



# Saxon Pit Stabilisation Buttress Environmental Permit Application

## Operating Techniques

### **East Midlands Waste Management Ltd**

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## 1.0 Introduction

SLR Consulting Ltd (SLR) has been instructed by East Midlands Waste Management Limited (EMWM) to prepare an application for an Environmental Permit (EP) for the construction of a buttress to stabilise the southern face of Saxon Pit, located at Peterborough Road, Whittlesey, PE7 1PJ (the Site).

This report describes the operating techniques that will be implemented at the facility to ensure compliance with the conditions of the EP. The report has been drafted to satisfy the requirements of Environment Agency (EA) guidance including “Non-hazardous and inert waste: appropriate measures for permitted facilities”<sup>1</sup> and is divided into the following sections.

- Section 1: Introduction
- Section 2: Management
- Section 3: Operations
- Section 4: Emissions and Monitoring
- Section 5: Information

## 2.0 Management

### 2.1 Management System

EMWM will operate their own in-house environmental management system (EMS) which will ensure that:

- the risks that the activities pose to the environment are identified;
- the measures that are required to minimise the risks are identified;
- the activities are managed in accordance with the management system;
- performance against the management system is audited at regular intervals; and
- the environmental permit is complied with.

The EMS will be supplemented by this document which outlines the proposed operating techniques at the site and demonstrates conformance with the requirements of relevant and published EA Guidance.

#### 2.1.1 Management System Structure and Responsibilities

The Site manager will be responsible for day-to-day operations and ensuring compliance with the EP.

Whenever the Site is open to receive wastes or carrying out any of the waste management activities, supervision will be provided by at least one member of staff who is suitably trained and fully conversant with the requirements of the EP regarding:

- waste acceptance and control procedures;
- operational controls;
- maintenance;

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<sup>1</sup> <https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities>



- record-keeping;
- emergency action plans; and
- notifications to the EA.

Brief descriptions of the responsibilities of those staff that are involved in managing and operating the Saxon Pit site are outlined below.

**Table 2-1: Roles and responsibilities**

Position	Company	Responsibility
Permit Holder	East Midlands Waste Management Limited	To ensure that the management and operation of activities undertaken at the Saxon Pit site are carried out in accordance with the Environmental Permit and other applicable legislation to protect human health and the environment, in addition to company policies and procedures.
Site Manager	East Midlands Waste Management Limited	The Site Manager will have overall responsibility for onsite management and operations including being responsible for health and safety. The Site Manager will ensure that: <ul style="list-style-type: none"> <li>• The Site is available to receive waste;</li> <li>• The arrangements for the removal of wastes from the Site is acceptable; and</li> <li>• The Site is operating within the parameters of the EP</li> </ul>
Delegated Site Manager	East Midlands Waste Management Limited	The Delegated Site Manager will be nominated by the Site Manager where the Site Manager is unable to attend or conduct duties at the Site. The Delegated Site Manager will assume the duties of the Site Manager.
Site Operatives	East Midlands Waste Management Limited	The Site Operatives will undertake the operations at the Site as defined by the EP in accordance with the EMS and as directed by the Site Manager.
Weighbridge Operator	East Midlands Waste Management Limited	The Weighbridge operator who will record all deliveries of waste, etc.



### **2.1.2 Technical Competence and Training**

The Site will be managed by sufficient staff, competent to operate the Site. In accordance with the EMS:

- all staff will have clearly defined roles and responsibilities;
- records will be maintained of the skills required for each post;
- records will be maintained of the training and relevant qualifications undertaken by staff to meet the requirement of each post; and
- operations will be governed by standard operating instructions.

Operations at the Site will be under the overall control of a technically competent person who holds the required Certificate(s) of Technical Competence (COTC) under the Waste Management Industry Training and Advisory Board (WAMITAB) scheme.

An assessment of staff training needs will be carried out to identify the posts for which specific environmental awareness training is needed, and to determine the scope and level of such training. The assessment of training needs will be reviewed on an annual basis.

The training programme will ensure that relevant staff are aware of the following:

- regulatory implications of the EP for the Site and their specific work activity;
- all potential environmental effects from operations under normal and abnormal circumstances;
- the need to report deviations from the EP; and
- prevention of accidental emissions and action to be taken should accidental emissions occur.

### **2.1.3 Display of Environmental Permit**

A copy of the EP will be kept available for reference by all staff and contractors whose work may have an impact on the environment.

### **2.1.4 Managing Documentation and Records**

Controls will be in place to ensure that all documents are issued, revised and maintained in a consistent fashion.

The documents that will be included within the scope of the controls are as follows:

- policies;
- responsibilities;
- targets;
- maintenance records;
- procedures;
- monitoring records;
- results of audits;
- results of reviews;
- complaints and incident records; and
- training records.



Operational records will be made and kept up to date on a daily basis to reflect waste deliveries. All records relating to the waste acceptance will be maintained and kept readily available on-site for a minimum of two years.

### **2.1.5 Reporting Non-Compliance and Taking Corrective Action**

Procedures will ensure appropriate corrective action is taken in response to problems identified at the site. The procedure will ensure that non-conformances are reported, investigated and rectified, and that failures and weaknesses are prevented. The following aspects will be considered:

- actual or potential non-compliance;
- system failure discovered at internal audit;
- suppliers or subcontractors breaking the agreed operating rules;
- incidents, accidents, and emergencies;
- malfunction, breakdown or failure of plant;
- other operational system failure; and
- complaints.

The action taken in response to the non-conformance may include:

- obtaining additional information on the nature and extent of the non-conformance;
- discussing and testing alternative solutions;
- modifying procedures and responsibilities;
- seeking approval for additional resources and training; and
- contacting suppliers and contractors (as applicable).

### **2.1.6 Auditing and Legal Compliance**

There will be a formalised internal auditing procedure to ensure the facility is audited at defined intervals and that the progress of corrective and preventative action is monitored.

### **2.1.7 Monitoring, Measuring and Reviewing Environmental Performance**

A formalised management structure will review environmental performance, and ensure any necessary actions are taken.

### **2.1.8 Operational Control, Preventative Maintenance and Calibration**

The EMS will complement operational procedures so as to ensure effective control of site operations, the use of approved suppliers and contract services, the maintenance of operational equipment and the calibration of monitoring equipment.

All plant and equipment will be subject to a programme of planned preventative maintenance which will follow the inspection and maintenance schedule recommended by the manufacturer.

### **2.1.9 Design and Construction**

All relevant elements of the Site which are not already constructed will be designed in accordance with recognised standards, methodologies and practices.

The design process will use a risk-based approach and will be appropriately documented using drawings, specifications and method statements to provide an adequate audit trail.



Construction Quality Assurance (CQA) plans will govern all construction activities necessary in the future. These CQA plans will be prepared by competent and suitably qualified persons.

A competent and suitably qualified person will supervise any construction activities to be undertaken.

## **2.2 Accident Management Plan**

EMWM recognises the importance of the prevention of accidents that may have environmental consequences and that it is crucial to limit those consequences.

An accident management plan will be implemented and maintained at the Site to ensure that the Site and its staff are fully prepared in the event of occurrence of accidents/incidents. The accident management plan will be reviewed at least every four years or as soon as practicable after an incident, with changes made accordingly to minimise the risk of occurrence.

The following accident management plan describes the techniques that will be implemented to minimise the risks posed to the environment. Activities affecting the health and safety (H&S) of operatives, contractors and visitors will be separately managed in compliance with H&S regulations and company H&S Policy.

### **2.2.1 Hazard Identification**

The following accident hazards were identified in the Environmental Risk Assessment (ERA) included in Section 7 of the EP application:

- unauthorised waste;
- plant or equipment failure;
- fire;
- loss of containment: spillage and leakage;
- security and vandalism; and
- flooding.

The following sections summarise the measures which will be employed to minimise the potential causes and consequences of accidents.

### **2.2.2 Unauthorised Waste Receipt and Processing**

The acceptance of unauthorised waste materials could have unintended consequences upon the environment including risks associated with odour and the contamination of land and water. All wastes will be subject to inspection and checking against the declaration on the waste transfer note. Documentation will accompany all waste material accepted. In the event that unauthorised waste is delivered to the site, the waste will be segregated and stored in a designated quarantine/isolation area prior to export from site.

To prevent impacts associated with the acceptance of unauthorised waste, EMWM will:

- only accept waste types as detailed in Section 3 of this OT;
- accept only wastes that conform to the site-specific waste acceptance criteria detailed in Section 3 of this OT;
- employ strict waste acceptance procedures to identify, reject and/or segregate potentially non-conforming waste;
- inspect and check waste against the declaration on the waste transfer note; and



- segregate unauthorised waste delivered to the site in a quarantine area prior to export from the site.

All imported waste will be subject to strict pre-acceptance and acceptance procedures, as detailed in Section 3.4, and any unauthorised waste will be dealt with as described in Section 3.4.4.

### **2.2.3 Plant or equipment failure**

Plant and equipment are visually inspected prior to every use to ensure they are fit for purpose.

In the event of breakdown of vehicles or plant, repairs will be actioned as a matter of urgency. If repairs cannot be resolved quickly, an alternative vehicle or plant will be sourced from the supplier until the defect can be repaired. If the machine used for levelling and compacting the waste breaks down, the Site Manager will, as a matter of urgency, make arrangements for its repair or replacement and note the details in the site diary. Should the repair or replacement of the machine not be achieved by the end of the day on which the breakdown occurs, a tracked excavator or tracked loading shovel shall be used to compact and level the waste until the compactor has been repaired or replaced.

All mobile and fixed plant is included on an inspection and service schedule. Operatives are required to complete inspection records for all plant on a regular basis. All plant is serviced in line with manufacturer's recommendations and instructions. A service schedule is displayed in the site office and records of all servicing and maintenance is stored within the site office.

### **2.2.4 Fire**

To prevent and minimise the potential impact of fire, the following action will be taken:

- flammable wastes and incompatible materials will not be accepted at the site;
- the plant inspection schedule will include checks of electrical equipment within the site to ensure that any faults are identified and repaired;
- fire extinguishers will be provided at designated locations;
- smoking will not be permitted in the operational areas of the site;
- working practices will ensure the assessment of fire hazards and annual training of employees in fire prevention, e.g. identification of fires, the use of fire extinguishers and emergency procedures;
- no wastes will be burned on the Site;
- any fire at the site will be treated as an emergency; and
- in the unlikely event of a fire, water bowsers will be used to dampen material and prevent fire spreading.

In the unlikely event of a fire, the following actions will be taken:

- the site manager will be informed immediately;
- the fire brigade will be notified immediately and the EA as soon as practicable;
- the burning area will be isolated and attempts to extinguish the fire utilising the on-site fire extinguishers will be made if safe to do so; and
- the site and buildings will be evacuated if the fire is not containable.



## 2.2.5 Loss of Containment – Spillage and Leakage

Loss of containment could lead to spillage and leakage of potentially contaminating liquids. There is no proposed fuel or other liquid raw material storage within the EP boundary. However, fuel will present on the Site within mobile plant and vehicles, and the following measures will be taken if fuel is required to be stored on the Site in the future.

To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented:

- Containment system: any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the largest tank plus 10% or 25% of the total tank volume within the bund, whichever is the greater. All filling points, vents and gauges will be located within the bund;
- Storage vessels: storage tanks will be constructed to the appropriate British Standard;
- Inspection: tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action;
- Spill kits: materials suitable for absorbing and containing minor spillages will be maintained on-site; and
- Monitoring techniques: the site staff will undertake daily monitoring for evidence of spillage and leakage.

In the event of any potentially polluting leak or spillage occurring on-site, the following action will be taken:

- Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary.
- Any dry wastes spilled on-site will be collected and transported to the appropriate area of the site.
- In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from entering surface water, drains or lagoon. The spillage will be cleared immediately and placed in containers for off-site disposal. The EA will be informed.

## 2.2.6 Security and Vandalism

The Site will have the following security measures in place to prevent unauthorised access and vandalism:

- The site access gate will be locked when the site is not in use;
- The entrance has an intercom and password operated gate, to minimise unauthorised entrance;
- CCTV cameras will be located at the entrance and will be accessed remotely whilst the Site is closed and will be monitored out of hours.
- The gate and fencing extending around the Site will be inspected regularly by the operations staff to identify deterioration, damage or the need for any repairs;



- In the event that damage is sustained to the access gate or fencing, repairs will be made by the end of the working day. If this is not possible, suitable measures will be taken to prevent any unauthorised access to the site and permanent repairs will be affected as soon as practicable and within 5 days;
- All inspections, defects, damage and repairs would be recorded in the Site diary;
- Keys to property will only be kept by authorised persons; door keys shall not be left on top of the lintel, under stones or in other 'concealed' places; a key register should be compiled and maintained; key holders will be notified to the Local Police Station and this information kept up to date; wherever possible one person should be made responsible for locking up and where applicable setting the burglar alarm;
- All visitors to the Site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on-site; and
- Operational procedures, including regular inspections, will ensure continual monitoring of security provision at the Site.

Operational procedures, including regular inspections, ensure continual monitoring of security provision at the site. In the event of a breach of security at the Site, the cause will be investigated, and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing and the gate, breaches of security, investigations and actions taken.

### **2.2.7 Flooding**

The flood mapping on the Environment Agency's web page indicates the Site is located in a Flood Zone 3, which is defined as "*Land within flood zone 3 has a high probability of flooding from rivers and the sea*".

In the event that flooding does occur at the Site, evacuation procedures will be implemented. The Site Manager will be responsible for implementing the risk management measures in accordance with operational and management procedures.



## 3.0 Operations

### 3.1 Overview

Permitted activities at the Site will consist of the receipt, handling (including screening where required), storage and deposit of inert waste into land.

It is anticipated that approximately 216,700m<sup>3</sup> (between 325,500 and 390,600 tonnes assuming a density between 1.5 and 1.8 tonnes/m<sup>3</sup>) of suitable imported material will be required for the construction of the buttress. The use of suitable inert wastes to achieve this outcome will directly replace non-waste virgin materials which would otherwise have had to be used to achieve this function, as demonstrated in the Waste Recovery Plan (WRP) approved by the EA.

The proposed EP boundary is illustrated in Drawing No. 002. Access to the Site is via a shared access road from the A605 to the north of the Site.

### 3.2 Operating Hours

The Site will be operated during the following hours for the receipt of waste and all other operations:

- Monday to Friday: 0700 - 1700
- Saturday: 0700:1300
- Sunday: Closed
- Bank Holidays: Closed

No waste shall be received at the Site outside the specified operating hours. EMMW will not operate any plant or machinery associated with the delivery or placement of waste materials, nor undertake any servicing, maintenance, testing of plant and machinery and environmental monitoring systems outside the hours stated above unless:

- Approval of the Cambridgeshire County Council has been received in writing; and
- Arrangements have been discussed with the Environment Agency.

### 3.3 Description of Development

Essential works are required to stabilise the unrestored southern face of the quarry associated with the former Saxon brickworks site. The stabilisation will involve the placement of suitable imported material to construct an engineered buttress against the southern face of the quarry.

The buttress has been designed with a 1V:3H gradient for the main and south-western section to achieve an acceptable factor of safety for the slope gradient.

The design also takes into account the constraints posed by presence of existing site buildings at the toe of the buttress, which are under third party ownership. To address this, it is proposed to install a retaining structure, such as a gabion wall at the toe of the slope.

Based on an isopachyte of the existing topography and the proposed buttress design, approximately 216,700m<sup>3</sup> of material will be required for the construction (between 325,500 and 390,600 tonnes assuming a density between 1.5 and 1.8 tonnes/m<sup>3</sup>). The material used for the buttress will be imported inert clays and soils, likely to be sourced from local construction, demolition and excavation (CD&E) projects and will conform to inert Waste Acceptance Criteria (iWAC) as set out in the 2003/33/EC: Council Decision of 19 December



2002<sup>2</sup>. Typical sources will be wastes extracted for construction of foundations, bored pilings etc and which will consist mainly of naturally occurring soils, stones, clay or sandy clay or soils. The proportion of recycled material within these waste streams is low and, as such, it is anticipated that the material will consist predominantly of uncontaminated, naturally occurring soils and stones.

All material will need to be imported for the construction of the buttress as a cut-and-fill approach is not an option for the stabilisation works. This is due to the proximity of the crest of the former quarry slope to the adjacent railway and surface water feature behind the crest of the slope meaning that it is not possible to cut the existing slope back to a suitably stable profile. In addition, all excess material which remained following closure of the quarry has been incorporated into the previous stabilisation phase on the eastern quarry face.

Following completion of the engineered buttress, the slope will be finished with a comprehensive landscaping and ecological enhancement scheme designed to integrate with the existing restoration/planting scheme to the east of the site.

Surface water run-off will be managed via a swale at the base of the buttress which will direct flow to the existing on-site drainage scheme and attenuation lagoon.

It is estimated that buttress engineering work and restoration would take seven years to complete.

### 3.4 Process Description

Once the acceptable material arrives at site, as arranged during the Pre-acceptance measures, it will be subjected to the appropriate on-site verification 'Acceptance' checks. The weighbridge operator will check the waste transfer note for accuracy in accordance with the Duty of Care Code of Practice detailed in the EMS.

Where safe to do so, deliveries will be visually inspected at the weighbridge by the weighbridge operator or site manager to determine the basic characteristics of the waste and ensure it accords with the Pre-acceptance paperwork. Should waste be found unsuitable, the load will remain on the vehicle for immediate off-site transfer. The event will be recorded in the site diary and the Environment Agency informed where necessary. Where visual inspection at the weighbridge is not possible, waste will be visually inspected at the tipping face or the storage and processing area and the machine operator informed via mobile phone of this action. Should a load be deposited within the Site and be found to be non-compliant by machine operatives, the material will be immediately reloaded and rejected from the Site.

Should the producer / carrier have left the Site, this load will be placed in a quarantine area awaiting collection for delivery to a suitably permitted facility. Such events will be recorded in the Site diary.

Acceptable buttress-forming material will be placed to an earthworks specification<sup>3</sup> and will follow placement methods to achieve the proposed profile and cross-sections presented in the approved WRP. In general terms this comprises:

- The former quarry floor and faces will be cleared and trimmed to remove any loose debris ;
- The imported material will be placed in layers and be notionally compacted by the bulldozer;

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<sup>2</sup> 2003/33/EC: Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC

<sup>3</sup> Manual of Contract Documents for Highway Work Volume 1 Specification for highway works, national highways.



- The profile of the buttress will be controlled through topographic surveying and the use of survey boards where required.

### 3.5 Permit Activities

Permitted activities at the Site will consist of the receipt, handling, screening, storage and deposit of inert waste into land. These fall under the following waste management activities as specified in Annex I of the Waste Framework Directive:

- R3: Recycling or reclamation of organic substances which are not used as solvents.
- R5: Recycling / reclamation of inorganic compounds – use of waste for the purpose of restoration of land.
- R13: Storage of wastes pending any of the operations numbered R3 and R5.

### 3.6 Types and Quantities of Waste

The waste types which will be used for the development are detailed in Table 3-1 below with their associated European Waste Catalogue (EWC) code. These waste types have historically been accepted by the EA as being potentially suitable for recovery.

**Table 3-1: Proposed Waste Types to be Accepted**

EWC Code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	Waste from non-metalliferous excavation excluding silt and tailings
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	Waste sand and clays
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles & ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 05	Soils Stones and Dredging Soil
17 05 04	Soil and Stones
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	Minerals (for example sand, stones)



EWC Code	Description
20	MUNICIPAL WASTE (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	Garden and Park Wastes
20 02 02	Soil and Stones

Waste inputs will be limited to those that meet inert Waste Acceptance Criteria (iWAC) limits as outlined within section 2.1.2 of the Landfill Directive 2003/33/EC and reproduced in Table 3-2 and Table 3-3.

**Table 3-2: Limit values for waste acceptable for Inert Waste**

Component	L/S = 2 l/kg (mg/kg dry substance)	L/S = 10 l/kg (mg/kg dry substance)
Arsenic	0.1	0.5
Barium	7	20
Cadmium	0.03	0.04
Chromium (Total)	0.2	0.5
Copper	0.9	2.0
Mercury	0.003	0.01
Molybdenum	0.3	0.5
Nickel	0.2	0.4
Lead	0.2	0.5
Antimony	0.02	0.06
Selenium	0.06	0.1
Zinc	2	4
Chloride	550	800
Fluoride	4	10
Sulphate	560*	1000*
Phenol	0.5	1
DOC**	240	500
TDS***	2500	4000
<b>Notes</b>	<p>* If the waste does not meet these values for sulphate, it may still be considered as complying with the acceptance criteria if the leaching does not exceed either of the following values: 1,500mg/l as C<sub>0</sub> at L/S = 0.1l/kg and 6000mg/kg at L/S = 10l/kg.</p> <p>** If the waste does not meet these values for DOC at its own pH value, it may alternatively be tested at L/S = 10 l/kg and a pH between 7,5 and 8,0. The waste may be considered as complying with the acceptance criteria for DOC, if the result of this determination does not exceed 500 mg/kg.</p> <p>*** The values for total dissolved solids (TDS) can be used alternatively to the values for sulphate and chloride.</p>	



**Table 3-3: Limits for Total Content of Organic Contaminants**

Parameter	Value (mg/kg)
TOC (total organic carbon)	30,000 (*)
BTEX (benzene, toluene, ethylbenzene and xylenes)	6.0
PCBs (polychlorinated biphenyls, 7 congeners)	1.0
Mineral oil (C10 to C40)	500
PAHs (polycyclic aromatic hydrocarbons)	100
* In the case of soils, a higher limit value may be admitted by the competent authority, provided the DOC value of 500 mg/kg is achieved at L/S = 10 l/kg, either at the soil's own pH or at a pH value between 7,5 and 8,0.	

Environment Agency guidance 'Testing for Disposal to Landfill'<sup>4</sup> clarifies: "While limits are set for these tests in the Council Decision annex, the Environmental Permitting Regulations, schedule 10 state that the L:S 10 l/kg test must be used.". It is therefore proposed that the L:S 10l/kg WAC limits will be used for determining priority contaminants.

### 3.7 Waste Acceptance Procedures

The waste acceptance procedures implemented by EMWM will ensure compliance with the requirement implicit under Duty of Care when dealing with waste materials, particularly the need to assess the material from initial customer enquiry to when it is deposited on the Site. The phases of acceptance are divided into "Pre-acceptance" and "Acceptance" measures.

It is proposed that the Site will accept up to 50,000 tonnes per annum of uncontaminated inert waste only, with a maximum of 20,000 tonnes stored on the Site at any one time. The Site will only accept waste that is permitted in the EP which is limited to the types identified in Table 3-1, and meet the requirements of inert WAC, as presented in Table 3-2 and Table 3-3.

#### 3.7.1 Pre-Acceptance

Prior to acceptance of waste at the Site, a pre-acceptance questionnaire will be completed to ensure that the waste is acceptable under the EP i.e. it will meet the requirements for inert WAC, and has been correctly assigned an EWC code that and description that is listed on the EP. The following information will be required as a minimum:

- Waste source and origin
- The process giving rise to the waste and its SIC code
- Description of the waste
- EWC code for the waste
- The appearance of the waste (including smell, colour, consistency and physical form)
- Determination if the waste has any hazardous properties as per WM3

<sup>4</sup> Environment Agency (March 2013). *Waste Sampling and Testing for Disposal to Landfill*. Ref. EBPRI 11507B Final



### 3.7.2 Waste Acceptance

Once the acceptable material arrives at site, as arranged during the pre-acceptance measures, it will be subjected to the appropriate on-site verification 'acceptance' checks. The weighbridge operator will check the waste transfer note to confirm that the waste conforms with the details on it, in accordance with the Duty of Care Code of Practice.

Where safe to do so, deliveries will be visually inspected at the weighbridge by the weighbridge operator or site manager to determine the basic characteristics of the waste and ensure it accords with the pre-acceptance paperwork.

Should waste be found unsuitable, the load remains on the vehicle for immediate off-site transfer, such events will be recorded in the site diary and the Environment Agency informed where necessary.

Where visual inspection at the weighbridge is not possible, waste will be visually inspected at the tipping face or the storage and processing area and the machine operator informed via mobile phone of this action.

Should a load be deposited within the Site and be found to be non-compliant by operatives, the material will be immediately reloaded and rejected offsite having given consideration for the relevant Duty of Care requirements. Should the producer / carrier have left the Site, this load will be placed in a quarantine area awaiting collection for delivery to a suitably permitted facility. Such events will be recorded in the Site diary.

A register of the quantities and characteristics of waste accepted at the site will be maintained on a computerised database. The database will include the following details:

- date of delivery;
- waste quantity;
- waste description and classification code; and
- waste producer and/or carrier.

A record will be maintained of all waste that is removed from the facility.

### 3.7.3 Waste Characterisation

The wastes acceptable under the EP are the list of wastes that do not typically require WAC analysis to be provided prior to acceptance provided they:

- come from a single source;
- are well characterised and described; and
- carry no risk of contamination, for example from a site that has not previously been developed

For most waste sites, wastes entering sites are required to undergo a three-tier testing protocol as detailed below:

- Level 1: Basic Characterisation. This constitutes a thorough determination, according to standardised analysis and behaviour testing methods of the short and long term leaching behaviour and or characteristic properties of the waste.
- Level 2: Compliance Testing. This constitutes periodical testing by simpler standardised analysis and behaviour testing methods to determine whether the waste complies with the conditions of the permit and/or specific reference criteria. This test will focus on key variables and behaviour identified by basic characterisation and will be carried out on at least an annual basis.



- Level 3: On-site verification. This constitutes rapid check methods to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in the documentation accompanying the waste. It may consist merely of a visual inspection of the waste before and/or after unloading.

Where representative sampling of waste is undertaken it will be carried out in accordance with appropriate European and/or national standards and procedures.

Testing for basic characterisation and compliance testing will not be carried out in the following circumstances:

- where the waste is on the list of waste not requiring testing (as is the case for the Site EP);
- where, with the agreement of the Environment Agency, all necessary information required for the basic characterisation is already known; and
- where testing is impractical or where appropriate testing procedures and acceptance criteria are unavailable.

The waste types to be accepted at the Site are from the list of waste that can be accepted at deposit for recovery site without testing. However, in the event that there is suspicion of contamination with a specific waste, prior to accepting such waste, the following procedure will be followed:

- Basic characterisation leachate tests will be carried out to ensure that the material is uncontaminated;
- Thereafter, re-testing will be carried out every 3 months or if it is suspected that the nature and chemical characteristics of the waste has changed; and
- The producer will be asked to provide written confirmation that the waste is derived from uncontaminated sources

Where representative sampling of waste is undertaken, it will be carried out in accordance with appropriate European and/or national standards and procedures.

## **3.8 Site Infrastructure and Equipment**

### **3.8.1 Site Identification Board**

A Site identification board which is easily readable from outside the entrance during hours of daylight will be provided at or near the main site entrance.

The identification board will be inspected at least once per week. In the event of damage or defect that significantly affects the legibility of the board it will be repaired or replaced within a timescale agreed with the EA.

The boards will display the following information:

- Site name and address;
- EP holder;
- EP number;
- Emergency contact name and telephone number;
- EA national telephone numbers; and
- Days and hours site is open to receive waste.



### **3.8.2 Plant and Equipment**

Typical plant that will be utilised at the Site will comprise, but is not limited to, the following:

- 1 No. 38 Tonne Excavator
- 3 No. 30 Tonne Dumpers
- 1 No. D6 Dozer
- 1 No. Screener
- 1 No. JCB 437 Loader

All items of plant and equipment will be maintained in accordance with manufacturer's recommendations.



## 4.0 Emissions and Monitoring

### 4.1 Surface Water and Groundwater

#### 4.1.1 Engineering Containment

Site surfacing will be maintained as required to ensure it is fit for purpose. The surface shall be maintained such that the working surface will:

- remain even;
- not be subject to settlement or differential settlement;
- not be subject to rutting by vehicles even when wet;
- have sufficient durability to allow cleaning, for example, by scraping; and
- remain free of standing water.

All operational areas will be inspected to ensure the integrity and fitness for purpose is maintained at all times.

#### 4.1.2 Containment Bunding

It is noted that there are no proposed fuel storage facilities within the proposed EP boundary. In the event of future storage of fuel within the EP boundary, all tanks containing liquids whose spillage could be harmful to the environment will be bunded. EMWM will ensure that bunds will be:

- impermeable and resistant to the stored materials;
- have no outlet and drain to a blind collection point;
- have pipework routed within bunded areas with no penetration of contained surfaced;
- be designed to catch leaks from tanks or fittings;
- have a capacity greater than 110% of the largest tank or 25% of the total tankage;
- have tanker connection points within the bund; and
- be subject to regular visual inspection.

All Site surfaces will be inspected daily when the Site is in operation. Debris will be swept as required and placed in a skip or container. Any spillages of fuel/ oil will be cleared immediately by depositing sand or absorbents on the affected area. The sand or absorbents will be placed in a skip to be taken to a suitably licensed site for disposal. All spillages of waste and windblown litter will be cleared by the end of the working day in which they occur.

#### 4.1.3 Monitoring

The appropriate measures for non-hazardous and inert waste guidance is acknowledged as part of this EP application, however the requirements for “emissions to water” are not considered relevant for the Site due to:

- the emissions of water from the Site being intermittent.
- emissions of water being rainfall dependent.
- only inert waste being accepted to the Site (in accordance with strict waste acceptance procedures confirming their inert status).



The surface water drainage strategy for the Site directs surface water to the silt lagoon located to the north of the EP boundary. Discharges of water from the silt lagoon to the Kings Dyke, will be controlled by a discharge consent (EPR/YB3895AC/A001) that is pending issue from the EA to EMWM. It is anticipated that this consent would provide the appropriate safeguards to protect the receiving water course, inclusive of the contribution from rainfall derived run-off from the proposed activities within this application”

## 4.2 Sewer

There will be no direct discharges to sewer from waste management activities at the Site.

## 4.3 Odour

Due to the inert nature of the waste that will be accepted at the site, odour is not expected to pose a significant risk. Incoming wastes would be subject to inspection by Site personnel who would be aware of the permitted wastes that can be accepted at the facility and those which could be potentially malodorous and which could require special attention.

There are no point source emissions to air from the waste management operations at the Site. No specific management measures are considered necessary.

Daily olfactory inspection will be carried out by staff during the course of their normal working activities.

## 4.4 Dust and mud

The following measures will be taken to minimise and control dust and mud from the site:

- Dust from the access route through the site will be controlled during dry weather using a mobile water bowser fitted with a spray bar, which will be deployed to spray the route whenever dust is generated by the movement of plant and vehicles.
- Dust from materials stored in the stockpile area will be controlled during dry weather using spray equipment, as above. Should mud and debris be deposited on the access road, it will be kept clean by tractor brush.
- Road going vehicles will travel on a long section of surfaced access road, therefore the risk of tracking mud out of the site is low.
- A wheel wash will be used by all vehicles exiting the Site.

In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures will be implemented:

- the affected public areas outside the Site will be cleaned;
- traffic will be isolated from sources of mud and debris within the Site to prevent further tracking, and measures will be taken to clear any such sources as soon as practicable; and
- if required, provision will be made for road sweepers on the site access roads to stop any mud being carried onto public roads, and bowsers made available to damp down areas during dry periods to ensure that dust is not a problem.

In order to minimise the emissions of dust from the activities, the Site will be operated in accordance with the Dust and Emissions Management Plan prepared as part of the EP application. The following measures will be implemented:

- a 10mph speed limit will be implemented for vehicles using the Site;



- Site access, haul roads and operational areas will be maintained and repaired to minimise emissions of dust due to uneven and poor surfacing;
- all roads and operational areas will be swept where necessary to reduce dust emissions;
- all vehicles delivering waste to the site shall be sheeted to minimise emissions of dust;
- discharge heights from any loading operation will be kept as low as possible;
- dusty wastes will be damped down prior to unloading to minimise dust generation;
- dusty wastes will be deposited from tipper lorries as slowly as practicable to reduce dust generation;
- no deposit of dusty waste shall occur during particularly high winds or if dust suppression water is unavailable;
- daily, visual inspection at all areas of the Site and EP boundary will be carried out by site personnel;
- in the event that significant visual dust is observed at the boundaries of the operational areas, action will be taken to suppress the dust;
- a record of the inspection findings and remedial action taken will be made in the site diary; and
- the Site Manager will be responsible for implementing the dust management, monitoring and action plan.

Any complaint received in regard to dust will be logged in the Site diary. The Site Manager will investigate the complaint and will take action to identify the source of the dust emission and implement remedial measures where appropriate.

## 4.5 Noise

Measures that will be taken at the Site to minimise noise emissions from operations include:

- waste operations will only be carried out during operational hours;
- drop heights to be low as practically possible;
- the imposition of a 10mph speed limit for vehicles, together with traffic calming measures, will reduce noise associated with high engine speeds;
- all site personnel will be trained in the need to minimise site noise, and will be responsible for monitoring and reporting excessive noise when carrying out their everyday roles;
- all plant and equipment will be selected and operated to minimise noise and regularly maintained to minimise noise resulting from inefficient operation of, for example, pumps, generators and engines;
- where there is a requirement to replace plant completely, the quietest plant available will be considered;
- the regular maintenance of roads to prevent the development of potholes will significantly reduce the noise generated particularly by empty vehicles exiting the site;
- all plant would be maintained in accordance with manufacturer's specifications and in good working order at all times to minimise noise emissions;



- any breakdowns or malfunctioning leading to increased noise shall be dealt with promptly and away from receptors; and
- Vehicles will not wait or queue on public roads with engines idling.

Any complaint received in regard to noise will be logged in the Site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate.

#### **4.6 Pests**

Due to the inert nature of the wastes proposed to be accepted at the site, it is not anticipated that pests will pose a risk at the facility.

The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis. In the event that specific waste is found to be responsible for attracting scavengers, pests or infestation, this waste will be removed from the site as soon as practicable.

A specialist pest control contractor will be deployed if required.

#### **4.7 Litter**

Due to the inert nature of the wastes to be accepted on-site, it is not anticipated that litter will pose a serious risk.

The boundary of the site and its environs will be checked and any windblown litter collected and disposed of appropriately. It will be the responsibility of the site staff to constantly monitor the site for any signs of escaping materials. Inspections would be carried out on a daily basis and a record maintained in the site diary.



## 5.0 Information

All relevant notifications and submissions to the EA regarding the Site will be made in writing and will quote the EP reference number and the name of the EP holder.

In the case of off-site environmental effects and matters which affect the condition of land and groundwater, records shall be kept until EP surrender. Waste Duty of Care records will be kept for a minimum of two years.

### 5.1 Reporting and Notifications

#### 5.1.1 Changes in Technically Competent Persons

The EA will be informed in writing of any changes in the technically competent management of the Site and the name of any incoming person, together with evidence that such person has the required technical competence.

#### 5.1.2 Waste Types and Quantities

A summary report of waste types and quantities accepted and removed from the Site for each quarter will be submitted to the EA within one month of the end of the quarter unless otherwise required by the EP conditions.

#### 5.1.3 Relevant Convictions

The EA will be notified of the following events:

- EMWM being convicted of any relevant offence; and
- any appeal against a conviction for a relevant offence and the results of such an appeal.

#### 5.1.4 Notification of Change of Operator's or Holder's Details

The EA will be notified of the following:

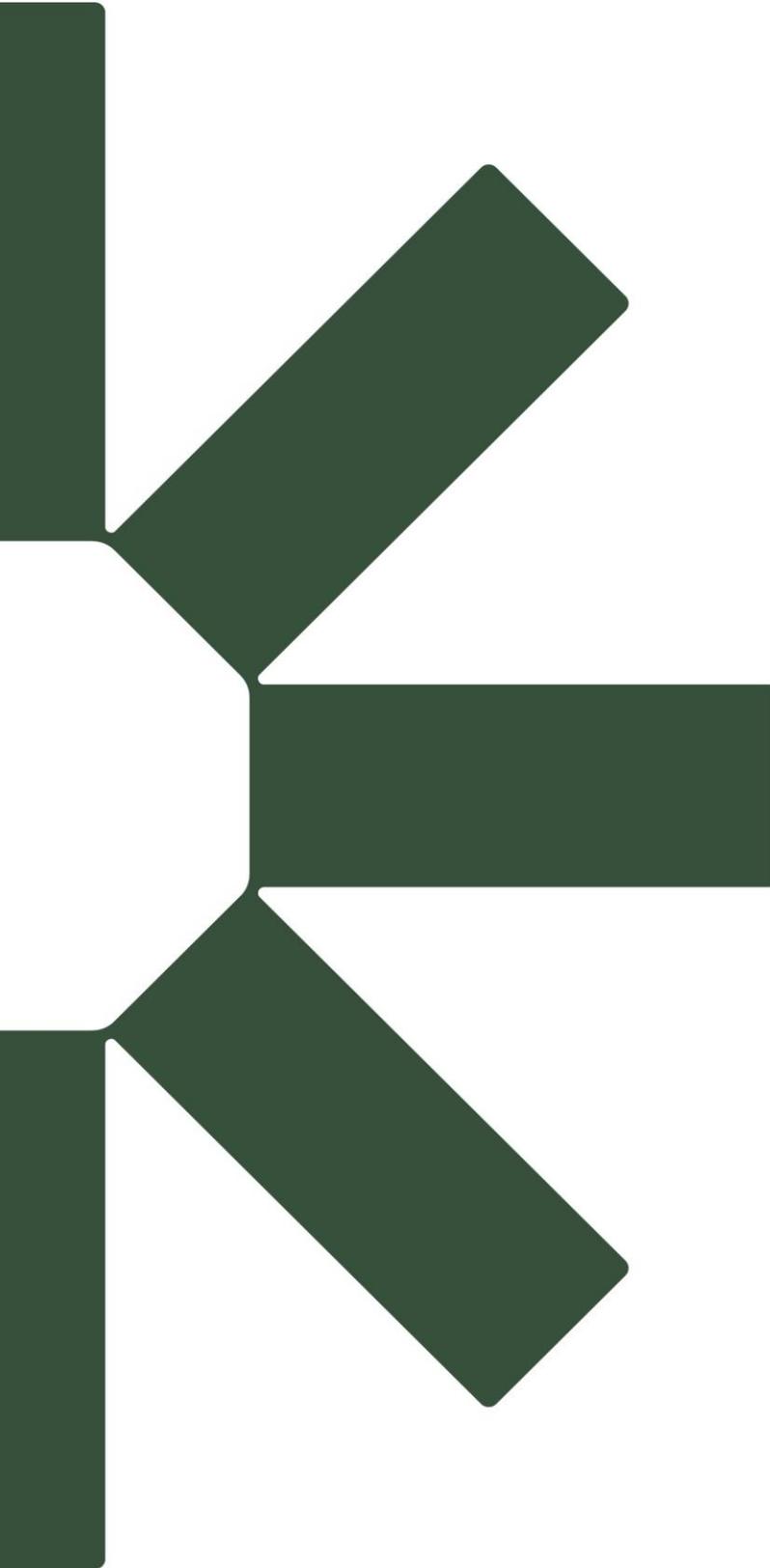
- any change in the operator's trading name, registered name or registered office address; and
- any steps taken with a view to the company going into administration, entering into a company voluntary arrangement or being wound up.

#### 5.1.5 Adverse Effects

The EA will be notified without delay following the detection of the following:

- any malfunction, breakdown or failure of equipment or techniques;
- any accident;
- fugitive emissions which have caused, is causing or may cause significant pollution; and
- any significant adverse environmental and health effect.





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