



February 2017  
Report No 2858/R/005/1

## **Environmental Permit Variation Application**

### **Lon Hen Felin Waste Treatment & Transfer Facility**

## **TECHNICAL STANDARDS**

Prepared for:

**Gwynedd Skip & Plant Hire Limited**

**TerraConsult**

**Environmental Permit Variation Application**

**Lon Hen Felin Waste Treatment & Transfer  
Facility**

**TECHNICAL STANDARDS**

**Date: February 2017**

**Prepared for:**

**Gwynedd Skip & Plant Hire Limited**  
Lon Hen Felin  
Cibyn Industrial Estate  
Caernarfon  
Gwynedd  
LL55 2BD

Telephone: 01286 677481  
Facsimile: 01286 678873

**Prepared by:**

**TerraConsult Ltd**  
Bold Business Centre  
Bold Lane  
Sutton  
St. Helens  
WA9 4TX

Telephone: 01925 291111  
Facsimile: 01925 291191

---

## CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	General.....	1
1.2	Supporting Documentation.....	2
1.3	Site Location.....	2
1.4	Site Description.....	2
1.5	The Development.....	2
1.6	General Site Layout.....	3
<b>2.</b>	<b>GENERAL MAINTENANCE.....</b>	<b>4</b>
2.1	Plant / Equipment.....	4
2.2	Site Surfacing / Infrastructure.....	4
<b>3</b>	<b>INCIDENTS AND NON-CONFORMANCES.....</b>	<b>5</b>
3.1	Mud-Debris.....	5
3.2	Spills & Leaks.....	5
3.3	Fires.....	6
3.4	Information & Records.....	6
3.5	Accident Management Plan.....	6
<b>4</b>	<b>STAFFING &amp; OPERATIONS.....</b>	<b>7</b>
4.1	Hours of Operation.....	7
4.2	Roles & Responsibilities.....	7
<b>5</b>	<b>SITE SECURITY.....</b>	<b>8</b>
5.1	Security.....	8
5.2	Maintenance.....	8
<b>6</b>	<b>PERMITTED ACTIVITIES.....</b>	<b>9</b>
6.1	Overview.....	9
6.2	Waste Acceptance.....	9
6.3	Waste Treatment (RDF).....	11
6.4	Process Outputs.....	11
6.5	Storage of Materials.....	12
6.6	Waste Dispatch Control.....	12
<b>7</b>	<b>SITE INFRASTRUCTURE.....</b>	<b>13</b>
7.1	Parking Provision.....	13
7.2	Fuel Storage.....	13
7.3	Lighting.....	13
7.4	Buildings.....	13
7.5	Surfaces.....	13
<b>8</b>	<b>SITE DRAINAGE.....</b>	<b>14</b>
8.1	Clean Surface Water Drainage.....	14
<b>9</b>	<b>EMISSIONS &amp; MONITORING.....</b>	<b>15</b>

---

9.1	Surface Water Systems .....	15
9.2	Bioaerosols & Particulates .....	15
9.3	Odours .....	15
9.4	Noise .....	15
9.5	Vermin & Pests .....	16
9.6	Control & Monitoring of Litter .....	16

## **DRAWINGS**

2858/1/001	Site Location
2858/1/002	Site Layout Plan
2858/1/003	Sensitive Receptor Locations
2889-CAU-XX-00-DR-6001	Existing Drainage Layout Plan

## **APPENDICES**

Appendix A	Waste Types
------------	-------------

## **1 INTRODUCTION**

### **1.1 General**

- 1.1.1 Gwynedd Skip & Plant Hire Limited currently operate a Waste Treatment and Transfer Facility (WTF) at their Lon Hen Felin site located on the Cibyn Industrial Estate, approximately 1.8km to the east of Caernarfon town centre in Gwynedd.
- 1.1.2 The site is primarily used for the physical processing of residual Municipal Solid Wastes (MSW), and mixed Commercial and Industrial (C&I) skip waste with the non-recyclable elements being proposed to be used for the production of Refuse Derived Fuel (RDF).
- 1.1.3 The site currently operates in accordance with a Standard Rules (SR2008No7\_75kte) household, commercial and industrial waste transfer station with treatment (and asbestos storage), Permit (ref: BP3196LV/V007), determined in September 2008. However, this variation application has been submitted to allow for the relocation of the covered manual sorting line to predominantly outside of the building.
- 1.1.4 All incoming wastes are deposited within the confines of the operations building for initial sorting. The facility can process up to 75,000 tonnes of waste per annum. Inside the building the incoming materials are fed into a trommel followed by the manual sorting, covered conveyor that extends out of the building, with underlying designated storage bays as shown on the Site Layout Plan (ref: 2858/1/002). In addition, small quantities of organic fines and residual metal fines will be stored in designated bays prior to being transferred from site, also as shown on the Site Layout Plan. Residual, suitable non-recyclates will be processed into Refuse Derived Fuel (RDF), which will be exported from site for recovery through incineration.
- 1.1.5 The implementation of the Industrial Emissions Directive Regulations through the Environmental Permitting (England and Wales) (amendment) Regulations 2013 specifies thresholds above which activities cease to be regulated as waste facilities and fall to be regulated as “installations” under Schedule 1, Part 2, Section 5.4 Part A(1)(b)(ii) – pre-treatment of waste for incineration or co-incineration for recovery. However, the RDF throughput at the Lon Hen Felin site will be maintained to a maximum of 75 tonnes per day, thus under the threshold to qualify as an installation. Therefore the site will remain a waste operation.
- 1.1.6 The area covered by the Environmental Permit is shown on the attached Site Location Plan (ref: 2858/1/001) and additionally on the Sensitive Receptor Plan (ref: 2858/1/003).

## 1.2 Supporting Documentation

**Table 1 – Application Documents**

Reference	Title	Description
2858/R/001/1	Application Supporting Statement	A summary of the proposed activities containing a Non-Technical Summary
2858/R/002/1	Environmental Risk Assessment (ERA)	An assessment of the environmental risks posed by the activities.
2858/R/003/1	ERA Appendix A – Fire Management Plan	Fire management and prevention plan for the site in accordance with current NRW guidance.
2858/R/005/1	Technical Standards	Technical details relating to the waste operation

## 1.3 Site Location

- 1.3.1 The Lon Hen Felin WTF is located on the Cibyn Industrial Estate near to Caernarfon in Gwynedd, North Wales. The site is accessed from the Llanberis Road (A4086), immediately to the north of the site. The site is encompassed on all immediate boundaries by other units located on the Cibyn Industrial Estate.
- 1.3.2 The site is centred on an approximate National Grid Reference (NGR) of SH 49879 62719.

## 1.4 Site Description

- 1.4.1 The site encompasses an Operations Building, where the initial permitted treatment and processing of the incoming residual MSW and C&I is undertaken. A Site Layout Plan (ref: 2858/1/002) showing the general layout of the WTF building and site are attached with this report.
- 1.4.2 A trommel and shredder are located within the confines of the operations building, with a covered manual sorting conveyor system which exits the main building as shown on the Site Layout Plan. Various recyclates are removed from the waste stream as part of this process. The recyclates are stored in specific bays, also as shown on the accompanying Site Layout Plan.

## 1.5 The Development

- 1.5.1 The installation comprises the Operations building used for the storage of incoming wastes and initial separation and physical treatment of wastes (where applicable). There are no changes proposed to the list of wastes which is presented in Appendix A and taken from the corresponding Standard Rules

---

Permit, with the exception of the addition of EWC code 19 12 12, which will consist of appropriate materials which have undergone physical treatment at other facilities and imported to site for either transfer purposes or to be input to the RDF process.

- 1.5.2 The incoming MSW and C&I feedstock is immediately deposited within a designated area within the Operations Building upon arrival at the site. Selected 'over-size' wastes are then shredded prior to input to the trommel and manual sorting conveyor system. The trommel is used for the removal of residual organic and inorganic fines which are stored in a designated bay prior to removal from site for appropriate disposal.
- 1.5.3 The relevant recyclates are removed from the waste along the covered, manual conveyor system as shown on the accompanying Site Layout Plan, and any appropriate residual materials being baled into RDF and stored in the designated bay prior to removal from site for recovery. All recyclates are transferred from site to appropriately permitted facilities for recovery purposes.

## **1.6 General Site Layout**

- 1.6.1 The indicative site layout is presented on the Site Layout Plan (ref: 2858/1/002). All waste treatment activities (including storage) are contained within the enclosed Operations Building, enclosed conveyor system or stored within the operations yard which is enclosed by a 5m high perimeter protection screen.
- 1.6.2 The weighbridge and welfare facilities are located immediately to the north of the main site entrance in the southwest corner of the site. The main office is located external to the operations yard and 5m perimeter screening fence.
- 1.6.3 Fixed plant will include shredders, trommel and associated conveyors. Non-structural plant and equipment may vary as operating conditions dictate.

---

## **2. GENERAL MAINTENANCE**

### **2.1 Plant / Equipment**

- 2.1.1 Mobile plant and equipment on site constitute a wheeled loading shovel and may also include wheeled grabs, clamp trucks and temporary moveable push walls. All site based mobile plant and equipment will be serviced and maintained in accordance with the manufacturers' recommended maintenance schedules and in accordance with the Operator's Environmental Management System (EMS).
- 2.1.2 Static plant at the site constitutes the shredder, trommel, and associated enclosed conveyor. All static plant will be serviced and maintained in accordance with the manufacturers' recommended maintenance schedules and the EMS.
- 2.1.3 In the event of plant or equipment experiencing significant downtime, replacement hire plant will be mobilised for the remaining duration of the downtime. Additional information on operational contingency actions are contained in the Environmental Risk Assessment document that supports this application.

### **2.2 Site Surfacing / Infrastructure**

- 2.2.1 All areas of the impermeable concrete surface, covered buildings, roofed areas, fixed/temporary bays and containers are visually inspected at least weekly to ensure continuing integrity and fitness for purpose. The inspection and any necessary maintenance required will be recorded. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.
- 2.2.2 The site lighting system will be visually inspected weekly during the site operation. Any defects will be recorded and rectified as soon as practicable.
- 2.2.3 The drainage system at the site will be subject to regular visual inspections to ensure effective operation and integrity of the system. Maintenance will be undertaken to ensure the effective operation and defects will be rectified as soon as possible. The site Existing Drainage Plan (ref: 2889-CAU-XX-00-DR-6001) accompanies this report.

---

### **3 INCIDENTS AND NON-CONFORMANCES**

#### **3.1 Mud-Debris**

- 3.1.1 All waste related activities, including associated loading, unloading and processing of wastes will be operated on the existing impermeable concrete surface within the site and is in a good state of repair. The site will be kept clean and tidy in all areas. In addition, drivers will be instructed to avoid tracking over previously deposited waste to avoid mud/debris being tracked off site.
- 3.1.2 All areas of hardstanding outside the buildings and the internal site access (including public access) road adjacent to the site entrance will be visually checked daily for mud and/or debris and will be cleared as required. Collected materials will be taken to the untreated waste storage area if suitable or appropriately disposed of off-site.
- 3.1.3 Should it become apparent that debris and/or mud has been tracked onto the internal roads, sweeping of the relevant areas, including the internal public access road, will be undertaken as soon as practicable. A road going sweeper will be utilised if required.

#### **3.2 Spills & Leaks**

- 3.2.1 Fuels and lubricants used for mobile plant are stored within sealed containers within the site workshop. Weekly visual checks of the containers will be made to ensure that there are no leaks or spillages in accordance with the procedures specified within the site EMS.
- 3.2.2 In the unlikely event of a leak or spillage from on-site plant, storage tanks or wastes received, the following procedures will be undertaken:
- The cause of the spillage will be identified and recorded so that further leaks or spillages may be prevented.
  - Remedial actions may include one or more of following:
    - Bunding and containment of the spilled material with sand or absorbent granules/pads;
    - The application of absorbent granules;
    - Suction to remove spilled material to secure container; and
    - Sweeping to allow collection of the materials and their placement in a secure container.
  - Absorbent granules will be kept on site at all times for the purpose of dealing with liquid spills. Contaminated granules will be loaded into an appropriate container for removal to an appropriate Permitted waste management facility as soon as practicable following containment of the spill.
  - Details of the spilled material and estimated quantity involved and remedial actions taken will be recorded.

### **3.3 Fires**

- 3.3.1 A Fire Prevention Plan has been prepared in accordance with the Natural Resources Wales (NRW) Guidance Note “*Fire Prevention Plan & Mitigation Plan Guidance (Version 1, May 2016)*” which superseded the previous technical guidance note “*TGN 7.01: Reducing fire risk at sites sorting combustible materials*”.
- 3.3.2 This document is enclosed as Appendix A to the accompanying Environmental Risk assessment (ref: 2858/R/002/1). This report details the risk and consequences of a fire at the site and the mitigation measures employed to reduce the risk of fires.

### **3.4 Information & Records**

- 3.4.1 A notice board will be displayed near the site entrance. Displayed information will include: the company name, emergency contact details, the site Environmental Permit number and the NRW contact details. All complaints received and subsequent action undertaken will be recorded in accordance with the EMS for the site.
- 3.4.2 A copy of the approved Environmental Permit, this Technical Standards document and all other relevant supporting documentation will be held on-site for immediate reference when required by all site staff conducting work under the requirements of the Permit.
- 3.4.3 Records will also be made of: emergencies (such as fire or major infrastructure problems); problems with waste received and rejected loads; site inspections; damage to site security provision; weather conditions; monitoring; and actions instigated; maintenance of site pollution prevention equipment (such as interceptors); and complaints.

### **3.5 Accident Management Plan**

- 3.5.1 Incidents and non-conformities are addressed above. A detailed accident management plan has been prepared in accordance with the Environmental Risk Assessment documentation and accompanies this report.

---

## **4 STAFFING & OPERATIONS**

### **4.1 Hours of Operation**

4.1.1 The site permitted operating hours are as follows:

- Monday to Friday - 07:30am to 20:00pm;
- Saturday – 07:30am to 17:00pm.
- Sundays & Bank Holidays – 08:00 to 16:00pm.

4.1.2 The RDF plant is shut down when required to allow for all general maintenance and repairs to be undertaken.

### **4.2 Roles & Responsibilities**

4.2.1 Staff have clearly defined roles and responsibilities. Appropriate training is undertaken and appropriate written instructions will be given where necessary. Copies of any such written instructions will be retained and used to investigate any incidents. Any contractors used on site will be provided with necessary information before commencing work.

4.2.2 Details of the Technical Competent Management for the site are contained in supporting document referenced 2858/R/001/1.

4.2.3 The site is operated in accordance with an ISO14001 accredited EMS, certificate number 613943. The EMS is assessed on a regular basis by an independent assessor with the site being subject to regular inspections based upon each respective environmental risk.

## **5 SITE SECURITY**

### **5.1 Security**

5.1.1 The site perimeter is fenced by secure 5m screening fence which is routinely inspected for damage or evidence of break in. Additionally, CCTV is installed which provides visual cover for the entire site.

### **5.2 Maintenance**

5.2.1 Site staff will be briefed that in the event of evidence suggesting unauthorised access or vandalism being found, the matter must be reported to the police. If the incident involved unauthorised tipping or spillage of any waste, NRW will be informed.

---

## **6 PERMITTED ACTIVITIES**

### **6.1 Overview**

6.1.1 The following section provides a detailed description of each stage of waste processing proposed.

### **6.2 Waste Acceptance**

#### ***Site Roads***

6.2.1 Access for waste vehicles is through the access gateway located on Lon Hen Felin in the southwest corner of the site. The site operates in accordance with a strict traffic flow procedure for incoming and outgoing vehicles. Site road details are shown on the Site Layout Plan (ref: 2858/1/002).

#### ***Weighbridge and Site Control Office***

6.2.2 The Weighbridge and site control office are located within the Permitted boundary, immediately to the north of the site entrance.

6.2.3 All incoming loads will be weighed and the appropriate waste acceptance procedures undertaken in accordance with the site EMS. Records of received wastes will be made and retained, appropriate documentation in accordance with the Duty of Care Regulations will be completed. The following records will be retained for each load delivered.

- Date and time of delivery
- Vehicle details (registration)
- Waste description
- Origin of waste (if known)
- Quantity of waste
- Details of rejected loads

6.2.4 A waste acceptance check will be undertaken at the weighbridge with additional visual checks being undertaken at the point of discharge and during the processing of the waste. Site operatives will be made aware of the permitted waste types.

6.2.5 If the document checks at the weighbridge show that the wastes are not permitted the load will be rejected. Any non-conforming wastes identified following deposit will be removed and placed in a quarantine area (see Site Layout Plan) pending removal from the site to a suitable permitted facility. A record will be made of wastes found not to be permitted this will include, if known: waste type, deliverer, date of receipt, producer and actions to be undertaken to prevent re-occurrence.

6.2.6 After passing over the weighbridge, all waste delivery vehicles will discharge waste into the relevant waste storage bay within the WTS building. Wastes permitted to be accepted are specified in Appendix A.

***Waste Quantities***

6.2.7 The maximum amount of waste to be accepted per year will be 75,000 tonnes. The maximum storage capacities at the site are detailed in Table 2 below.

**Table 2: Storage Capacities**

Bay No.	Internal/External	Waste Type	Self-Combustion Risk	Storage Capacity (tonnes)	Max Storage (days)
1	External	Baled RDF	High	200	5
2	External	Residual Inorganic Fines	Low	1200	5
3	External	Mixed Aggregates	Low	800	5
4	External	Un-Processed Wood	High	400	5
-	Operations Building	Mixed C&I/MSW	Medium	4000	5
-	Asbestos Skip	Asbestos	Low	20	5

***Waste Activities***

6.2.8 With regard to the Disposal and Recovery operations, provided for in Annex II to Directive 2008/98/EC of the European Parliament and of The Council of 19<sup>th</sup> November 2008 on Waste, the operator carries out the following operations on the site:

- R3:** Recycling or reclamation of organic substances which are not used as solvents;
- R4:** Recycling/reclamation of metals and metal compounds;
- R5:** Recycling/reclamation of other inorganic compounds;
- R13:** Storage of waste consisting of materials intended for submission to any of the operations numbered R1 to R12;
- D9:** Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12;
- D14:** Repackaging prior to submission to any of the operations numbered D1 to D13; and
- D15:** Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced).

6.2.9 All existing permitted activities at the site are to be retained within the site Permit, which is being varied to a bespoke waste operations Permit.

---

## **6.3 Waste Treatment**

### *Waste preparation*

- 6.3.1 On entering the site, the waste collection vehicles will proceed to the weighbridge to confirm the weight, the nature, and origin of the waste; and for completion of the relevant documentation in accordance with the Duty of Care.
- 6.3.2 From the weighbridge, the vehicles are directed to the storage area within the Operations Building building and the residual MSW and C&I waste is deposited within the appropriate storage area. Storage bays are operated to allow for the efficient loading of materials into the process by a loading shovel. Materials will be selected for loading into the process so that they provide for a suitable blended feedstock for the process. Waste materials are also selected with regard to the date of receipt in order to limit the residence time of the material within the building i.e. 'first in, first out'.
- 6.3.3 On unloading, the material will be inspected for compliance by the site loading shovel operator prior to being input to the waste processing plant.

### *Shredder*

- 6.3.4 Selected oversized material will be loaded into the process via a shredder either by shovel loader or excavator, with a hopper sized to accommodate charge loading. The shredder will not only act as a bag splitter and coarse shredder, but also as a metering device to ensure a constant feed to the remainder of the plant.
- 6.3.5 The shredded wastes will then be fed by conveyor into the trommel section of the processing plant, for the removal of fines.

### *Trommel*

- 6.3.6 The materials are fed through the trommel which separates out the organic and residual metal fines which are transferred to each designated storage bay. Outsized materials are also separated out, with any metals being deposited in a designated storage bay, and any non-recyclable element re-input to the shredder.

## **6.4 Process Outputs**

- 6.4.1 Once produced, RDF bales will be stored within the bale storage area (Bay 1, drawing ref: 2858/1/002) prior to transfer from site to be used as an alternative fuel.
- 6.4.2 Segregated recyclable materials are stored within the segregated bays prior to being loaded into 'Ro-Ro' containers before being transported off site for recovery at suitably permitted facilities.
- 6.4.3 The organic fines materials are deposited within the fines storage bay (Bay 2) and removed from site as the volume of material permits. This is typically within 24 hours.

- 
- 6.4.4 Prior to leaving the site vehicles will be weighed on the exit weighbridge and all vehicles will be appropriately covered to prevent materials being deposited on the highway.

## **6.5 Storage of Materials**

- 6.5.1 All incoming MSW and C&I wastes are initially stored within the operations building, prior to processing. Shredding of wastes will take place within the operations building.
- 6.5.2 Baled RDF will be stored within the designated storage bay as detailed on the accompanying Site Layout Plan (ref: 2858/1/002).
- 6.5.3 All separated wastes will initially be stored within the segregated, covered bays associated with the manual sorting line, before being relocated to either the designated bays in the storage yard (Fines, aggregates and wood), with appropriate residual materials being baled as RDF.
- 6.5.4 The waste storage area will be checked on a regular basis to ensure the integrity of the concrete surface to ensure that it has not become damaged. Any damage will be repaired and the inspection and any necessary repair recorded in accordance with the accredited site EMS.
- 6.5.5 Wastes which are identified as not permitted will be segregated to the quarantine area for suitable off-site disposal. Staff will be formally instructed in these procedures and the use of nominated containers positioned in the quarantine area.

## **6.6 Waste Dispatch Control**

### ***Waste Dispatch***

- 6.6.1 Removal of all materials will be documented in accordance with Duty of Care requirements and recorded by passage over the weighbridge prior to departure from the site.

---

## **7 SITE INFRASTRUCTURE**

### **7.1 Parking Provision**

7.1.1 Provision for the parking of staff and visitor vehicles has been made adjacent to the main office located outside the operational areas of the site.

### **7.2 Fuel Storage**

7.2.1 Fuels and lubricants associated with the mobile plant on site will be stored within the site workshop building.

### **7.3 Lighting**

7.3.1 External areas and the Operations Building interior will be lit by use of suitable floodlighting to provide sufficient intensity of lighting to comply with Health and Safety regulations and to make the waste identification and sorting procedures possible. All lighting infrastructure will be subject to regular maintenance checks. Any defects will be repaired as soon as practicable to ensure continued safe lighting of all site areas.

### **7.4 Buildings**

7.4.1 The buildings which form the waste facility are shown on the Site Layout Plan.

### **7.5 Surfaces**

7.5.1 The risk of contamination to surface water and groundwater in the locality of the site was assessed in the Environmental Risk Assessment (ref: 2858/R/002/1) which accompanies this Technical Standards Document.

7.5.2 All site surfaces upon which waste is stored, treated or transported are constructed from impermeable hardstanding. Perimeter bunds are provided within the building to prevent the release of water and other liquids potentially resulting from spills, wet imported wastes or fire water in the event of a fire at the site.

---

## **8 SITE DRAINAGE**

### **8.1 Clean Surface Water Drainage**

- 8.1.1 Clean surface water from the building roofs will be directed via a dedicated, enclosed drainage system to discharge to sewer as shown on the Site Drainage Plan (ref: 2889-CAU-XX-00-DR-6001). The drainage system contains built in shut off valves and interceptors to allow control of the drainage in the event of a spillage.
- 8.1.2 Waste is only handled, treated and stored either within the Operations Building which has an impermeable surface, or in external storage areas which are situated on concrete hard-standing. All surface run-off within the building is directed to the site drainage system.

---

## **9 EMISSIONS & MONITORING**

### **9.1 Surface Water Systems**

#### *Inspection and Monitoring*

9.1.1 The site surface water drainage system will be subject to regular inspections by the site staff to ensure that it is operating efficiently at all times. Any blockages or silting up of the system will be removed by the site staff or by a suitable contractor as necessary.

#### *Actions*

9.1.2 In the event that any spillages of potentially polluting material takes place, procedures outlined in Section 2 will be implemented. The results of monitoring; the state of the surface water system and any remedial actions taken will be recorded.

### **9.2 Bioaerosols & Particulates**

9.2.1 The nature of the wastes proposed to be treated on site are such that they are unlikely to release significant quantities of bio-aerosols. All applicable wastes are initially stored within the Operations Building thereby reducing the potential for the release of particulates and all external processing and storage areas are surrounded by a 5m high screening and protection perimeter fence. An assessment of the risks associated with bio-aerosols and particulates is contained in the accompanying Environmental Risk Assessment.

### **9.3 Odours**

#### *Monitoring*

9.3.1 The details of the odour monitoring undertaken at the site are provided within the accompanying Environmental Risk Assessment (ref: 2858/R/002/1). The odour risk assessment and management plan details the necessary monitoring undertaken at the site.

### **9.4 Noise**

#### *Plant*

9.4.1 Measures implemented for the minimisation of potential noise impact are summarised in the accompanying Environmental Risk Assessment.

9.4.2 Any external operations or operations within the building would only take place during the consented operating hours and within the audible limits specified within the extant Planning Permission.

#### *Monitoring*

9.4.3 Due to the location of the site within a predominantly industrial setting it is not proposed to undertake a programme of noise monitoring, although regular checks by site staff will be made and recorded.

***Actions***

- 9.4.4 A record of any complaints arising regarding noise and the actions taken will be made. Should it be possible to identify a particular activity or plant that generates significant noise emission, the cause of the noise will be investigated and appropriate control measures will be implemented if practicable.

**9.5 Vermin & Pests**

***Monitoring***

- 9.5.1 It is considered that the enclosed nature of the activities and the minimal residence time for untreated waste results in the risk of pest infestation being very low.

***Actions***

- 9.5.2 However, on detection or notification of scavenging animals, insects or birds that are causing a nuisance, immediate action will be taken to; remove or deter them from site; and to isolate and secure the wastes attracting the scavengers against further scavenging where possible. On detection of pests, insects or vermin an appropriate professional pest/vermin control contractor will be employed. In addition any waste subject to infestation or that has attracted vermin will be considered for removal from the site.

**9.6 Control & Monitoring of Litter**

***Monitoring***

- 9.6.1 Due to the enclosed nature of the waste activities, the overall risk presented by the escape of litter from the facility has been assessed to be low by the Environmental Risk Assessment (Ref: 2858/R/002/1). The site will be monitored daily for signs of escaping materials. An inspection around the site will be undertaken every day and any litter noted will be collected and placed in the untreated waste storage area.

***Actions***

- 9.6.2 In the event that there is an escape of litter from the site, arrangements will be made for its collection as soon as is practicable. Spillage of materials on the site will be cleaned as soon as is practicable. Monitoring and actions will be recorded.

## **DRAWINGS**

**Appendix A**  
Waste Types and Quantities

## List of Permitted Wastes

<b>Table 2.2. Waste types and quantities</b>	
<b>01</b>	<b>WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS</b>
<b>01 01</b>	<b>wastes from mineral excavation</b>
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
<b>01 03</b>	<b>wastes from physical and chemical processing of metalliferous minerals</b>
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
<b>01 04</b>	<b>wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 01 10	waste metal
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 03	materials unsuitable for consumption or processing
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 04	materials unsuitable for consumption or processing
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing

<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	Fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
<b>04</b>	<b>WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES</b>
<b>04 01</b>	<b>wastes from the leather and fur industry</b>
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>06</b>	<b>WASTES FROM INORGANIC CHEMICAL PROCESSES</b>
<b>06 09</b>	<b>wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>
06 11 01	calcium-based reaction wastes from titanium dioxide production
<b>07</b>	<b>WASTES FROM ORGANIC CHEMICAL PROCESSES</b>
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 13	waste plastic
<b>09</b>	<b>WASTES FROM THE PHOTOGRAPHIC INDUSTRY</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
<b>10</b>	<b>WASTES FROM THERMAL PROCESSES</b>
<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 24	sands from fluidised beds
<b>10 02</b>	<b>wastes from the iron and steel industry</b>
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 14	filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other filter cakes

<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 01	slags from primary and secondary production
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 05	filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 18	filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>wastes from casting of ferrous pieces</b>
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
<b>10 10</b>	<b>wastes from casting of non-ferrous pieces</b>
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>

10 11 03	waste glass-based fibrous materials
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	filter cakes from flue-gas treatment other than those mentioned in 10 11 17
<b>10 12</b>	<b>wastes from manufacture of ceramic goods, bricks, tiles and construction products</b>
10 12 01	waste preparation mixture before thermal processing
10 12 05	filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10.1209
10 12 12	wastes from glazing other than those mentioned in 10 12 11
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 07	filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 1309
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete
<b>11</b>	<b>WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO METALLURGY</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)</b>
11 01 10	filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 0205
<b>11 05</b>	<b>wastes from hot galvanising processes</b>
11 05 01	hard zinc
11 05 02	zinc ash
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging

15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport [including off-road machinery] and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13,14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
16 05 05	Gases in pressure containers other than those mentioned in 16 05 04
<b>16 06</b>	<b>batteries and accumulators</b>
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
<b>16 11</b>	<b>waste linings and refractories</b>
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
17 01 01	Concrete
17 01 02	Bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
<b>17 03</b>	<b>bituminous mixtures, coal tar and tarred products</b>
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	Aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	iron and steel
17 04 06	Tin
17 04 07	mixed metals

17 04 11	cables other than those mentioned in 17 04 10
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 01*	insulation materials containing asbestos
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>gypsum-based construction material</b>
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
<b>17 09</b>	<b>other construction and demolition wastes</b>
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 01	vitrified waste
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	Glass
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	Textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard

20 01 02	Glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	Clothes
20 01 11	Textiles
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 01 40	Metals
20 01 41	wastes from chimney sweeping
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

**Table 2.2. Waste types and quantities**

**Maximum Quantities**

The total quantity of waste accepted at the site shall be less than 75,000 tonnes a year.