CAULMERT LIMITED

Engineering, Environmental & Planning
Consultancy Services

Ewloe Recycling Facility

Thorncliffe Building Supplies Waste Ltd

Environmental Permit Variation Application

Installation Techniques & BAT review

Prepared by:

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Doc ref: 2784-CAU-XX-XX-RP-V-302-A0-C1

September 2016

Caulmert
Engineering, Environmental and Planning

APPROVAL RECORD

Site: Ewloe Waste Recycling Facility

Client: Thorncliffe Building Supplies Ltd

Project Title: Ewloe IED Permit Variation

Document Title: Installation Techniques & BAT review

Document Ref: 2784-CAU-XX-XX-RP-V-302-A0-C1

Report Status: Final

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Approved	Andy Stocks	**Date**	02/08/16

DISCLAIMER

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Background

1.1.1 This report is an assessment of compliance of the existing operation subject to this variation at the Ewloe Recycling Facility with the sector guidance note for waste treatment (SGN 5.06).

1.1.2 A general process description for the treatment activities is provided in section 4 of this report.

1.1.3 The scope of this report is limited to technical standards associated with the addition of the listed activity associated with this application and does not include the existing waste management operations that are currently permitted at the site.

2. PRE-ACCEPTANCE AND ACCEPTANCE PROCEDURES

2.1 Incoming and outgoing waste and waste recording

2.1.1 All vehicles entering the site must stop on the weighbridge and report to the site office. First time visitors to the site are asked to read the issued notice giving instructions on health and safety and site procedures then sign issue log to acknowledge understanding. Visitors other than customers bringing waste to the site must sign the Visitors Book and undertake a site induction before proceeding onto the site, and sign out prior to leaving.

2.2 Duty of Care

2.2.1 Customers must wait on the weighbridge to have the gross weight of the vehicle recorded on the computerised system. The driver of the vehicle must provide a document detailing the source location and description including EWC codes of the waste they are carrying for Duty of Care purposes. These details are recorded on the computer system along with the vehicle registration number.

2.3 Carrier Registration

2.3.1 The weighbridge clerk will check that the Customer is a Registered Waste Carrier. If the customer is not a Registered Waste Carrier the weighbridge clerk will not permit them to access the site and advise them to contact the Environment Agency to ensure registration. In addition NRW will be notified that an unregistered waste carrier has attempted to access the site.

3. RECEPTION, HANDLING & STORAGE OF WASTE

3.1 Waste Acceptance and Rejection

3.1.1 Waste acceptance procedures for the site are outlined in the Environmental Management System.

3.1.2 The weighbridge clerk will question the driver if unsure about the waste description to ensure it complies with the requirements of the Permit for the site. The clerk will make a visual check, whenever possible, to ensure an adequate description has been provided.

3.1.3 If the clerk is satisfied that the waste is acceptable at the site within the terms of the Permit, the customer will be directed to the tipping area or the relevant recycling area.

3.1.4 If the clerk is not satisfied by either the waste description or the content of the incoming load, the vehicle will be directed to the relevant reception area. The supervisor/manager will check the load thoroughly and decide on its acceptability.

3.1.5 If the clerk determines that the waste is not acceptable under the terms of the Permit or items not permitted under the terms of Permit are discovered within a load of deposited waste, the material will be isolated immediately, and NRW will be informed as necessary (of the type involved, the carrier registration mark, name of carrier, date and time of deposit / delivery, name of the producer of the waste and proposed course of action). If more than 2 tonnes of waste is rejected it will be removed from the site immediately.

3.1.6 The material will either be:

- Reloaded into the delivery vehicle;
- Loaded into a container and stored in for subsequent removal from site; or
- Otherwise dealt with in accordance with procedures discussed, and agreed, with NRW at the incident.

3.1.7 Waste will not be accepted into site unless sufficient storage capacity exists and site is adequately manned to receive waste.

3.2 Hazardous Waste Inputs

3.2.1 The site does not accept hazardous wastes as part of the RDF process. The only hazardous waste accepted at the site is cement-bonded asbestos, as detailed in the Environmental Management System.

3.2.2 Asbestos is double bagged and stored in a locked container on site, on an area of impermeable hardstanding.

3.3 Outgoing Vehicles

3.3.1 Outgoing vehicles must stop on the weighbridge before leaving the site. The tare weight will be recorded on the computer and a ticket printed with all the detail documented. The weighbridge clerk should sign the ticket and ensure the customer also signs for the tonnage. In the event of computer failure, weighbridge tickets will be issued manually.

3.3.2 All outgoing vehicles carrying bulk waste materials or materials destined for recycling reprocessors will be weighed out and their loads sheeted, if necessary, before leaving the site.

3.4 Waste Records

3.4.1 All weighbridge records are collated using a computerised system to ascertain waste inputs by weight and type on a monthly basis in order that the required waste received and removed from the site can be reported to NRW for each quarter of the year. The information will be provided in the standard waste return format.

4. DESCRIPTION OF TREATMENT PROCESS

4.1 Production of RDF

4.1.1 The screening and sorting of mixed recyclable materials is undertaken at the site to segregate into different recyclable components. The equipment is located inside the waste transfer area on the concrete pavement to minimise the risk of pollution.

4.1.2 Incoming waste streams will be inspected for suitability for the process. Unsuitable materials and large recyclable materials will be removed and remaining waste is shredded using a mobile shredder.

4.1.3 The unsuitable materials and any recyclables removed will be disposed of, depending on their composition.

4.1.4 The current management system will be updated to reflect the new building before it becomes operational. Please refer to drawing 2784.CAU.VN.XX.DR.V.0002.A0.C1 for details of proposed layout of the processing area.

4.1.5 In the event of any mobile plant experiencing significant (more than one working day) downtime, replacement hire plant will be mobilised for the remaining duration of the downtime. Should the RDF experience significant downtime any material awaiting processing will be diverted to another facility, as necessary.

4.1.6 The RDF equipment is supervised by a mechanical technician who can undertake small repairs and is also subject to a maintenance contract where any major failure will be attended to without delay.

4.1.7 In future the shredded RDF may be fed into an automatic baler and in-line bale wrapper system.

5. SITE DRAINAGE

5.1 Roof Water Drainage

5.1.1 Rainwater from the main roof is harvested and reused for dust control and cleaning.

5.1.2 This uncontaminated water is stored in a tank and used for dampening down on site.

5.2 Surface Water Drainage – potentially contaminated

5.2.1 All wastes accepted at the site which are potentially contaminating are stored and treated on impermeable surface with drainage to sewer via to the existing sumps, a silt trap and interceptor.

5.2.2 Drainage details are shown on drawing 2784.CAU.VN.XX.DR.V.0003.A0.C1

5.2.3 The site construction means that all wastes (other than inert wastes) are deposited, sorted, stored and loaded on an impermeable concrete pavement. The main handling area within the building is enclosed to further reduce the potential for contamination and the generation of excess volumes of contaminated liquids.

5.3 Foul Water Drainage (Sewerage)

5.3.1 The water generated from the staff welfare facilities is disposed of to a septic tank.

6. EMISSIONS

6.1 Surface water

6.1.1 There are no emissions direct to surface water.

7. MONITORING (PROCESS & EMISSIONS)

7.1 Surface Water

7.1.1 Water continues to drain to sewer with no emissions to surface water. No monitoring of surface water is carried out.

8. NUISANCE MANAGEMENT

8.1 Pests

8.1.1 Pest control is operated in house. Records of any necessary action taken are held in the weighbridge office.

8.1.2 The rapid turnaround of general wastes at the site means that the risk of pest development - mainly flies and other insects - on site are minimised. There is however a risk that customers may inadvertently bring loads of wastes into the site with flies, wasps and other insect pests already developed. In this event the waste load will be removed from site as soon as possible. The carrier/customer will be informed to ensure that future loads do not give rise to similar problems.

8.1.3 The wrapping of the RDF bales in future will minimise the potential for pest development with any split bales transferred back into the building for re-wrapping.

8.1.4 Birds are likely to be attracted to the site due to the general waste handling areas being located in an open sided building, however bird scaring devices are employed to control their numbers.

8.1.5 It is recognised however that other waste such as food waste or rejected waste stored on site may consist of materials more attractive to scavenging pests. Therefore pest and vermin activity will be monitored on a daily basis with results recorded on the daily check sheet. Pest control is carried out on site by Site staff

8.1.6 In addition, a recognised pest control contractor will be brought in within 48 hours if any particular problems are encountered.

8.1.7 See amenity & accidents risk assessment and the site's Environmental Management System for further assessment and control measures for pests.

9. RAW MATERIALS

9.1 Fuel & Lubricants

9.1.1 Fuel oil consumption is estimated to be around 1,800 litres per week, which is used in the waste handling and processing plant on site.

9.1.2 A 1,200 litre bunded diesel storage tank is stored on site on a concrete surface.

9.1.3 Oils, grease and lubricants are stored in a container with no more than 500 litres stored on site at any one time.

9.2 Air Spectrum

9.2.1 The deodourising air spectrum machine uses dilute 'Odr', a neutralising additive, to minimise the impact of odour from the site.

9.3 Baling film and wrap

9.3.1 It is anticipated that the site will bale shredded wastes in future.

9.3.2 Typically this operation would utilise rolls of wrapping film, to wrap the waste for transportation and will reduce the impact of odour and pests.

9.3.3 In addition strapping would be used in the baling process, typically nylon strapping is used.

10. ENERGY EFFICIENCY

10.1 Electricity usage

10.1.1 The majority of equipment on site is diesel operated, and so electricity is only used for ancillary equipment such as lighting and heating in winter hours.

10.1.2 Electricity use on site is therefore minimal.

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