

Ash Resource Management (Cambrian Quarry) Ltd

Application Ref No. EAWML 104422 (EPR/JB3034RN/A001)

Response to Schedule 5 Notice 16/07/2014 from Mutluluk Williams (Permitting Officer NRW)

1. Phase 5

Phase 5 of the proposed restoration scheme for Cambrian Quarry has not been included as part of the application submission, the application only refers to Phases 1-4. Phase 5 is referred to briefly in the documentation for information only so as to show how it relates to the previous phases. The documentation submitted with the current permit application for Cambrian Quarry therefore only gives in depth details relating to the initial 4 phases.

Phases 1-4 are associated with depositing of suitable infill material to ensure the future stability of the quarry and this was agreed as a recovery operation by Environment Agency (prior to the formation of Natural Resources Wales). Phase 5 will be regarded as the final restoration phase of the quarry and will be addressed under a separate application. Proposal will be discussed between all the relevant parties and the necessary authorisations will be sought in due course.

2. Proposed Mobile Recycling Facility

Phased Layout plans show the proposed locations of the recycling facility (storage and processing) which have been agreed with the Local Planning Authority (LPA). As detailed in the application and supporting documentation the recycling plant is mobile and will initially be located on the current Quarry floor at the southern end of the Quarry void. It will then be relocated to the northern part of the Quarry void when infilling has reached 282m AOD in the north. It will remain in this location and at this level until it has to be removed to enable infilling to be completed in this area. Retaining the recycling plant at this level will ensure that it is located at least 14m below the level of the eastern rim of the Quarry, in order to minimise noise and visual impact. The maximum height of the crusher and screener is 5m and all stockpiles of materials associated with the recycling operation will be no more than 5m high (or any revision agreed with the local authority).

Due to the predicted origin of the material to be processed on site the material will be transported to site generally in the applicant's own fleet of tipper lorries. Therefore the storage of skips is not applicable.

Site surfacing will consist of the quarry floor for phase 1 and then on top of the compacted infill. A pavement of crushed hardcore may be provided if required to assist the operations associated with the recycling activities. The site roads will be located as detailed in the phasing plans which have been agreed by the LPA.

Site Drainage has been detailed in Drawing No. P 103 of Appendix I of the application submission and further details described in the Hydrology and Hydrogeological Report.

3. Aggregates and Soil produced on site

Section 5.1.23 of the EMS

As detailed in Section 5.1.22 mobile plant, operated under the recovery and treatment environmental permit, may be used on site to produce aggregates under a WRAP protocol.

Waste/product removal and export

5.1.23 The operational outputs and residues produced by the site and the disposal or recovery routes envisaged are detailed as follows:

- a) Brick/rubble - for crushing to produce aggregate replacements for on -site or off site use (produced under a WRAP Protocol). Any material which is exported off site without passing the aggregates protocol test will still be regarded as waste and will therefore need to go to an authorised facility for either recovery or disposal. The operator will ensure it has seen all the relevant permit or notices information for the receiving facility.
- b) Fines - exported for use as landfill cover or as material for site restoration works on site. EWC CODE 19 12 09 (minerals eg sands and stones) which may be exported off site or following successful WAC testing may be deposited on site as part of the recovery activity. Fines coded EWC 19 12 12 (other wastes, including mixtures of materials from mechanical treatment of waste) will be used off site.
- c) Soils - used on site or exported for site restoration works and other suitable uses.

All material to be deposited within Cambrian Quarry as part of the 'recovery operation' will either be WAC tested as part of the pre-acceptance criteria ie before it enters the site, or the material will be WAC tested while stock piled on site and will not be deposited as part of the recovery operation until the WAC acceptance has been confirmed as suitable for use.

4. EWC 19 12 12

Waste coded as EWC 19 12 12 will only be accepted on site for processing under the mobile plant and will then be exported off site. If any EWC 19 12 12 wastes are brought into the quarry for processing (eg screening or blending) they will be stockpiled separately (and labelled accordingly) both before and after treatment to ensure the material is not deposited as part of the stability/restoration operation. If there is a market for such waste to be mixed with other waste codes then the blended material will be clearly labelled up for export only, and removed off site for use in the construction industry.

5. SAMPLING BOREHOLES

Monitoring Programme:

There are currently no groundwater level or groundwater quality records for the site or the surrounding area. Infilling the quarry void with the materials which are non leaching, detailed in the application Doc Ref 2304/426/MS/01 Appendix III and following strictly the pre-acceptance and acceptance criteria associated with the site is unlikely to alter groundwater levels or to modify groundwater flow directions. Strict adherence with site methods and procedures will prevent accidental losses on-site during operations of mobile and fixed plant (eg hydrocarbons).

Therefore it has therefore been concluded by Hafren Water who undertook the initial HIA (risk assessment) that no groundwater monitoring will be undertaken. This is based on that there are no boreholes currently in place and it would be extremely difficult due to the complex geology of the site to install and that there is no groundwater currently associated with the quarry void. Based on the list of wastes and the strict acceptance criteria and site procedures in place for the site the risk of any contamination is deemed to be extremely low and therefore would not be regarded as a necessity to undertake groundwater monitoring.

Section 7.3.2 of the EMS should therefore be deleted

6. Appendix C Mud and Dirt Management Plan (Complaints Procedure) and Accident Management Plan (2352/426/AMP/01)

The relevant documents have been revised to include reference to Natural Resources Wales.

7. Technical Standards

Revision to application form B4 to include compliance with 'How to comply with your Environmental Permit'- technical guidance.

8. Former Tip Area

During the site visit on 20th August 2014 with Natural Resources Wales the former tip area was pointed out by John Dennen from Alan'Skip Hire Ltd.

Currently material which has been excavated from the quarry entrance etc to enable the Ecologist to investigate the possible location of bat roosts, has been temporarily deposited in the area considered to be the 'former tip area'.



It was agreed on during the visit site that the preferred option would be to remove most of the recently deposited material from this area, leaving just a thin layer (approximately a metre in depth) to minimise disturbance of material which has been tipped historically under previous licences.

Impact from historically tipped material- the risk assessment has based on the assumption that asbestos and possibly other contaminated material may have been imported onto site (possibly legally under the previously licences) but due to the strict waste acceptance which will be adhered to for the proposed restoration and processing activities and the strict adherence to site methods and procedures there will be no additional risks perceived. Also the proposed drainage design which has been agreed at the planning stage takes into account any previous deposited material and diverts drainage away from the former tip area.

9. Asbestos (possibly from former tipping)

Details of the former tipped area and reference to anecdotal evidence regarding the possible tipping of asbestos containing material and the recommendations are covered in the report dated 9th July 2012 produced by Robin Draper BSc, MCIWM following his walk over survey. There was no evidence of potentially hazardous waste observed during his site visit. The wastes observed were mainly quarrying rubble, brick rubble and subsoils associated with construction and demolition and repair of highways and quarry waste. The report concluded that intrusive investigation could not conclusively prove an absence of hazardous material. Making the assumption that asbestos containing material is present, programming works with this in mind is the best practicable approach to take and as far as is practicable disturbance of previously tipped material should be avoided. Restoration should also avoid as far as possible altering the hydrogeological situation of the previously tipped material. Proposals for the drainage of the restored area should avoid increasing infiltration into previously tipped material.

An area of previously deposited material will abut and be overlain by proposed fill material. In this area there is considerable re-growth of scrub and saplings. Particular care should be taken when removing vegetation prior to deposit of restoration material avoiding surface disturbance as far as possible. Overrunning of previously deposited material with heavy plant should be minimised.

It has therefore been recommended not to carry out intrusive testing as this would not conclusively prove an absence of hazardous material and would not be recommended as far as health and safety is concerned.

Strict waste acceptance procedures will be in place as part of the permit requirements to ensure no asbestos containing wastes will be deposited on the site.

It has been documented in the application submitted for the recovery activity that there is a possibility that asbestos containing material may have historically been tipped on site. This information should be taken into account therefore when any future surrender application is submitted. Based on the information gathered during the pre-application stage, it is clear which parts of the site have been subject to deposit of waste. It is therefore wholly reasonable that if intrusive investigation at the time of surrender were required only wastes deposited under the permit would be sampled and analysed to determine the surrender.

Additional information requested following site visit

Inclusion of EWC code 17 05 04 Soil and stones other than those mentioned in 17 05 03.

Waste Recovery Plan: Response 2 from Environment Agency dated Dec 2012 states all wastes listed are suitable for restoration works. The Geoscience technical team assessed the waste recovery plan and advised that all the waste streams requested are suitable for use in this proposal (but advised that EWC 10 12 08 would need testing before deposition as they may contain substances which could potentially cause pollution to surface water/groundwater.

EWC 17 05 04 is permitted to be deposited under a U1 waste exemption so considered suitable for deposit as a low risk activity.

It has been confirmed EWC 17 05 04 is suitable for deposit at Cambrian Quarry and bearing in mind the pre-acceptance and on site checks (detailed below) that will be taken at this site this will ensure that only material suitable for the stability/restoration (recovery) operation will be deposited within the quarry.

Criteria for acceptance of waste

Pre- Acceptance Criteria to Assess Waste

In order to prevent the acceptance of unsuitable wastes on site which may lead to adverse reactions or uncontrolled emissions, systems and procedures will be in place to ensure that wastes are subjected to appropriate technical appraisal prior to acceptance into Cambrian Quarry site. This ensures the suitability for the proposed stability/restoration operation and the mobile processing facility and the checks will be carried out before any decision is made to accept a waste.

The following criteria shall apply to the acceptance of waste at Cambrian Quarry for both deposit in the quarry restoration and processing to produce secondary aggregates to be used in the construction industry (under a WRAP Aggregates Protocol)

Waste may only be accepted where its acceptance would not -

- (a) result in unacceptable emissions to groundwater, surface water or the surrounding environment;
- (b) jeopardise environment protection systems or
- (c) endanger human health.

The site will take materials such as: clean construction and demolition waste; hard core, soils and stones for crushing, screening and re-use as aggregate or topsoil or for deposit in the quarry.

The waste acceptance procedures consist of a pre-acceptance check (Stage 1) involving the provision of information and representative sample data of the waste being considered. This will allow the permit holder to determine the suitability of the waste to be either processed to produce a recycled aggregate under the Company's Secondary Aggregates certified protocol regime or suitable for deposit in the quarry for restoration etc, before arrangements are put in place to accept the material.

Stage 2 is the acceptance procedure which is followed once the waste has arrived at the site., thus confirming the characteristics of the material, without the time pressure and potential hazard of checking the waste at the gate.

Guidance will be given by the site operator to all employees, sub-contractors, other waste carriers and customers regarding the waste types which are acceptable at the site i.e. a copy of the relevant authorisations for the site such as the Environmental Permit and Planning Permission. Where waste is brought in under sub-contractor is delivered by other known hauliers then the carrier registration details will be taken. All haulage operators bringing waste to the site will be periodically checked with Natural Resources Wales to ensure that they are registered. The procedures below will be followed prior to the receipt of waste onto site.

For the protection of the operator and site supervisor any loads from an industrial site/area must be accompanied by written documentation to demonstrate whether the material can be classified as inert, non hazardous or hazardous. And where present the data must show the level and type of contamination involved.

To ensure that a full understanding of the type of waste to be received at site the following information will be requested from waste producers (if relevant) at the start of each contract to ensure compliance with the permit requirements (basic characterisation of the waste). The operator reserves the right to refuse such loads and contact Natural Resources Wales where necessary (prior to acceptance of the loads) to ensure that the load is acceptable.

- (i) A site investigation report, including borehole logs (if available).
- (ii) Waste analyses (if available), including leachability tests.
- (iii) Name and address of the site from which the waste was excavated/produced.
- (iv) Detailed waste description, composition of the waste including EWC code.
- (v) Its hazards
- (vi) Specific handling requirements

The information is required from the producer of the waste and the operator must ensure that the data is reliable and that comprehensive information has been provided to determine the suitability of the waste for the proposed treatment facility. The information should be reviewed regularly and kept up to date with any changes to the waste stream.

All data relating to the waste stream must be verified by the management of the company producing the waste and a visit to the site producer may be appropriate. The number of links in a chain down which a sample may be passed will be kept to a minimum to avoid information loss or misrepresentation. The operator will carefully verify the information received at the pre-acceptance stage and as well as having written information of the waste they will request to see representative samples of the material. The operator will need to be aware of any deviations from the original sample data.

Adequate sampling and analysis will be carried out to characterise the wastes. The number of samples taken is based on the assessment of the risks of obtaining a true analysis/characterisation of the waste stream. Advice will be sought from Natural Resources Wales or Environmental Scientist/Consultant if required. The information is necessary to screen out

unsuitable wastes, confirm details relating to the composition and identify verification parameters that can be used to test waste arriving at the site and identify any substances within the waste that may be unaffected by any proposed treatment process.

A waste tracking system will begin at the pre-acceptance stage. For every unique enquiry a record will be raised with a unique reference number and the record will follow the waste during its acceptance, checking stage, storage, treatment or removal off-site. If the waste is a regular arising then the document will be unique to that waste stream. All records relating to pre-acceptance should be maintained at the site for cross-reference and verification at the waste acceptance stage. The length of time the records will be held will depend on whether the waste is actually delivered to the site or likely to be delivered. Analysis will be carried out by a laboratory with robust quality assurance and quality control methods. The analysis required will depend upon the nature of the waste and what is known about the waste already. The relevant sectors of the guidance including the indicative BAT requirements for pre-acceptance of waste as detailed in TGN 5.06 will be taken into account by the operator for all waste streams being considered for possible acceptance on site.

The main characterisation work should have taken place at the pre-acceptance stage, thus reducing the burden on the acceptance procedures when the waste arrives at the site. This should minimise the time the delivery vehicle is kept waiting on site.

All incoming vehicles are required to report to a designated representative of the operating Company responsible for checking in loads. The details of the load will be recorded and the duty of care note/company documentation will be further checked by the operator to ensure that the load is acceptable at the site, including a visual check prior to the vehicle proceeding to the tipping area and if need be provision for any additional sampling to be undertaken. It should be noted that **WAC testing** will be carried out on the wastes before they enter the site or if be subjected to on site processing stockpile material will be WAC tested, prior to deposit as part of the restoration activity and only if it passes the test will it be deposited at Cambrian Quarry (ie waste deposited as part of the restoration process will be at the appropriate time be subjected to WAC testing).

Any deviation from the procedures or problems with any loads will result in tipping facilities being suspended for the offending company. Loads which are not acceptable within the

above terms will be rejected and returned to the producer.

SAMPLING AND TESTING

Sampling of loads will be undertaken as part of a routine procedure for verifying the nature of waste to be accepted at the site. Waste producers will need to include analyses when booking in waste streams for acceptance at the site. Only analyses that have been undertaken in line with MCERTs requirements where necessary and practicable will be accepted as evidence that materials are suitable for acceptance at the site.

Any samples that require to be sent off site for testing/monitoring will be despatched to an appropriate laboratory where suitably accredited test methods are in place.

Please refer to Appendix 3 of the Environmental Management System for the two lists of waste types for both the quarry restoration and the processing operations to be carried out at Cambrian Quarry. If any additional waste types are required they would be subject to the agreement of Natural Resources Wales prior to acceptance on site.

RECORDS AND TESTING

An internal tracking system and stock control procedure will be in place for wastes associated with the site cross-referenced at the pre-acceptance stage which will enable the site to manage the throughputs of waste and is a necessary requirement of the operators' Secondary Aggregates Protocol procedure. The documented tracking system will follow the waste during its acceptance, storage, treatment and removal off-site. Consequently the operator should be able to identify where a specific waste load is in the site process, the length of time it has been there and the proposed or actual treatment route. The tracking system will also enable synergies between wastes to be used to the advantage of the operator.

WRAP PROTOCOL

Material will be tested as detailed in the WRAP Protocol documentation to ensure the secondary or recovered aggregates are fit for purpose and have been produced to the specification of the customers. Once the materials have met the requirements of this protocol they are no longer regarded as waste. Copy of the Aggregates Protocol document will be held in the site office and is available for inspection by the customer and regulator.