

# PEMBROKE DOCK RECYCLING FACILITY

## ODOUR MANAGEMENT PLAN

FEBRUARY 2016

Prepared for:

Sundorne Products Limited  
Potters Yard  
Severn Road  
Welshpool  
Powys  
SY21 7YE

ExCAL Limited

ExCAL House, Capel Hendre Industrial Estate,  
Ammanford, Carmarthenshire. SA18 3SJ  
Tel: 01269 831606  
Fax: 01269 841867




# DOCUMENT CONTROL SHEET

|                 |   |
|-----------------|---|
| <b>PROJECT:</b> | <b>PEMBROKE DOCK RECYCLING FACILITY</b> |
| <b>TITLE:</b>   | <b>ODOUR MANAGEMENT PLAN</b>            |

|                     |                        |
|---------------------|------------------------|
| <b>PROJECT REF:</b> | <b>240-02-03-15</b>    |
| <b>REPORT No.:</b>  | <b>240-02-03.Rev 3</b> |

## PREPARED BY:

C Gray:

.....

## APPROVED BY:

S Whitehouse:

.....

| <b>Version</b> | <b>Date</b>   | <b>Amendments</b>   |
|----------------|---------------|---|
| Original       | July 2015     |   |
| Revision 1     | December 2015 | Section 4.0 and 5.0   |
| Revision 2     | January 2016  | Plan updated to accommodate additional storage area and new waste codes outlined in section 2.1 |
| Revision 3     | February 2016 | Section 4.1.2 and section 6.0 updated   |

This report, and information or advice which it contains, is provided by ExCAL solely for internal use and reliance by its Client in performance of ExCAL's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this report should be read and relied upon only in the context of the report as a whole. The advice and opinions in this report are based upon the information made available to ExCAL at the date of this report and on current UK standards, codes, technology and construction practices as at the date of this report. Following final delivery of this report to the Client, ExCAL will have no further obligation or duty to advise the Client on any matters, including development affecting the information or advice provided in this report. This report has been prepared by ExCAL in their professional capacity as Environmental Consultants. The contents of this report do not, in any way, purport to include any manner of legal advice or opinion. This report is prepared in accordance with the terms and conditions of ExCAL's contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this report. Should the Client wish to release this report to a Third Party for the party's reliance, ExCAL may, at its discretion, agree to such release provided that:

- ExCAL's written agreement is obtained prior to such release and,
- By release of the report to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against ExCAL and ExCAL, accordingly, assume no duties, liabilities or obligations to that Third Party, and
- ExCAL accepts no responsibility for any loss or damage incurred by the Client or for any conflict of ExCAL's interests arising out of the Client's release of this report to the Third Party.

# PEMBROKE DOCK RECYCLING FACILITY

## ODOUR MANAGEMENT PLAN

| Contents  | Page      |
|---|-----------|
| <b>1.0 SITE DESCRIPTION AND SPECIFIED WASTE MANAGEMENT OPERATIONS .....</b>                   | <b>1</b>  |
| <b>2.0 SITE LAYOUT AND EQUIPMENT .....</b>  | <b>2</b>  |
| <b>2.1 Accepted Waste Types.....</b>  | <b>2</b>  |
| <b>3.0 PUBLISHED GUIDANCE .....</b>   | <b>4</b>  |
| <b>3.1 Objectives .....</b>   | <b>4</b>  |
| <b>4.0 PROCESSING .....</b>   | <b>5</b>  |
| <b>4.1 Process Overview .....</b>   | <b>5</b>  |
| 4.1.1 <i>Delivery and Removal.....</i>  | <i>5</i>  |
| 4.1.2 <i>Treatment.....</i>   | <i>5</i>  |
| <b>4.2 Source Pathway Receptor .....</b>  | <b>5</b>  |
| 4.2.1 <i>Odour Source Characterisation .....</i>  | <i>5</i>  |
| 4.2.2 <i>Odour Pathway Characterisation.....</i>  | <i>6</i>  |
| 4.2.3 <i>Odour Receptor Characterisation.....</i>   | <i>6</i>  |
| <b>5.0 INTERNAL AND EXTERNAL STORAGE .....</b>  | <b>7</b>  |
| <b>5.1 Storage Overview.....</b>  | <b>7</b>  |
| <b>5.2 Source Pathway Receptor .....</b>  | <b>7</b>  |
| 5.2.1 <i>Odour Source Characterisation .....</i>  | <i>7</i>  |
| • <b>Odours generated storage of waste prior to onward transport.....</b>                     | <b>7</b>  |
| 5.2.2 <i>Odour Pathway Characterisation.....</i>  | <i>7</i>  |
| 5.2.3 <i>Odour Receptor Characterisation.....</i>   | <i>7</i>  |
| <b>6.0 CONTROL MEASURES.....</b>  | <b>8</b>  |
| <b>6.1 Odours Generated From the Processing of Untreated Wastes .....</b>                     | <b>8</b>  |
| <b>6.2 Odours from Storage of Baled Waste Prior to Onward Transport .....</b>                 | <b>8</b>  |
| <b>7.0 ODOUR MONITORING .....</b>   | <b>10</b> |
| <b>7.1 Public Engagement.....</b>   | <b>10</b> |
| <b>7.2 Complaints Management and Reporting.....</b>   | <b>10</b> |
| 7.2.1 <i>Odour Investigation Plan .....</i>   | <i>10</i> |
| <b>7.3 Contingency Control Measures in the Event of Incidents or Emergencies.....</b>         | <b>11</b> |
| 7.3.1 <i>Loss of Process Control.....</i>   | <i>11</i> |
| 7.3.2 <i>Plant Breakdown.....</i>   | <i>11</i> |
| 7.3.3 <i>Boat Delayed Resulting in Material Requiring Longer Storage Period on Site .....</i> | <i>11</i> |
| <b>8.0 AUDIT PROCEDURE .....</b>  | <b>12</b> |
| <b>APPENDIX A Drawings</b>  |           |
| <b>APPENDIX B Site Inspection Checklist Templates</b>   |           |
| <b>APPENDIX C Odour Complaint Form</b>  |           |

## 1.0 SITE DESCRIPTION AND SPECIFIED WASTE MANAGEMENT OPERATIONS

Sundorne Products Limited operate a Recycling Facility at Pembroke Dock, Pembrokeshire.

The site address is: -

Unit 41,  
The Dockyard,  
Pembroke Dock,  
Pembrokeshire,  
SA72 6TD

The hours of operation for the facility are outlined below: -

|                             |               |
|-----------------------------|---------------|
| Monday – Saturday           | 07.30 – 19.30 |
| Sundays and Public Holidays | 09.00 – 16.00 |

Planning Permission with reference 13/1039/PA was granted by Pembrokeshire County Council for a **“Waste transfer station and shredding bailing facility and a reception hall”** on the 30<sup>th</sup> May 2014.

An environmental permit has also been granted for the facility and has the reference number EPR/PB3490HV.

The permit comprises a tier 3 bespoke Permit for a household, commercial and industrial waste transfer station with treatment.

Treatment can be for either recovery or disposal.

All treatment and storage of waste must take place on an impermeable surface with sealed drainage to foul sewer. Storage may take place either in a building or outside.

The maximum quantity of waste that can be accepted in accordance with the environmental permit is 74,000 tonnes per year.

No hazardous wastes can be accepted at the site.

## 2.0 SITE LAYOUT AND EQUIPMENT

The main pieces of machinery that will be utilised on site are summarised in Table 1 below: -

| Equipment        | Model                   | Serial Number |
|------------------|-------------------------|---------------|
| Shredder         | SATRIND Shredder        | 406415        |
| Screener/Trommel | 60MM DRUM SM518         |               |
| Baler            | Cross Wrap CK TR121/006 | 1103817       |

### 2.1 Accepted Waste Types

Only waste categorised under Environmental Waste Code 20 03 01 can currently be accepted at the Pembroke Dock Materials Recycling Facility. The description of this waste type is given below: -

20 03 01 - Mixed municipal waste (consisting of general 'black bag' waste or Household Waste Recycling Centre residual waste only).

The maximum amount of mixed municipal waste that can be accepted at the site is 74,000 tonnes per year.

An application has been submitted to add the below waste codes to be accepted at the facility.

If the below waste streams are to be stored at the facility, they will follow the existing plan of storing at the furthest distance from sensitive receptors as per the facility's Odour Management Plan.

They will undergo the same waste acceptance procedures, in that loads with an unacceptable high odour will be rejected entrance, with this being recorded in the site diary, as outlined in the facility's Odour Management Plan.

15 01 02 - plastic packaging;  
15 01 04 - metallic packaging;  
15 01 06 - mixed packaging;  
19 12 12 - other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11;  
20 01 01 - paper and cardboard;  
20 01 11 - textiles;  
20 01 39 - plastics;

The above waste streams will either just be bulked up or baled and wrapped in 8-10 layers to prevent fugitive odour emissions, ready for storage at the facility prior to being loaded on the ship.

15 01 07 - glass packaging;  
20 01 02 - glass.

All glass waste will be skipped ready for loading into containers.

20 03 07 - bulky waste.

Bulky waste will be bulked together as far as reasonably practical and stored ready to be loaded onto the ship.

20 01 08 - biodegradable kitchen and canteen waste.

Biodegradable kitchen and canteen waste is the most likely additional waste stream to emit fugitive odour, and as such the waste will be bulked up in preparation for transport to Withyhedge Landfill, removed every day with no overnight storage.

Food waste will be stored in sealed 'Roll on Roll off' containers.

The waste accepted at the facility will remain non-hazardous, with similar processes, storage and waste acceptance, and as such the current odour monitoring and checks will remain largely applicable. In order to take a conservative approach, olfactory monitoring will be increased from a minimum of twice a week to three times a week, with increased checks of the site and bale conditions.

Processing will still be undertaken within the enclosed building for all new additional waste streams.

### **3.0 PUBLISHED GUIDANCE**

This Odour Management Plan has been prepared in consideration of the following guidance documents: -

- NRW – Odour Management Plans for waste handling facilities;
- H4 – Horizontal Odour Guidance.

This management plan is based on the Source – Pathway – Receptor model which aims to control risks at source by implementing effective and robust control measures.

It is acknowledged in guidance notes that the assessment and control of odour can be difficult due to dispersal and the episodic nature of odour events. Assessments are therefore usually based on conservative worst case scenarios and are not a reflection of the preventative measures in place at the site.

The guidance states that the Best Available Technology (BAT) is often site-specific and can be determined by the controls necessary to meet benchmark odour concentrations at ground level at sensitive receptors.

#### **3.1 Objectives**

The aim of this document is to provide a summary of appropriate physical and management controls that will be employed to minimise the odour release at the Pembroke Dock Site. It provides a site specific assessment of the potential sources of odour, the pathways odour can take from the site and the receptors which could be impacted.

Where a source or pathway has been identified, mitigation measures to prevent or control fugitive odour emissions are discussed.

The objective of the plan is to ensure odorous sources are identified and intervention takes place at the earliest opportunity to prevent odours emissions or complaints.

## **4.0 PROCESSING**

### **4.1 Process Overview**

Details of the processing of untreated material carried out at the Pembroke Dock Recycling Facility are outlined below. Drawing 240-01-04.D02 in Appendix A shows a plan of the facility.

#### **4.1.1 Delivery and Removal**

During site opening hours, waste will be delivered to the site by residual waste collection vehicles and bulk transport vehicles. Fines and wastes will exit via enclosed transport vehicles.

A waste acceptance procedure is in place. Incoming material is reviewed by the site supervisor prior to acceptance. Loads with an unacceptable odour are rejected and recorded in the site diary. Volumes of more odorous wastes will be limited on site as much as possible (see characterisation in 4.2.1).

Upon entering the site, all vehicles will be weighed at the weighbridge and then be directed to unload waste in the enclosed reception hall within the waste reception building.

Safe systems of work will be in place to ensure that loading and unloading of waste into and out of the processing plant is undertaken in an appropriate manner to minimise risk of accident or incident.

#### **4.1.2 Treatment**

All waste accepted at the site will be treated in preparation for onward transport to off-site recycling and incineration facilities.

This will involve shredding, screening, separation and baling processes.

Selected recyclates will be extracted from the waste stream in line with the Waste Framework Directive.

Recyclates will be stored separately within containers before being transported for re-processing.

Dusts and fines resulting from processing techniques entering the working environment will be minimised through the use of dust and fines collection systems incorporated within treatment equipment.

Additional dust suppression will be implemented by damping down where deemed necessary. All processing will take place within the waste reception building, and therefore, release of dust and fines to the external environment will be minimal.

A de-odourising agent will be sprayed onto the waste prior to baling to minimise odour generation.

Biodegradable and canteen waste will not be stored at the facility and will be disposed of daily by means of transport to an alternative facility.

### **4.2 Source Pathway Receptor**

#### **4.2.1 Odour Source Characterisation**

Following review of the operational process undertaken at the Pembroke Dock MRF facility and the wastes which can be accepted at the site, the following source of odour is considered to be applicable for the Pembroke Dock facility: -

- Odorous emissions from waste at the delivery stage and odorous waste sources;
- Odours generated from the processing of untreated wastes.

All waste sources will be characterised by the operator, with more odorous material prioritised for processing.

Containment at source via enclosure within the site building and use of the bale material/de-odouriser is the primary method for reducing and preventing release of odorous emissions.



#### *4.2.2 Odour Pathway Characterisation*

Due to the unprocessed material being unloaded, treated and baled in an enclosed building, the potential for odour release would be via roof vents and doorways when open.

The principal mechanism for the transit of odorous emissions from the site operations to adjacent sensitive receptors is via ambient air. The distance any emissions are carried and the degree of dispersion will be determined by the meteorological conditions and topography.

Any odour emissions will be influenced by the prevailing wind direction at the site, which is from the west.

Wind velocity will affect the distance an odour emission will travel. However, increased wind speed could also beneficially improve dispersal. The receptors that are closest to the installation however, remain at the highest risk of adverse impact.

To increase the pathway between source and receptor, odorous material will be stored at locations furthest from sensitive receptors.

The volumes of odorous waste kept on site at any one time will be restricted as far as practicable.

#### *4.2.3 Odour Receptor Characterisation*

Locally sensitive receptors can be characterised as follows: -

- Settlement of Neyland – located 0.8 miles to the North across Milford Haven estuary;
- Settlement of Pembroke Dock – located 0.2 miles to the East;
- South Pembrokeshire Hospital – located 0.15 miles to the South;
- Site operational staff;
- Surrounding industrial estate users;
- Residents of Llanstadwell and Neyland and recreational users of the Haven to the north of the site;
- Public rights of way;
- Locally sensitive sites.

## **5.0 INTERNAL AND EXTERNAL STORAGE**

### **5.1 Storage Overview**

The storage locations are outlined on drawing 240-02-05.d01 in Appendix A.

Odorous waste will be stored at locations furthest from receptors first, the order of which is outlined on drawing 240-02-03.d01.

If approved, the additional storage location as seen on drawing 240-02-05.d01 will become the 2<sup>nd</sup> priority location, which will allow for storage further from sensitive receptors, notably the hospital located south of the site. Baled waste with a higher odour than others will be prioritised to be stored at this location.

There is sufficient external storage capacity for the storage of 4,500 tonnes of baled and wrapped waste. As part of the lease agreement with Milford Haven Port Authority, baled waste will not be stored externally on site for longer than 12 weeks at any time.

Baled waste will be stored in accordance with TGN7.1 to reduce the risk of fire on site.

Baled and wrapped waste will be transferred in an appropriate manner to a dedicated external storage area prior to onward transportation to further treatment / recovery facilities.

Processed waste will be baled and wrapped in plastic film to ensure environmental protection during transportation.

An inspection of stored wastes for pest infestations or damage of wrapping will be carried out on a daily basis by the site supervisor, and shall be recorded in the site diary.

On detection (or notification) of damage to bale wrapping, immediate remedial action shall be taken, appropriate measures will be undertaken to secure the bale.

The incident and the remedial action shall be recorded in the site diary.

### **5.2 Source Pathway Receptor**

#### **5.2.1 Odour Source Characterisation**

Following review of the storage of processed waste at Pembroke Dock recycling facility, the following source of odour is considered to be applicable for the Pembroke Dock facility: -

- Odours generated storage of waste prior to onward transport.

Containment at source will also be seen as the primary method for reducing the risk of release of fugitive odour emissions.

#### **5.2.2 Odour Pathway Characterisation**

The pathway described in section 4.2.2 is also applicable for the odours generated from the storage of waste.

Processed waste with a particularly high odour will be stored in storage areas located furthest from sensitive receptors.

#### **5.2.3 Odour Receptor Characterisation**

Locally sensitive receptors can be characterised as the same as those outlined in section 4.2.3 for odours generated from the processing of untreated waste.

## **6.0 CONTROL MEASURES**

The Site Manager will be responsible for ensuring the potential for odour generation at the facility is monitored and managed effectively.

Prevention will be viewed as the most effective means of controlling odour before any impact occurs. The Source – Pathway – Receptor model outlined in the preceding sections has identified two potential sources from the site which could impact on nearby sensitive receptors.

### **6.1 Odours Generated From the Processing of Untreated Wastes**

Odours associated with the untreated material will be controlled to an acceptable level by ensuring the following measures are implemented: -

- Wastes will be delivered to the site in covered or sealed vehicles;
- A site operator will check incoming waste prior to acceptance. If the waste has an unacceptably elevated odour, then this load will be rejected, and this will be recorded in the site diary. Waste acceptance procedure is key as it represents the earliest opportunity for the intervention of odour;
- All unloading and treatment of unprocessed material is undertaken within the site building;
- The processing building has PVC flaps on the doors, which will limit the potential for released of fugitive odour emissions. Only 1 door will be open at any one time in order to prevent a through-draft, to further minimise any fugitive odour escaping the facility;
- The maximum quantity of unprocessed waste permitted to be stored on the site at any one time (570 Tonnes), as outlined in the Environmental Permit and the Environmental Management System will not be exceeded;
- All unprocessed material delivered to the site that requires baling will be treated as soon as possible, but within a maximum of 48 hours, as once the waste is baled the potential for odour generation is reduced;
- During processing, organic materials and fines will be removed, which are the primary odour generating fraction of the waste. Machinery will be checked weekly to ensure that their efficiency at removing these fractions remains within acceptable limits;
- Waste streams that require bailing will be sprayed with a de-odourising agent to reduce the potential for odour generation;
- The waste will be then be baled in a minimum of 8-10 layers of tough waterproof baling plastic. The baling material will limit water ingress which could lead to elevated odour generation, while limiting odour emissions themselves from the bales;
- Odour suppression is also utilised in the processing building, further reducing the potential for the release of fugitive odour emissions;
- The building is cleaned thoroughly on a daily basis, with no waste stored within the building overnight;
- Provision will be made to undertake a thorough clean down of all plant and machinery annually;
- Any biodegradable and canteen waste accepted at the site will be transported to Withyhedge Landfill on the same day.

### **6.2 Odours from Storage of Baled Waste Prior to Onward Transport**

Odours associated with the treated baled waste will be controlled to an acceptable level by ensuring the following measures are implemented: -

- The maximum quantity of baled waste permitted to be stored at the site at any one time (4500 Tonnes), as outlined in the Environmental Permit and the Environmental Management System will not be exceeded;
- Baled waste will not be stored at the site for longer than 12 weeks. Where this timeline cannot be achieved, the procedure outlined in section 7.3.3 will be employed immediately;
- The Site Manager will assess the risk of each of its sources of waste, which will include proposals for processing waste from more odorous sources first, and storing it furthest from receptors once processed. This will extend the pathway length for any odour generated. Drawing 240-02-03.d01 in Appendix A displays the various storage areas, and the order in which they will be used;
- Baled wastes will be regularly inspected for damage or pest infestation as outlined in the Environmental Management system for the site. The inspections will ensure that bale integrity is not compromised which could increase the potential for odour emissions. Where damage to a bale identified, the wrapping layer will be repaired if needed;
- Daily and weekly site inspection checklists are in place, which include subjective assessments by the site manager regarding any odour generation from the facility. Any observations are noted in the site diary and checklists along with the meteorological data for each day;
- During periods of hot weather, the site manager will attempt to limit as far practicable, the amount of baled waste stored at the site;
- Provision will be made to clear each storage area and undertake a thorough clean down at a suitable frequency, no less than annually. Clean downs of storage areas are likely to be undertaken on a rotational basis.

## **7.0 ODOUR MONITORING**

Odour monitoring is the primary mechanism by which any impact from the facility will be quantified and recorded.

The Site Manager will be responsible for ensuring that monitoring is conducted at the facility, identifying any sources of odour and to establish whether any odours are discernible.

Monitoring will be conducted a minimum of three per week on Monday, Wednesday and Friday mornings as a result of new waste streams to be accepted at the site, extended storage time and a new storage area. All odour monitoring will start at the upwind location on the day as determined by prevailing wind conditions.

Monitoring will comprise sniff tests to be undertaken along the site perimeter and at offsite at nearby sensitive receptors, the locations of which are shown in drawing 240-02-03.d01 included in Appendix A.

All off-site olfactory monitoring will also be carried out with reference to the protocol in Appendix 1 of the H4 Technical Guidance Note, with an odour assessment form being completed. Results will also be recorded in the daily site checklist and odour diary, copies of which are included in Appendix B.

The Daily and weekly site checklists will also include process monitoring. Checks will ensure that the organic components and fines are being adequately removed from the waste and that the waste is being de-odourised and baled correctly.

### **7.1 Public Engagement**

The operator will undertake regular, planned engagement with nearby sensitive receptors. The frequency of contact will be at least monthly, including visits or phone calls, the date and time of which will be recorded in the site diary.

These meetings provide clear lines of communication with the operator to enable swift identification of any issues, commencement of investigations and resolution where required, prior to the need to register a complaint.

The operator will keep sensitive receptors informed of any operations or operational periods which could lead to elevated levels of odour.

Nearby receptors will be provided with a direct contact number which they can ring to discuss any issues. Alternatively, any issues can be discussed with the operator on site by visiting the weighbridge.

### **7.2 Complaints Management and Reporting**

Following the receipt of any complaints, the Site Manager will complete an Odour Complaint Form and implement the site Odour Investigation Plan.

A copy of the odour complaint form is included in Appendix C. The site odour investigation plan is discussed below.

#### **7.2.1 Odour Investigation Plan**

Once a complaint has been made and received an employee from the Withyhedg waste site will be sent out to detect odours at each of the 9 regular monitoring points as shown in drawing 240-02-03.d01.

The reason an employee from Withyhedg will be utilised is to limit the possibility that the assessor has become acclimatised to any odours generated by the Pembroke Dock site.

The odour diary utilised for regular monitoring will be filled in each point.

Where unacceptable levels of odour emissions from the facility are identified, potential corrective and preventative actions will be investigated and implemented where possible.

NRW will be notified of all complaints received and provided with copies of the Investigation forms.

### 7.3 Contingency Control Measures in the Event of Incidents or Emergencies

The primary incidents that could impact odour at the site are outlined below: -

- Loss of process control;
- Plant Breakdown;
- Boat delayed resulting in material requiring longer storage period on site.

#### 7.3.1 *Loss of Process Control*

The machinery at the site could experience a malfunction which results in a loss of process control.

Daily and weekly inspections will be undertaken at the site to ensure that machinery is running correctly. All machinery will be maintained in accordance with the manufacturer's guidelines.

Site machinery is also fitted with emergency stop features that can be activated in case of an incident or emergency. Furthermore, as the waste requires manually loading into process machinery, the supply of waste into the machines can be stopped quickly in the event of an incident or emergency.

The risk of loss of process control resulting in an odour impact is therefore low, with any impact likely to be minor and short term.

#### 7.3.2 *Plant Breakdown*

The machinery at the site could break down resulting in the need to halt processing of waste at the site.

Daily and weekly inspections will be undertaken at the site to ensure that machinery is running correctly. All machinery will be maintained in accordance with the manufacturer's guidelines.

Where machinery is unlikely to be fixed within an appropriate timeframe, waste deliveries to the site will be diverted.

Where unprocessed waste will not be able to be treated within 48 hours, daily odour monitoring will be conducted and the site manager will inform local sensitive receptors of the situation.

If 48 hours after the initial breakdown, the machinery has not been repaired, Mobile plant will be brought in if necessary to continue processing the waste while the machinery is repaired.

If the waste cannot be processed, then the Site Manager will arrange for the unprocessed material to be collected and taken from the site.

NRW will be informed of any process machinery breakdowns and kept informed daily of monitoring results, any complaints received and progress with fixing the machinery.

#### 7.3.3 *Boat Delayed Resulting in Material Requiring Longer Storage Period on Site*

Where the boat collecting the baled waste is delayed, or where otherwise the time baled waste is required to be stored at the site for longer than 12 weeks, NRW will be informed.

The Site manager will commence daily odour monitoring at the receptors identified in drawing 240-02-03.d01 and will inform local sensitive receptors of the situation.

Older baled wastes will be relocated within the site to storage areas furthest from the sensitive receptors to extend the odour pathway length. De-odourising agents will be employed where possible.

In the event that the bales cannot remain on site beyond the 12 week storage time then the waste will be promptly diverted to a different site for disposal. The disposal site would also have to be agreed by the producer.

## **8.0 AUDIT PROCEDURE**

The Site Manager is responsible for conducting a review at least once a year of the odour management plan document, to ensure the current control measures and monitoring outlined are adequately managed and remain appropriate.

Additional control measures will be added as required.

The Odour Management Plan will be updated to incorporate any changes made.

The audit will also include the review of the plant and maintenance schedule along with records of all complaints received and corrective actions taken since the previous audit.




Changes that alter site processes, machinery types or could increase the environmental risk of the site will be discussed with Natural Resources Wales prior to implementation and updating of the document.

A copy of an updated Odour Management Plan will be provided to NRW for approval.

## **APPENDIX A**

### **Drawings**



-  Proposed Additional Storage Location
-  Bale Storage
-  Weighbridge



Job: 240-02-05

Title: Pembroke Dock Storage Locations

Date: December 2015

Scale: NTS

Drawn by: CG

Checked by: SW



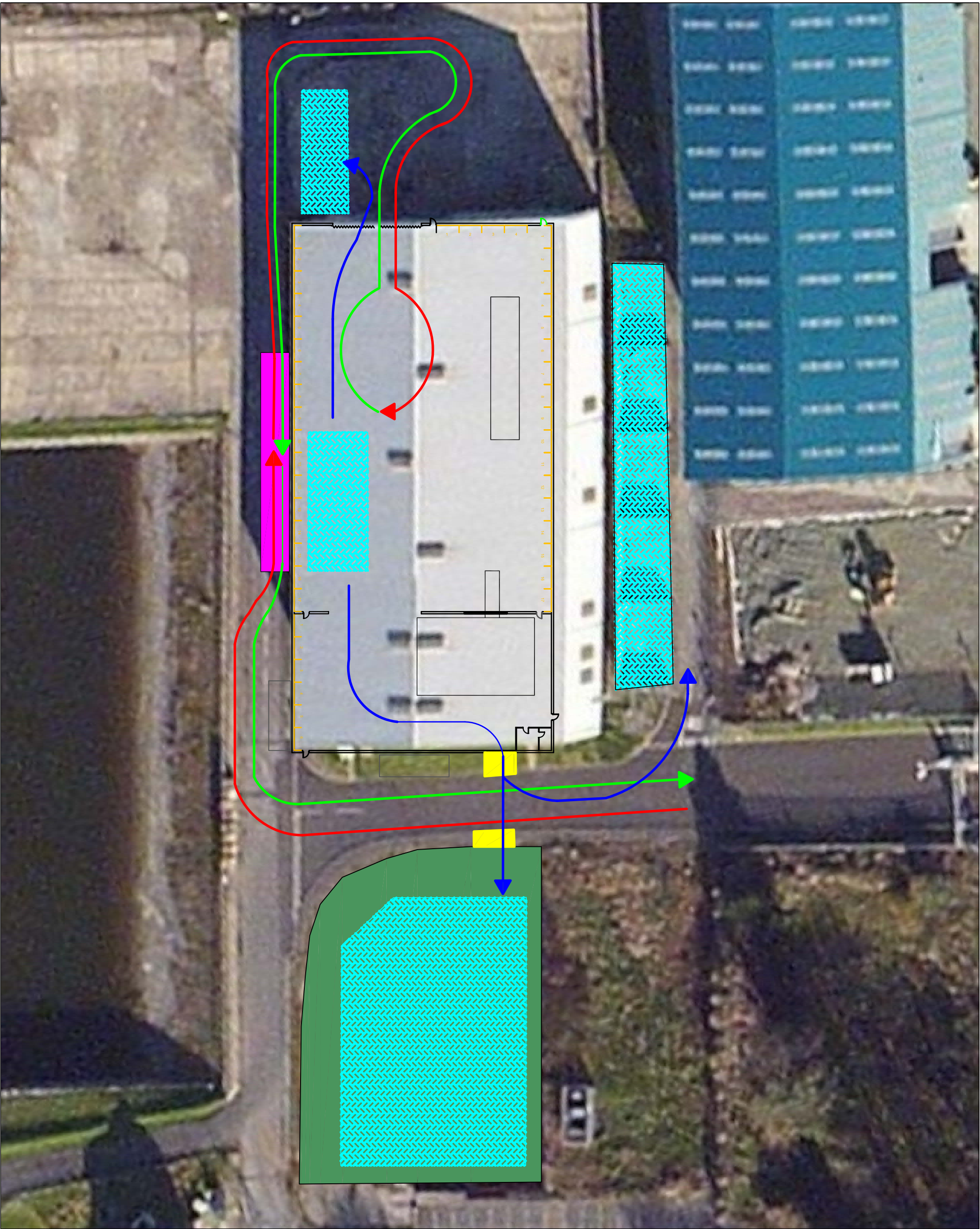
**ExCAL**  
Limited

ExCAL House,  
Capel Hendre Ind. Est.,  
Ammantford,  
Carmarthenshire,  
SA18 3SJ  
Tel: 01269 831606  
Fax: 01269 841867  
Website: www.excaluk.com  
E-mail: info@excaluk.com

Drawing No: 240-02-05.d01

Revision No: Date:





- Route In
- Route Out
- Internal Movements
- Tarmac
- New Drop Curbs
- Bale Storage
- Weighbridge

Job:  
240-01-04

Title:  
Pembroke Dock Traffic Management Plan

Date: March 2015

Scale: NTS

Drawn by: DS

Checked by: SW

E.CAL House,  
Capel Hendre Ind. Est.,  
Ammantford,  
Carmarthenshire,  
SA18 3SJ  
Tel: 01289 831606  
Fax: 01289 841607  
Website: www.ecaluk.com  
E-mail: info@ecaluk.com

Drawing No: 240-01-04.D02

Revision No: Date:

Site

1Odour Monitoring Location



|   |       |
|---|-------|
| Job:<br>240-02-03   |       |
| Title:<br>Odour Monitoring Location Plan  |       |
| Date:<br>August 2015  |       |
| Scale:<br>NTS   |       |
| Drawn by:<br>DS   |       |
| Checked by:<br>SW   |       |
| E/CAL House,<br>Capel Hendre Ind. Est.,<br>Ammarford,<br>Carmarthenshire,<br>SA18 3SJ<br>Tel: 01269 831606<br>Fax: 01269 841867<br>Website: www.excaluk.com<br>E-mail: info@excaluk.com |       |
| Drawing No: 240-02-03.D01   | Date: |
| Revision No:  | Date: |



1 – 4 Storage order

- Tarmac
- Weighbridge
- Bale Storage



Job:  
Odour Management Plan

Title:  
Storage locations

|             |               |
|-------------|---------------|
| Date:       | November 2015 |
| Scale:      | NTS           |
| Drawn by:   | CG            |
| Checked by: | SW            |



E-CAL House,  
Capel Hendre Ind. Est.,  
Ammantford,  
Carmarthenshire,  
SA418 3SJ  
Tel: 01269 831606  
Fax: 01269 841607  
Website: [www.ecaluk.com](http://www.ecaluk.com)  
E-mail: [info@ecaluk.com](mailto:info@ecaluk.com)

|              |               |
|--------------|---------------|
| Drawing No:  | 240-02-03.001 |
| Revision No: | Date:         |

## **APPENDIX B**

### **Site Inspection Checklist Templates**

# Daily Diary

**PotterGroup**

Site:

By:

Day:

Date:

Weather:

## Staffing levels

|  |  |
|--|--|
| Staff present                          |  |
| No. agency staff                       |  |
| Appointed person (1 <sup>st</sup> aid) |  |
| Team Leader                            |  |

## COTC holder on site

|          |  |  |  |
|----------|--|--|--|
| Initials |  |  |  |
| Time in  |  |  |  |
| Time out |  |  |  |

Daily checks-any issues e.g. broken/damaged signs, damage, etc.

|  | Reported |
|--|----------|
|  | Y/N      |
|  | Y/N      |
|  | Y/N      |
|  | Y/N      |
|  | Y/N      |

## Site inspections/audits (EA,CCC etc.)

| Type of inspection | Name | Time in | Time out | Comments | Reported |
|--------------------|------|---------|----------|----------|----------|
|                    |      |         |          |          | Y/N      |
|                    |      |         |          |          | Y/N      |
|                    |      |         |          |          | Y/N      |
|                    |      |         |          |          | Y/N      |

## Accidents/emergencies

## Compliments/comments/complaints

|  |  |
|--|--|
|  |  |
|--|--|

Contractors on site-maintenance, repairs, etc.

|  |
|--|
|  |
|--|

## Further comments

|  |
|--|
|  |
|--|

# Daily/Weekly Site Inspection

**Site:** Pembroke Dock

**Week Commencing:**

**TCM Minimum Attendance Required:**

**TCM Attendance (hours/week):**

| Inspected items  | Frequency            | Mon | Tues | Wed | Thur | Fri | Sat | Sun |
|--|----------------------|-----|------|-----|------|-----|-----|-----|
| Person Completing the checklist  | Daily Initials       |     |      |     |      |     |     |     |
| All Facilities   |                      |     |      |     |      |     |     |     |
| Condition of site ID Board & signs   | weekly               |     |      |     |      |     |     |     |
| Condition of Access, site road & hardstanding  | weekly               |     |      |     |      |     |     |     |
| Condition of Waste reception area & Operational area   | weekly               |     |      |     |      |     |     |     |
| Site building & welfare  | weekly               |     |      |     |      |     |     |     |
| Waste type, Quantities & storage   | daily                |     |      |     |      |     |     |     |
| Waste acceptance/inspection & Duty of care   | daily                |     |      |     |      |     |     |     |
| Condition of Fencing, Gates & security   | daily                |     |      |     |      |     |     |     |
| Condition of all waste containers, on shared site this includes any containers left by logistics   | daily                |     |      |     |      |     |     |     |
| Condition of lighting system   | daily                |     |      |     |      |     |     |     |
| Condition of fuel & storage tanks, inc containment system  | daily                |     |      |     |      |     |     |     |
| Other liquid storage: Availability of spillage kit   | daily                |     |      |     |      |     |     |     |
| Fire; Availability of emergency equipment (inc vehicles)   | daily                |     |      |     |      |     |     |     |
| Surface water Management e.g. Drainage system  | daily                |     |      |     |      |     |     |     |
| Control of litter inc fly tipping  | daily                |     |      |     |      |     |     |     |
| Control of odour – morning check If no odour x if odour and investigate with details on reverse  | Once/twice           |     |      |     |      |     |     |     |
| ADDITIONAL CHECK TO BE IMPLEMENTED IF ODOUR COMPLAINT RECEIVED AND CONTINUED FOR 1 MONTH AFTER LAST COMPLAINT – control odour – afternoon check if no odour x if odour and investigate with details in reverse | Daily as Appropriate |     |      |     |      |     |     |     |
| Odour suppression system operating satisfactorily  | daily                |     |      |     |      |     |     |     |
| Control of dust  | daily                |     |      |     |      |     |     |     |
| Control of noise   | daily                |     |      |     |      |     |     |     |
| Control of birds & rats  | daily                |     |      |     |      |     |     |     |
| Control of flies (*record spraying and any problem load on reverse)  | daily                |     |      |     |      |     |     |     |
| Wind direction   | daily                |     |      |     |      |     |     |     |
| Have any inspections occurred (e.g. regulator) or samples taken (e.g. discharge monitoring) if regulator scored received   | As inspected         |     |      |     |      |     |     |     |



# Daily/Weekly Site Inspection



**Site:** Pembroke Dock

**Week Commencing:**

**Monday**

**Tuesday**

**Wednesday**

**Thursday**

**Friday**

**Saturday**

**Sunday**

**Comments**

CoTC Signature: \_\_\_\_\_

Date: \_\_\_\_\_



| Odour Diary Unit 41   |          |          |          |          |          |          |          | Sheet No |          |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Name of person doing checks:  |          |          |          | Date:    |          |          |          |          |          |
| Time arrived at points:   |          |          |          |          |          |          |          |          |          |
| Location of odour; if not at above address:   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> |
| Time spent at location:<br>(1-5 minutes)  |          |          |          |          |          |          |          |          |          |
| Weather conditions (dry, rain, fog, snow etc.):   |          |          |          |          |          |          |          |          |          |
| Temperature (very warm, warm, mild, cold or degrees if know):                           |          |          |          |          |          |          |          |          |          |
| Wind strength (none, light steady, strong, gusting):                                    |          |          |          |          |          |          |          |          |          |
| Wind direction (e.g. from NE):  |          |          |          |          |          |          |          |          |          |
| What does it smell like? How unpleasant is it? Do you consider this smell as offensive? |          |          |          |          |          |          |          |          |          |
| Intensity – how strong was it? (see below 1-5)  |          |          |          |          |          |          |          |          |          |
| How long did go on for? (time)  |          |          |          |          |          |          |          |          |          |
| Was it constant or intermittent in this period:   |          |          |          |          |          |          |          |          |          |
| What do believe the source/cause to be?   |          |          |          |          |          |          |          |          |          |
| Any actions taken or other comments:  |          |          |          |          |          |          |          |          |          |

### Intensity

0 No odour

1 Vey faint odour

2 Faint odour

3 Distinct odour

4 Strong Odour

5 Very strong odour

6 Extremely strong odour

### Time

1 - 1 minute

2 – 2 minutes

3 – 3 minutes

4 – 4 minutes

5 – 5 minutes

## **APPENDIX C**

### **Odour Complaint Form**

## Odour Complaint Report Form

|                                  |                                  |
|----------------------------------|----------------------------------|
| Time and date of complaint:      | Name and address of complainant: |
| Telephone number of complainant: |                                  |

|   |                  |
|---|------------------|
| Date of odour:  |                  |
| Time of odour:  |                  |
| Location of odour, if not at above address:   |                  |
| Weather conditions (i.e., dry, rain, fog, snow):  |                  |
| Temperature (very warm, warm, mild, cold or degrees if known):  |                  |
| Wind strength (none, light, steady, strong, gusting):   |                  |
| Wind direction (eg from NE):  |                  |
| Complainant's description of odour:   |                  |
| o What does it smell like?  |                  |
| o Intensity (see below):  |                  |
| o Duration (time):  |                  |
| o Constant or intermittent in this period:  |                  |
| o Does the complainant have any other comments about the odour?   |                  |
| Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure): |                  |
| Any other relevant information:   |                  |
| Do you accept that odour likely to be from your activities?   |                  |
| What was happening on site at the time the odour occurred?  |                  |
| Operating conditions at time the odour occurred (eg flow rate, pressure at inlet and pressure at outlet):                               |                  |
| Actions taken:  |                  |
| Form completed by:  | Date      Signed |

### Intensity

- |                    |                  |                          |
|--------------------|------------------|--------------------------|
| 0 No odour         | 3 Distinct odour | 5 Very strong odour      |
| 1 Very faint odour | 4 Strong odour   | 6 Extremely strong odour |
| 2 Faint odour      |                  |                          |

For this Agency to follow up on your complaint, the Odour Management