental.co.uk

Document History:

Prepared by Oaktree Environmental Ltd On Behalf of ASH Resource Management
(Cambrian Quarry) Ltd

Version	Issue date	Status	Notes
1.0	18/02/2014		

Author : Jan Edwards - Senior Consultant

Contributors :

Contents

<u>Section</u>	<u>Title</u>	<u>Page</u>
1.0	Introduction	3
2.0	Site Description	4
3.0	Identified Risks	4
4.0	Normal Operating Conditions	4
5.0	Abnormal Conditions	5
6.0	Monitoring and Reporting	6
7.0	Action Plan	6
8.0	Investigation and complaints	6
9.0	Other Measures	6
10.0	Site Completion Arrangements	7
Appendix 1	Draft site layout plan: Site roads, wheel washing and drainage	
Appendix 2	Draft Site Diary Check Sheet	
Appendix 3	Draft Complaints/Investigation procedure	

1.0 Introduction

1.1 This section of the management plan sets out the risks posed by mud and dirt arising from the operation of the restoration scheme at Cambrian Quarry and the management measures proposed to prevent monitor and remedy any problems associated with dirt and mud, which arise as a consequence of vehicles leaving the site. The infrastructure and maintenance details are contained in Section 2 of this plan. Failure to implement or have regard to the contents of this or the other management plans associated with the site at any time by an employee of ASH Resource Management (Cambrian Quarry) Ltd or any associated companies will result in disciplinary action in line with standard company procedures. Failure of a contractor to comply with the plan/site rules/or instructions from site staff will lead to a written warning to the individual or their employer any subsequent failure will lead to individuals or contractors being refused entry to the site. Records will be maintained of any management action taken in relation to the MMP within the site log system. The layout of the Mud Management Infrastructure and some of the related drainage infrastructure is shown on the drawing at appendix 1.

Key Staff

- 1.2 The key personnel within the management of the site in relation to the implementation of the mud management plan will be:
- 1.2.1 The site Manager based in the site office with responsibility for inspection and oversight of the whole site and the implementation of the mud management plan. The Site Manager will hold a relevant Certificate of Technical Competence for this type of facility
 - 1.2.2 Wheel-wash supervisors i.e. one operative on duty whenever vehicles are being despatched from the site (plus cover from other company employees).
 - 1.2.3 The supervisors and covering staff will be trained in the routine inspection of the wheel-wash facilities to ensure they are in suitable condition on a day to day basis.
 - 1.2.4 All staff will be trained in inspecting and washing vehicles to ensure no mud remains that could fall from a vehicle. Details of competence training provided and training records are retained in the company's personnel files and will be included within training records in accordance with the written management system.

Review and revision

- 1.3 The plan will be subject to constant review as part of any complaints/investigation procedure in response to incidents or failures falling outside normal operating conditions. The plan will also be subject to a regular audit by the site manager, commencing then being once or twice a year thereafter unless a more frequent audit is considered necessary.

Interaction with other management plans and the Written Management System

- 1.4 This plan is written to complement and combine with the other management systems and plans which will be put in place for this site these include the Written Management System, the Surface Water Drainage Plan, The Dust Management Plan and a number of others which will interface with this plan and will be available prior to import of wastes. There may be a number of amendments particularly in the development stages of the site. Some aspects of the surface drainage plan mentioned in this plan may be subject to changes once the fully integrated surface drainage plan has been developed.

2.0 Site Description

- 2.1 Cambrian Quarry is an inactive limestone and silica stone quarry in Gwernymynydd, 2.5km south west of Mold. The quarry covers a total area of 7.3 hectares, Cambrian Quarry void covers approximately 2.8 hectares. This application involves the importation of inert materials for use in the restoration of the quarry in order to make the quarry faces stable and safe. The restoration will result in the formation of a shallow valley landform which will subsequently be used for agriculture and nature conservation once restored. It also proposed that an inert waste recycling operation will be undertaken within the quarry which would export material off site for re-use and the residues from the recycling process that cannot be re-used may be used in the restoration of the quarry. The void space is estimated to be around 477,000m³ and take around 10 years to complete. The quarry void would be restored progressively in five phases, with the first four phases required to create a stable landform which would stabilise the unstable quarry faces. It is anticipated that between 145,000 and 200,000 tonnes/annum could be transported into Cambrian Quarry and between 45,000 and 60,000 tonnes of this material would be recycled for export. Leaving 70% of the imported material used in the restoration of the site. Materials would be transported using heavy goods vehicles with an average load of 20 tonnes. The average number of HGV loads transported to the quarry per day is expected to be between 28 and 38 (equating to 56 and 76 HGV movements per day).

3.0 Identified Risks

- 3.1 The primary risk is the tracking of mud and dirt by vehicles leaving the site.
- 3.2 There is a secondary risk of mud and dirt washing from the site roads and the site under conditions of extreme rainfall. Calculations for drainage etc. are based on the data gathered for the ESID Report (Appendix F).

4.0 Normal Operating Conditions

- 4.1 All vehicles that have visited the operational area of the site or that are judged to be carrying dirt must leave via the exit road and have their wheels, wheel arches and under body area cleaned before leaving the site. The wash will be supervised by a trained operative who will ensure the lorry remains on the wash for sufficient time to remove adhering mud. When the lorry leaves the wash the wheel-wash supervisor will check the vehicle a second time and if there appears to be a substantial amount of mud still adhering to the vehicle it will be directed to re-use the wash.

- 4.2 The lorry will only be permitted to proceed to the site entrance when judged to be clean and given permission by the wheel wash supervisor. The site road between the wheel wash and the site exit must also be clean and free of mud or debris before a vehicle is permitted to proceed.
- 4.3 Further operative(s) in addition to the wheel cleaning supervisors will maintain the site exit road in a clean condition using manual and mechanical sweepers and washing as necessary.
- 4.4 Drivers failing to obey instructions from the wheel-wash supervisors will face disciplinary action if employed by the operator and if working for a contractor will be ultimately banned from visiting the site after a suitable written warning. The introduction provides a more detailed explanation of the procedures in place. Clearly any disciplinary action against employees will have to be governed by employment law.

5.0 Abnormal Conditions

- 5.1 Abnormal conditions are defined as occasions when any of the following circumstances occur:

- there is an unusual amount of mud adhering to vehicles;
- inclement weather;
- part of wheel wash equipment is not operational;
- insufficient staff are present to implement the Mud Management Plan as described;
- mud is detected on the site road below the wheel wash;
- mud is detected on the highway;

In these circumstances the site manager will assess if it is possible to prevent mud adhering to vehicles leaving the site. If this is considered impracticable the site will be closed.

- 5.2 In most situations when there are abnormal conditions, delivery of waste to the site will cease until conditions improve. There may be scenarios where closure is not required for example delivery of dry material in dry weather delivery of clean hardcore delivery of oversize inert items large pieces of concrete or similar where there is no risk of picking up mud and the equipment and personnel available can ensure there is no mud adhering to vehicles. Conditions may also be improved through any of the following scenarios:
- improving weather;
 - repair/replacement of faulty equipment;
 - deployment of additional equipment/trained staff;
 - other site works such as providing temporary turning/tipping pad of hard core to minimise the picking up of mud on delivery vehicles.
- 5.3 If ice and snow are present in quantities that prevent the safe operation of the site or the satisfactory implementation of the mud management systems the site will be closed for the delivery of waste. Works may be undertaken to clear access roads of ice and snow if access is required. It is considered that unless such conditions are expected to persist for

a considerable time and operations on site can be managed without compromising safety or mud management the site will remain closed until weather conditions improve.

6.0 Monitoring and Reporting

- 6.1 Whenever the site is accepting deliveries of waste the site manager and/or the wheel-wash supervisor will check the exit site road, site entrance and the public highway for signs that mud and dirt are being tracked from the working area.
- 6.2 Checks will be made on arrival at the site at least three times each day when vehicles are exiting from the site and at the end of the day, checks will be recorded in the site diary/inspection record (attached as Appendix 2). If any mud is detected in these areas the action plan outlined below will be instigated or the abnormal conditions actions will be put in place.

7.0 Action Plan

- 7.1 If mud or dirt is found to be on the exit road immediate steps will be taken to inspect the full length of the exit road and the highway outside the site.
- 7.2 Any areas of the exit road where mud is found will be cleaned immediately using manual and mechanical sweeping and shovelling.
- 7.3 If mud has been tracked onto the highway immediate steps will be taken to deploy the road-sweeper to clean the highway.
- 7.4 No more vehicles will leave the site until the exit road/site entrance, and if necessary, the highway have been cleaned and swept.

8.0 Investigations and Complaints

- 8.1 If monitoring of the highway reveals a problem or there are complaints from third parties reported to the site, the site manager will conduct an immediate investigation into the cause of the failure/complaint. Investigations will be carried out in accordance with the complaint and investigation procedure (attached as Appendix 3). A note will also be made in the site diary indicating that an investigation has been conducted/complaint received and the action taken.

9.0 Other Measures

- 9.1 Instructions will be provided to the drivers of all vehicles delivering waste to the site, which will include:
- the exit route
 - the requirement to use the wheel-wash;
 - how to use the wheel-wash;
 - the requirement to obey instructions from the wash supervisors; and
 - details of the sanctions for failure to comply.
- 9.2 If any drivers or sub-contractors fail to follow these instructions they will be prevented from using the site. The instructions will also ask that drivers report any incidents where mud is noted on the highway, or noticed to be originating from other vehicles not visiting the quarry site.

10.0 Proposed Site Completion Arrangements

- 10.1 The exit road and wheel wash will be sited at a level equivalent to the agreed final contours. This means that the wheel washing equipment and site exit roads can remain in-situ until the site is fully restored. The road ways can remain as access tracks for the site when it is restored to agricultural or recreational use or can be easily removed without causing a risk of contaminating the highway. The wheel wash equipment is demountable and therefore can be removed with a minimum of fuss using lorry mounted cranes.

Appendix 1

Draft Site layout plan with parts of the proposed drainage layout

Appendix 2

Draft Site Check Sheet

Appendix 3

Complaints/Investigation procedures.

ASH Resource Management (Cambrian Quarry) Ltd Investigations and Complaints Report Form

Date Recorded	Reference Number
Name and address of complainant*	
Person Noting Breach of Permit Conditions*	
Telephone number of caller	
Time and Date of call	
Nature of breach/complaint (mud on highway, mud on site road, noise, odour, dust, other) (date, time, duration, action taken, time to rectify.)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints/breaches relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
Follow Up	
Actions taken, including any reports made to Site Owner, EA or Local Authority	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Management Systems	
Date changes implemented	
Form completed by	Changes to Management Plans authorised by
Signed	Signed
Date completed	Date agreed

Complaint recording procedure.

- 1) Any investigations carried out or third party complaints received will be recorded on the form below. This form will normally be completed, signed and dated by the Site Manager, if they are not available the Office Manager or a company director will complete the form.
- 2) a) For third party complaints the name, address and telephone number of the caller will be requested.
b) Where a staff member has noted a breach of a permit condition their name will be recorded
- 3) Each investigation/complaint will be given a reference number.
- 4) a) A third party caller will be asked to give details of:
 - the nature of the complaint;
 - the time;
 - how long it lasted;
 - how often it occurs;
 - is this the first time the problem has been noticed; and
 - what prompted them to complainb) For a breach of condition the following details will be recorded
 - the nature of the breach;
 - the time;
 - how long it lasted;
 - action taken to rectify the situation;
 - how quickly compliance was achieved; and
 - is this the first time the problem has been noted;
- 5) The person completing the form will then, if possible, make a note of :
 - the weather conditions at the time of the problem (rain snow fog etc.)
 - strength and direction of the wind; and
 - the activity on the site at the time the breach/complaint was detected, particularly anything unusual.
- 6) The reason for any breach or complaint will be investigated and a note of the findings added to the report along with any reports made to Natural Resources Wales or the local planning authority.
- 7) Following complaints the caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.
- 8) If the complainant is unhappy about the outcome or unwilling to identify themselves the caller will be referred to Natural Resources Wales or the local planning authority.
- 9) Following any investigation/complaint the relevant management plan(s) will be reviewed to ensure appropriate actions are in place to counter any problems.