PEMBROKE DOCK MATERIAL RECYCLING FACILITY

ODOUR MANAGEMENT PLAN

JULY 2015

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PEMBROKE DOCK MATERIAL RECYCLING FACILITY

ODOUR MANAGEMENT PLAN

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1.0 SITE DESCRIPTION AND SPECIFIED WASTE MANAGEMENT OPERATIONS

Sundorne Products Limited operate a Material Recycling Facility (MRF) 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 30th 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

A layout drawing for the Pembroke Dock Materials Recycling Facility is included in Appendix A of this document.

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	Not yet purchased	
Baler	Cross Wrap CK TR121/006	1103817

2.1 Process Overview

2.1.1 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 suitably enclosed transport vehicles.

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.

2.1.2 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 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.

2.1.3 Storage

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

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 pest infestation or damage to bale wrapping, immediate remedial action shall be taken.

In the instance of a pest infestation, a professional pest control contractor will be appointed.

Where damage to bales is identified, appropriate measures will be undertaken to secure the bale.

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

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 six weeks.

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

2.1.4 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).

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 therefore are 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.

This document provides a summary of the physical and management controls that will be employed to minimise the odour release at the Pembroke Dock MRF 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.

4.0 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 as outlined in section 2,1, the following sources of odour are considered to be applicable for the Pembroke Dock facility: -

- Odours from the internal storage and processing of untreated wastes. 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;

- Odours from the external storage of baled waste prior to onward transport. The plastic baling material will limit water ingress and odour egress from the material which will reduce the potential for odour generation.

For both potential sources, containment at source via enclosure within the site building and the bale material is the primary method for reducing and preventing release of odorous emissions,

4.1 Odour Pathway Characterisation

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.

4.2 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.

4.3 Odour Management

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.

4.3.1 Odours from storage and 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 appropriately covered or sealed vehicles

- All unloading and treatment of unprocessed material is undertaken within the site building,

- The processing building has sealable doors which will be kept closed as much as possible to limit the potential for released of fugitive odour emissions,

- The maximum quantity of unprocessed waste permitted to be stored on the site at any one time, as outlined in the Environmental Permit and the Environmental Management System will not be exceeded,

- All unprocessed material delivered to the site will be treated as soon as possible, as once the waste is baled, the potential for odour generation is reduced.

- 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 as practicable, the amount of untreated waste present on the site and the time required to process the untreated waste.

4.3.2 Odours from storage of treated baled waste prior to onward transport

Treated wastes are baled, which involves the covering of the treated material in several layers of wrapping material. The wrapping material seals the treated waste inside the bail which limits water ingress and the potential for odour release.

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, as outlined in the Environmental Permit and the Environmental Management System will not be exceeded;

- 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;

- 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.

Due to the waste being delivered directly into the site building, the baling of the treated waste being stored at the site, and the odour control procedures put in place, the potential risk for odour generation is considered to be at an acceptable level

The source of odour will be contained sufficiently so that it will not enter the potential pathway in a way that could cause a nuisance to the local community. A monitoring and complaints procedure is also in place at the site as discussed below.

4.4 Odour Monitoring

The Site Manager will be responsible for ensuring that regular inspections are made of the facility in order to identify any sources of odour and to establish whether any odours are discernible. All odour monitoring will start at the upwind location on the day as determined by prevailing wind conditions.

Odour inspections will form part of the daily and weekly site checklists completed by the Site Manager.

If deemed to be required by the Site Manager, 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.

All site personnel will be responsible for reporting any odour problems immediately to the Site Manager.

4.5 Complaints Management and Reporting

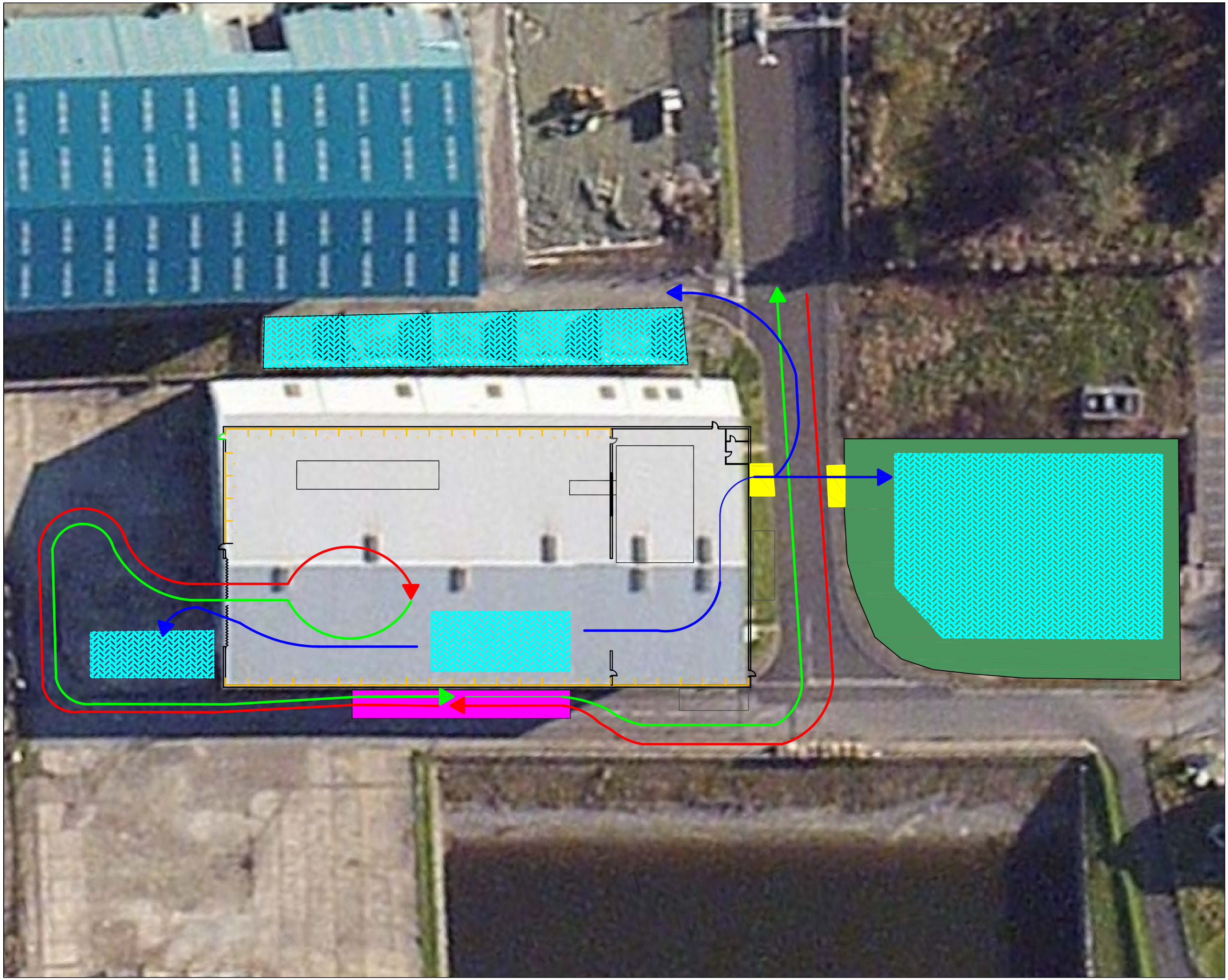
Complaints management and reporting will be handled in accordance with the corresponding sections of the Environmental Management System prepared for the site.

Following the receipt of any complaints, the site manager undertake an investigate which will include as a minimum a site walkover and subjective assessment to identify any abnormal odour emissions, review of the daily and weekly site checklists and review of recent meteorological data.

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

APPENDIX A

Site Layout Plan



Notes: A3

Job:
240-01-04

Title:
Pembroke Dock Traffic Management Plan

Date:	March 2015
Scale:	NTS
Drawn by:	DS
Checked by:	SW

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Drawing No:	240-01-04.d02
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 (1st 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:_____