

# Wivenhoe Quarry

## Waste Acceptance Procedures

**Tarmac Limited**

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**Disclaimer: Please note that this report is based on specific information, instructions and information from our Client and should not be relied upon by third parties.**

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## 1 Introduction

### 1.1 Report Objectives

Byrne Looby Partners (UK) Ltd (ByrneLooby) have been commissioned by Tarmac Trading Limited (Tarmac) to undertake an Environmental Permit Application for the restoration of the Wivenhoe East Quarry. This Waste Acceptance Procedures (WAP) report has been produced to support the application for the quarry restoration.

There is an obligation to restore the “land to the south of Colchester Main Road (known as Sunnymead, Elmstead and Heath Farms), Arlesford, Essex, CO7 8DB” (the Site) as required by Planning Permission ESS/17/18TEN. The approved restoration scheme comprises a combination of return to agricultural land and the creation of low-level water-based nature conservation habitats, lowland meadow, woodland planting and hedgerow enhancement.

A Waste Recovery Plan has been produced (ByrneLooby Report K6009-ENV-R001) and lists the proposed waste for use in this scheme in Table 1.

The criteria for the acceptance of wastes has taken into account the Site Conceptual Model developed in the Hydrogeological Risk Assessment and Environmental Risk Assessment (referenced: K6008-ENV-R004 and K6008-ENV-R003), so as to ensure that there are no:

- unacceptable emissions to the groundwater and surface water and surrounding environment; and
- unacceptable risks to human health.

The waste types accepted will present a negligible risk to the surrounding environment in terms of leachate and gas generation.

### 1.2 Geotechnical Suitability

The purpose of the waste recovery activity is to commence the significant task of restoring the quarry to the restoration contours mandated by the planning consent. This material once placed will not be required to support any built structures and is not required to be geotechnically suited to that task. It will however need to be sufficiently stable to be a self-supporting mass pending restoration of other areas of the site.

The waste materials to be used for restoration of the site will be predominantly sourced from local development projects. It is anticipated that a significant proportion of the material accepted will originate from greenfield excavations. The bulk of the wastes to be accepted at the site will comprise excavated soils and fall under EWC codes 17 05 04 “*Soils and stone other than 17 05 03*” and 20 02 02 “*Soil and stones*”.

Excessively wet material will however not be geotechnically suitable for construction of the landform. This will be identified at source as evidenced by its handling characteristics during

loading. In the unlikely event the any wet loads are subsequently identified on arrival at site, they will be rejected (see Section 2.6).

## 2 Waste Acceptance

### 2.1 Waste Acceptance

Waste acceptance will follow a structured hierarchy with appropriate points of control for the identification and validation of suitable wastes. The waste acceptance procedures will be an integral part of the site Environmental Management Systems (EMS) and can be summarised as follows:

Level 1: Basic characterisation through pre-submission of an appropriate waste classification (European Waste Catalogue (EWC) codes, site investigations etc);

Level 2: Compliance testing; and

Level 3: On-site verification through retrospective review of material deposited at site.

Each stage in is detailed further below. Reference has been made to Agency guidance<sup>1</sup>.

### 2.2 Level 1: Waste Characterisation

The permitted waste types are listed in Table 1 of the Waste Recovery Plan.

The EWC code of wastes will be checked against any relevant available information provided directly to the Operator from the supplier e.g. waste description, waste source or chemical testing to confirm the waste coding is correct, it can be accepted under the permit and it is suitable for the proposed activity. The waste enquiry procedure requires the following information to be gathered from any potential waste load prior to waste acceptance:

- Full address where the waste was produced;
- The identity of the producer;
- Information on the waste production process (description including characteristics of raw materials and products);
- Source and origin of waste (e.g. site investigation reports, borehole logs);
- Description of the waste treatment applied, or a statement of reasons why such treatment is not considered necessary;
- Code according to the EWC;
- Evidence the waste is free from contamination;

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<sup>1</sup> [Waste acceptance procedures for deposit for recovery - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

- If available or appropriate, chemical analysis data on the composition of the waste (i.e. total mg/kg) and the leaching behaviour (i.e. WAC);
- Appearance of the waste (e.g. smell, colour, physical form); and,
- The quantity of waste available for import, how that waste relates to the testing provided e.g. stockpiles or borehole logs and how it will be separated from other noncompliant stockpiles at the source site.

Agency guidance<sup>1</sup> includes a list of wastes that are assumed to be inert and therefore acceptable without testing if they:

- come from a single source;
- are well characterised and described;
- carry no risk of contamination, for example from a site that has not previously been developed; and,
- are listed waste codes that do not need analysis (provided in Agency guidance), which includes all EWC codes listed in Table 1 of the Waste Recovery Plan.

In the case of suspicion of contamination (either from visual inspection or from the knowledge of the origin of the waste) the waste must be WAC tested (or refused acceptance on site).

If WAC testing is required, the appropriate data will be requested from the waste producer and will be reviewed by a suitably qualified person, using the WAC criteria specified in Section 2.1.2 of the Council Decision 2003/33/EC including the likelihood of hazardous properties also being present.

### **2.3 Quantity of Waste Required**

The recovery scheme requires approximately 1.2million m<sup>3</sup> to restore the site back to the final restoration contours as illustrated on Drawing W328-00062-12-D. This equates to 1.9 – 2.3 million tonnes of material at a density of 1.6 – 1.9T/m<sup>3</sup>.

It is assumed waste will only be considered for acceptance if chemical analysis is provided in advance, along with a physical description of the material. The material will be from a single supplier and if the material is arising from a single known source, i.e. a discrete site excavation, then the required number of samples according to Agency guidance is 1 to 3 times a year for each waste stream. Any deviations from this assumption will require the supplier to effectively double the number of samples provided. The Operator will not accept material which is generated from an unknown process or without source knowledge (they will request site investigation information as a minimum and reserve the right to visit the source site).

Compliance with the WRP will be assessed by ongoing survey of the recovery area and a rolling tally of the quantity of material imported to the site.

## **2.4 Level 2: Compliance Testing**

Once the waste has been deemed acceptable for the site by basic waste characterisation, and WAC tested (if deemed necessary) it is unlikely to require compliance testing on a regular basis due to the limited volume of inert waste from each source, e.g. excavated soils from specific development sites.

The level 2 compliance testing will be carried out in accordance with the requirements of Agency guidance<sup>1</sup>. In general, accepted waste will be tested 1 to 3 times a year for each waste stream. Any deviations from this assumption will require the supplier to effectively double the number of samples provided. The Operator will not accept material which is generated from an unknown process or without source knowledge (they will request site investigation information as a minimum and reserve the right to visit the source site).

## **2.5 Level 3: On-Site Verification**

Assuming the initial checks have been completed to the satisfaction of the site management / chemist, the weighbridge operator will be the second point of control prior to deposit of wastes in the site.

All incoming vehicles will enter the site via the main site entrance and check in at the weighbridge. The documentation accompanying the load shall be checked by the weighbridge operator and shall include, but not be limited to, the Carriers Certificate of Registration and Duty of Care Waste Transfer Note. The information to be recorded in respect of each load will be:

- Pre-treatment details;
- Waste Type and EWC code;
- Date;
- Time;
- Customer Name;
- Vehicle Registration Number and Type;
- Ticket Number; and,
- Carriers Certificate of Registration.

It is recognised that there are difficulties achieving a visual inspection of waste loads arriving at the weighbridge in compacted or bulky type vehicles. For these types of loads emphasis is placed on checking the documentation at the weighbridge and the visual inspection at the recovery area.

1. Every load of waste delivered to site will be visually inspected (where possible) by the weighbridge operator or other site staff prior to deposit, and after deposit by the plant operatives working at the recovery area.



2. The weighbridge operator will confirm that the accompanying documentation (i.e. waste description or likely levels of contamination) demonstrates that the waste load is the same waste type described by the customer at the pre-acceptance stage. If the documentation is not correct and the correct paperwork cannot be provided, the weighbridge operator will inform the site manager or nominated technically competent person (TCP) and the load rejected.
3. Where practicable, the weighbridge operator or other site operatives will then visually inspect the load for compliance with the documentation. If the inspection shows that the load differs from the description, the load will be rejected as above
4. For wastes produced by the operator this visual verification may be made at the point of dispatch. In such cases this verification must be documented and the document be made available at the receiving site.
5. The weighbridge operator will inform the operatives at the recovery area via two-way radio or other method of communication of the declared waste description and its impending arrival at the recovery area. The weighbridge operator will ask the operatives at the recovery area to confirm by visual inspection that the load is compliant and is accurately described.
6. The operatives at the recovery area will undertake a visual inspection of each waste load arriving to site. Should any load look suspicious or unsuitable for recovery the operatives at the recovery area will contact the weighbridge operator to assess the waste load in question.
7. If the waste is not acceptable, the weighbridge operator will inform the site manager or TCP. The waste will be re-loaded onto the delivering vehicle and rejected from the site. The Agency will be informed of any incident of rejected waste.

Level 3 testing will be applied in accordance with Agency guidance<sup>1</sup>. It is expected that the material brought to site will be from a limited number of sources and hence homogenous in nature, with the carrier limited to one company.

## **2.6 Rejection Procedure**

The rejection procedure covers the system for controlling all actions involved with the rejection of a load or part load of waste, which has been determined by inspection to be unsuitable for recovery at the site. The procedure outlines what is to be done in order to deal with wastes which have been rejected either at the weighbridge reception area or at the recovery area.

A holding or quarantine area will be designated for waste vehicles or part loads. Any unpermitted waste will be prevented from being unloaded where possible, or isolated and reloaded as quickly as possible. Any incompatible wastes, which are impractical to reload will be segregated in the isolated area until they can be transported to a suitable disposal site in accordance with arrangements made with the Agency and using any relevant documentation. The designated quarantine area will comprise of an isolated area large enough to accept a lorry (approximately 15m x 4m).

Any waste identified as being unsuitable for recovery at the site will be rejected. A record will be kept of the following:

- Date and time;

- Person rejecting waste;
- Haulier /customer name and address including carrier number;
- Vehicle registration number;
- Producer name and address if known;
- EWC number;
- Transfer note number; and,
- Waste description.

The event will be recorded and the Agency will be notified as soon as possible of any rejection of part or all of a waste delivery. Any wastes that have been rejected will be removed from the site within a maximum of five days of receipt of the waste at the site and within 24 hours of the quarantine area becoming full.

## **2.7 Site Records**

All records will be maintained and kept on file until the permit is surrendered. Records can be made available to the Agency for inspection if required.



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[www.byrneology.com](http://www.byrneology.com)

Email: [info@byrneology.com](mailto:info@byrneology.com)