Report: *CWM1005/OMP*
Date: April 2018

MATERIALS RECYCLING FACILITIES, NANTYCAWS WASTE MANAGEMENT SITE, LLANDDAROG ROAD, NANTYCAWS, CARMARTHEN, SA32 8BG

ODOUR MANAGEMENT PLAN

Prepared for
CWM Environmental Limited

Prepared by

Office Suite 2
The Beacon Centre for Enterprise
Dafen
Llanelli
SA14 8LQ

Tel: 01554 780544
Fax: 01554 759988
Web: www.thesiriusgroup.com

Project Quality Assurance
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ODOUR MANAGEMENT PLAN

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Prepared for	:	CWM Environmental Limited			
Prepared by	:	Sirius Environmental Limited Office Suite 2 The Beacon Centre for Enterprise Dafen Llanelli SA14 8LQ			

Written by:

Lucy J Edds
Environmental Consultant

Reviewed & Approved by:

Mark L Griffiths
Environmental Director

MATERIALS RECYCLING FACILITIES, ENVIRONMENTAL PERMIT VARIATION APPLICATION NANTYCAWS WASTE MANAGEMENT SITE, LLANDDAROG ROAD, NANTYCAWS, CARMARTHEN, SA32 8BG

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1.0 INTRODUCTION

1.1 Background

1.1.1 Sirius Environmental Limited (Sirius) has been commissioned by CWM Environmental Limited to prepare an Environmental Permit Variation Application (EPA) for their Materials Recycling Facilities at Nantycaws Waste Management Facility, Llanddarog Road, Nantycaws, Carmarthen, SA32 8BG (National Grid Reference 247280, 217631)

1.1.2 CWM Environmental operate a Household, Commercial and Industrial (HCI) waste transfer station with treatment including manual and/or mechanical sorting, separation, screening, baling, shredding, crushing, compaction and bulking up of permitted inert and non-hazardous wastes for the purposes of recovery or disposal (the Residual Waste Materials Recycling Facility (RWMRF), Environmental Permit EPR/KB3097TU). Please note, at present, crushing and shredding is not conducted at the site. RDF is produced from predominantly from suitable residual materials resulting from the mechanical processing of waste at the site, as well as other permitted wastes as stipulated within the site's permit.

1.1.3 CWM also operate a "Clean MRF", which is permitted by a Standard Rules Permit (SR2008No3_75kte) for a Household, Commercial and Industrial Waste Transfer Station with Treatment (Environmental Permit EPR/YB3293HL), which is situated adjacent to the previously mentioned Residual Waste Materials Recycling Facility. The majority of waste input to the 'Clean' MRF is comingled recyclate, however the facility does have the capability to process source segregated as well as other waste types. Operations involve the receipt, storage, treatment and eventual dispatch of non-hazardous materials. Wastes is permitted to be bulked up for disposal or recovery elsewhere and is treated by sorting, separation, screening, baling, shredding, crushing and compaction. Please note, at present, crushing and shredding is not conducted at the site. CWM is now seeking the consolidation of the two MRF Environmental Permits at the site (the RWMRF and 'Clean' MRF), and to operate under one Bespoke Environmental Permit. The site operations and activities will remain largely unchanged.

1.1.4 Going forward, in addition to the above, CWM Environmental Limited now propose to extend their current RWMRF permit boundary to encompass an additional area of land to the south of the current RWMRF in order to account for an extension of the current building. The Permit boundary extension area has previously been utilised as a pre-treatment area for the adjacent landfill and it was subsequently permitted under EPR/HP3098FA/V002. The operator now proposes to consolidate the current RWMRF permit (EPR/KB3097TU) with the aforementioned landfill pre-treatment permit, to allow for amalgamation of the two permit boundary areas. All other activities listed under the landfill pre-treatment permit can be removed as appropriate as they are already covered by the RWMRF Permit.

1.1.5 Further to this, the operator has advised that the 75 tonnes per day limit relating to the treatment of waste as stipulated within their permit will only apply to activities that directly and intentionally improve the quality of the waste as a fuel. This will allow for the increased daily production of RDF at the site. This is discussed further in the **Supporting Statement CWM1005/04**.

1.1.6 The potential for odour emanating from the internal processing and storage of the majority of Commercial and Industrial waste streams within the RWMRF and the Household, Commercial and Industrial (HCI) co-mingled recyclate within the Clean MRF is considered to be 'low' to 'very low'. It is possible that small amounts of Household waste residue present upon the co-mingled recyclate could also lead to minor odours.

1.1.7 Notwithstanding the above, there is a potential risk that odour emanating from the processing and treatment of 'black bag' Household waste within the RWMRF with subsequent production of RDF could cause offence beyond the site boundary.

1.1.8 This Odour Management Plan (OMP) will seek to outline measures to be employed, as required, to prevent any odour problems emanating from the site, predominantly in relation to the treatment and storage of 'black bag' Household waste, but with cognisance given to the potential for odour produced by a limited number of permitted Commercial and Industrial waste streams and activities carried out at the 'Clean' MRF. It will also include identification of potential sources of risk, mitigation measures employed and how CWM will respond to complaints etc.

1.1.9 A Fugitive Risk Assessment (included in **Appendix 3** to the **Support Statement: Report Reference CWM1005/04**) considered potential risks of odour and mitigation measures employed to address these risks. This Odour Management Plan has been prepared to provide more specific information due to the acceptance of potentially odourous waste streams at the site.

1.1.10 This Odour Management Plan has been prepared in accordance with guidance on best practice, and in particular the following specific regulations and guidance (where applicable) contained in:

- Environmental Permitting (England and Wales) Regulations 2017;
- Environmental Permitting Core Guidance (DEFRA, Updated March 2013);
- General Natural Resources Wales Guidance
- Natural Resources Wales Document H4 – Odour Management.

1.1.11 This Odour Management Plan is a live document and as such will be subject to regular review and revision. In all circumstances, revisions will be submitted to the Natural Resources Wales (NRW) for review and approval.

1.2 Scope

1.2.1 This Odour Management Plan (OMP) has been prepared in accordance with the requirements of the Natural Resources Wales guidance referred to in paragraph 1.1.7 above.

1.2.2 Appendix 4 of the H4 Guidance discusses the purpose of an Odour Management Plan and details the requirements of what should be included in the aforementioned document. The objectives of an OMP are as follows;

- Employ appropriate methods, including monitoring and contingencies, to control and minimise odour pollution;
- To prevent unacceptable odour pollution at all times; and
- Reduce the risk of odour releasing incidents or accidents by anticipating them and planning accordingly.

1.2.3 Each OMP needs to consider odour sources, potential releases and possible impacts, and use these to identify cost-effective opportunities for odour management. For a particular activity, some methods may be more effective/ applicable than others.

1.2.4 It is considered that the required contents for OMP's is that they include a number of simple measures which each make a significant contribution to the overall objectives. OMP's which rely on single measures can be vulnerable to minor failures and may not provide the most cost effective solution.

1.2.5 In order to prepare an Odour Management Plan, the operator will need to consider;

- The activity which produces the odour and the point(s) of odour release (both intentional and unintentional);
- Possible process or control failures or abnormal situations which could lead to an increased level of exposure;
- The potential outcome of each failure scenario in respect of the likely odour impact on local sensitive receptors; and
- The actions which are to be taken to mitigate the effect of the odour release, and details of the persons responsible for the actions on the Regulated Facility.

1.2.6 Examples of potential issues to consider within an OMP are summarised in below in **Table 1**. Only some of these are appropriate for consideration in relation to the MRF facilities at Nantycaws.

Table 1 - Issues to Consider in an OMP

Nature / cause of failure	Examples of issues to consider
Those which have the potential to affect the process and the generation of odour	Examples of factors which the Operator should normally have made arrangements for are: • material input (seasonal variation in weather may affect odour of materials)

Nature / cause of failure	Examples of issues to consider
	• process parameters (changes in temperature / pressure) • rate of throughput or increased hours of operation • anaerobic conditions develop where not appropriate.
Those which affect the ability to abate / reduce odour	Examples of factors which might be considered to be outside the Operator's control and best dealt with by management actions: • power failure (if accepted to be BAT not to provide backup) • external failure of other utilities, e.g. water supply. (where the Operator has signed up to an interruptible supply, there may be some debate as to whether an interruption is outside of the Operator's control) • start-up / shut down (depending on the frequency of occurrence and the nature of the process).
	Examples of factors which the Operator should normally have made arrangements for are: • breakdown of abatement kit / pumps • poor performance of biofiltration or poisoning • saturation of a filter media and subsequent breakthrough of odorants • below optimum performance conditions of waste treatment plant
Those which affect the ability to contain odour (where releases are not normally permitted)	Examples of factors which might be considered to be outside the Operator's control and best dealt with by management actions: • power failure (if accepted to be BAT not to provide a backup)
	Examples of factors which the Operator should normally have made arrangements for are: • failure of automatic doors, i.e. in open position • failure in procedures to maintain containment (human error)
Those affecting dispersion between the source and sensitive receptors (for permitted releases points such as vents, stacks or permitted open (area) sources):	Examples of factors which might be considered to be outside the Operator's control and best dealt with by management actions: • short term weather patterns which fall outside the normal conditions for that area (i.e. highly unusual, not just the normal meteorological pattern – for example inversions and other conditions unfavourable to dispersion should have been considered in designing the process).
	Examples of factors which the Operator should normally have made arrangements for are: • weather – wind direction, temperature, inversion conditions if these are normal variants of local weather • loss of plume buoyancy temperature

Nature / cause of failure	Examples of issues to consider
	Note: the above are design issues to a large extent – the process should be designed to prevent / reduce odour to the required level (a level of acceptability) which takes the range of meteorological conditions into account.

1.3 Site Location

1.3.1 The Nantycaws MRF facilities lie approximately 6.5km south east of the centre of the town of Carmarthen and *c.* 1.3km to the south east of the village of Nantycaws, on the southern side of the A48 dual carriageway. Much of the area surrounding the site is dominated by rural agricultural fields interspersed with small farm holdings.

1.3.2 The site is situated within the footprint of a large waste management site and as a consequence a number of waste facilities encompass the site. The site location is shown on **Drawing Reference Number CWM1005/5/01** which is included as part of the Supporting Statement for the EPVA (**Report Reference: CWM1005/04**) and the area that is subject to this Environmental Permit Variation Application boundary is shown on **Drawing Reference Number CWM1005/5/02** included as part of the aforementioned report.

1.3.3 The proposed extension to the RWMRF permit boundary will encompass an additional area of land to the south of the current RWMRF, which is covered by the additional landfill pre-treatment area Environmental Permit which requires consolidation into the RWMRF permit as part of this variation. This will allow for an extension of the current building to accommodate RDF wrapping and storage.

1.3.4 In addition to the above, the operator is seeking a consolidation of the Standard Rules Environmental Permit (SR2008No3_75Kte- Household, Commercial and Industrial Waste Transfer Station with Treatment) attributed to the adjacent 'Clean' MRF (EPR/YB3293HL) with the RWMRF Environmental Permit (EPR/KB3097TU) in order to streamline operations and to operate under one bespoke Environmental Permit. The area that is subject to this Environmental Permit Variation Application boundary (which includes the consolidation of the RWMRF Environmental Permit, Clean MRF Environmental Permit and the landfill pre-treatment area Environmental Permit) is shown on **Drawing Reference Number CWM1005/5/02.**

1.3.5 Further to this, the operator requires the removal of the 75 tonnes per day limit relating to the treatment of waste for the purpose of recovery for both activities listed (Waste Transfer Station and RDF Processing Facility) to allow for the increased daily production of RDF at the site, but still within the overall annual tonnage stipulated.

1.3.6 The application site is encompassed in all directions by the wider footprint of the applicant's landholding. The access road to is situated immediately adjacent to the sites eastern boundary, with a hedgerow and open windrow composting

activities to the west. There are open fields (which are owned by the applicant) and further hedgerows situated to the north, beyond which the A48 dual carriageway runs in a broadly east/west alignment. The site is bound upon its southern boundary by the additional extent of the unclassified site access road beyond which lies the site offices, weighbridge and car parking facilities.

1.3.7 Beyond the applicant's landholding, the area is dominated by agricultural fields with associated hedgerows and patches of woodland, farm holdings (which carry out a variety of farming practices), scattered residential properties, as well as the aforementioned A48 dual carriageway to the north.

1.3.8 Operations take place within a building upon an impermeable surface with sealed drainage (foul water drains to a sealed sump).

1.4 Site Processes

1.4.1 The site is permitted by Natural Resources Wales as a Residual Waste ('Dirty') Materials Recycling Facility (RWMRF) which includes the production of Refuse Derived Fuel (RDF). The facility is authorised to process up to 125,000 tonnes of inert and non-hazardous waste per year emanating from Household ('black bag' waste), Commercial and Industrial sources and also includes non-hazardous bulky and separate clinical waste bulking and transfer (clinical waste is not permitted to be utilised within the RDF process). This range of mixed waste is treated via manual and/or mechanical sorting, separation, screening, baling, compaction and bulking for the purposes of recovery or disposal. This manual/mechanical sorting is conducted in order to recover recyclates from the waste stream.

1.4.2 The RWMRF process line receives mixed residual and recyclable non-hazardous, inert waste material from Household, Commercial and Industrial sources (as well as some non-hazardous bulky and clinical waste) which requires separation for onward processing. These materials are subject to a series of manual and automated sorting operations in order to recover the recyclable content which includes a bag splitter, screens, magnetic separators, eddy current separator, elevated picking station etc. Materials will be removed and sorted into fractions such as aluminium and steel. Separated recyclable materials will initially be placed into bays beneath the RWMRF picking line.

1.4.3 The residual waste materials from the sort line, as well as other permitted residual wastes (contained within Table S2.2 of Environmental Permit EPR/KB3097TU, a copy of which is included in **Appendix 5** of the accompanying Supporting Statement, **Document Reference CWM1005/04**) are deposited to a residual waste storage area which is located within the RWMRF building. Further to this, suitable residual waste emanating from the adjacent 'clean' MRF operation is transferred via a covered conveyor to the RWMRF for storage pending treatment. From here the waste is separated into two fractions, a residual waste that is suitable as RDF and a residual waste for disposal only (at the adjacent landfill). Other waste sources identified to contain lower levels of recyclable materials are deposited directly into the RDF input storage area but

are subject to a mechanical pick to extract identified large recoverable materials such as metals, wood and large inerts. These materials are removed and set aside for resale or suitable disposal. The residues from this process along with those from the sort line enter the RDF preparation route.

1.4.4 The prepared (suitable) RDF feedstock is loaded by an excavator fitted with a grab handler or loading shovel into an electrically powered bag splitter, which is situated within the RWMRF building. The bag splitter reduces the size of any large items for the primary purpose of improving the baling process and to facilitate handling. The material is then transported via conveyor to the baling plant. Within the baling plant, the material is tumbled and condensed to form a square bale. The bales of residual waste are then transferred to a storage area in order to undergo wrapping. The square bale is stabilized by being fully wrapped with multi-layers of film. The wrapped RDF bales are then stored prior to onward transfer to an appropriate facility. The resulting bales can be directly used as a fuel to produce electricity.

1.4.5 The residual waste stream at CWM Environmental is not treated to fulfil contractual or product standard requirements. All treatment activities are conducted merely to ensure the maximum extraction of recyclates from the waste stream as well as to facilitate handling. Any change in the quality of the RDF as a fuel is purely incidental as opposed to intentional and therefore the facility can continue to be considered to represent a Waste Operation as opposed to an Installation.

1.4.6 As mentioned above, site activities will take place internally within the RWMRF building. Waste offloading, storage and treatment areas within the main building will be on impermeable surface with sealed drainage.

1.4.7 The delivery conveyor from the adjacent clean MRF to the RWMRF will be covered to ensure the control of fugitive emissions. As previously discussed, the site is situated within a wider waste management site which will mitigate the potential for fugitive emissions spreading beyond the applicant's landholding.

1.4.8 In addition to the above, the 'Clean MRF' which is situated adjacent to the RWMRF is permitted to process up to 75,000 tonnes per annum of Household, Commercial and Industrial wastes, the majority of which comprise of non-hazardous co-mingled recyclate from kerbside collection schemes. The static MRF plant, which is located within a building, consists of a loading hopper, bag splitter, delivery conveyors, elevated pre-sort picking stations, trommel, ballistic separators, overhead band magnets, eddy current separator and materials baling press. Material is located into the loading hopper and transferred around the system via a series of conveyors, which allows the material to be separated, sorted, bailed and ultimately bulked ready for onward transfer for reprocessing. All bulking, transfer and treatment of materials will be undertaken inside the building unless stored or treated externally as "specified waste" in accordance with the Environmental Permit.

1.4.9 Wastes will be transported to and from the site by road, weighed in and recorded over the weighbridge. Once checked in at the site office, waste delivery vehicles will be direct to the RWMRF or Clean MRF (dependent on waste load) and unloaded from the delivery vehicle. The waste will be checked during the discharge into the designated storage area prior to the treatment process. This storage is on impermeable surfacing within the treatment building for materials to be input to the sort line. Nantycaws RWMRF will have a total storage capacity of *c.* 3,435m^3.

1.4.10 The majority of potential emissions are fugitive in nature and there are no major point source emissions arising from the MRF processes or indeed the site itself. Notwithstanding this, given the types of waste accepted at the site (particularly at the RWMRF), the possibility for fugitive emissions must be considered. This is in terms of the relevant controls that will be implemented and how potential odours will be assessed via olfactory monitoring at the appropriate location/s as part of the overall site checks. As well as this, appropriate engineering measures and proposed management techniques will be employed at the site.

1.4.11 The Commercial and Industrial waste streams which are accepted on site are likely to have a low odour potential, with the Household waste (particularly at the RWMRF, given this accepts 'black bag' waste) having a medium potential for the generation of odours. The control of potential fugitive emissions which may be produced via the acceptance and treatment of Household 'black bag' waste and co-mingled Household recyclates will be via the implementation of good management practices and housekeeping. Please note, it is considered that the risk of odour emanating from the co-mingled recyclate waste stream which is accepted at the 'Clean' MRF is significantly lower than that associated with the acceptance of Household 'black' bag waste at the RWMRF.

1.5 Sensitive Receptors

1.5.1 The Environmental Permit Variation Application has undertaken a series of Emissions and Accident Risk Assessments in accordance with Natural Resources Wales (NRW) guidance and as part of these assessments, receptors within the vicinity of the proposed facility were required to be identified. The potential receptors considered are included within **Table 2** below, and this has been developed out into further details to consider each receptor at risk from this specific emission as considered within this OMP.

Table 2 – Sensitive Receptors within 1km of the site

Receptor Name	Receptor Type	Distance/Direction From Site
Wider Nantycaws Site	Waste Management Facility	Adjacent – 660m N/S/E/W
Agricultural Land	Farmland & associated hedgerows	40m – 1km N/S/E/W
A48 Dual Carriageway	Highway	255m N/NE/NW

Receptor Name	Receptor Type	Distance/Direction From Site
Ty Hen	Residential Dwelling (Unoccupied)	260m NW
Nantycaws Fuel Station	Commercial Property	300m N
Unnamed Road	Road	310m N
Awelfan	Residential Dwelling	330m NW
Llety-dau-filwr	Residential Dwelling	290m SE
Bronhafod, Falcondale & Afalon	Residential Dwellings	305m + E/SE
Coedgain Farm	Residential Dwelling	420m N/NW
Gelli- Uchaf	Residential Dwelling	545m NE
Coedgain Manor	Residential Dwelling	610m N/NW
Footpath	Public Right of Way	620m - 980m NE/NW/SW/W
Hedd-fan	Residential Dwelling	575m E
Ffynon Las	Residential Dwelling	760m NW
Blaenisfael	Residential Dwelling	770m S/SW
Poultry Houses	Agricultural Buildings	780m-900m S/SW
Unnamed Properties on Unnamed Road	Residential Dwelling	815-910m N/NW
Coed Farm Storage Facility	Commercial Premises	860m S/SW
Pen-ty Farm	Residential Dwelling	900m E
Ysticlau	Residential Dwelling	990m S/SW
Brigwallt y Coed	Residential Dwelling	990m N/NW

1.5.2 The closest receptor to the site is the wider Nantycaws Waste Management Facility, which includes a number of waste activities including landfill disposal, In Vessel Composting (IVC) and Open Windrow Composting (OWC) and Household Waste Recycling Centre (HWRC).

1.5.3 Beyond the wider waste management site, the closest receptors to the site includes agricultural land and the A48 dual carriageway.

1.5.4 The nearest domestic dwelling is Ty Hen which is situated *c.* 260m North West of the site, beyond the separately permitted open windrow composting operations. This property is unoccupied and is owned by CWM Environmental.

1.5.5 The nearest large aggregation of residential properties to the operational site are those associated with the outskirts of the village of Nantycaws, approximately 1.3km to the North West. There is generally no direct line of sight between these properties and the site operations.

1.5.6 Receptors that are transient in nature include traffic travelling along major transport routes, such as the A48, which at its closest point is *c.* 255m to the North of the site. Other less significant roads within the vicinity include several single track country lanes which lead to the various farming properties around the site. Further to this, there is a Public Right of Way (PRoW) situated *c.* 620m to the west of the site.

1.5.7 As previously indicated, there are no Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA) and/or Special Areas of Conservation (SAC) within a 1km radius of the site. Pen Ty Pastures and Wood (Gweunydd a Choed Pen-Ty) is the closest SSSI to the site at *c.* 1.04km to the south east. It represents two areas of unimproved herb-rich grassland linked by a wet semi-natural wood. This habitat complex is of botanical and entomological interest, supporting a number of uncommon species.

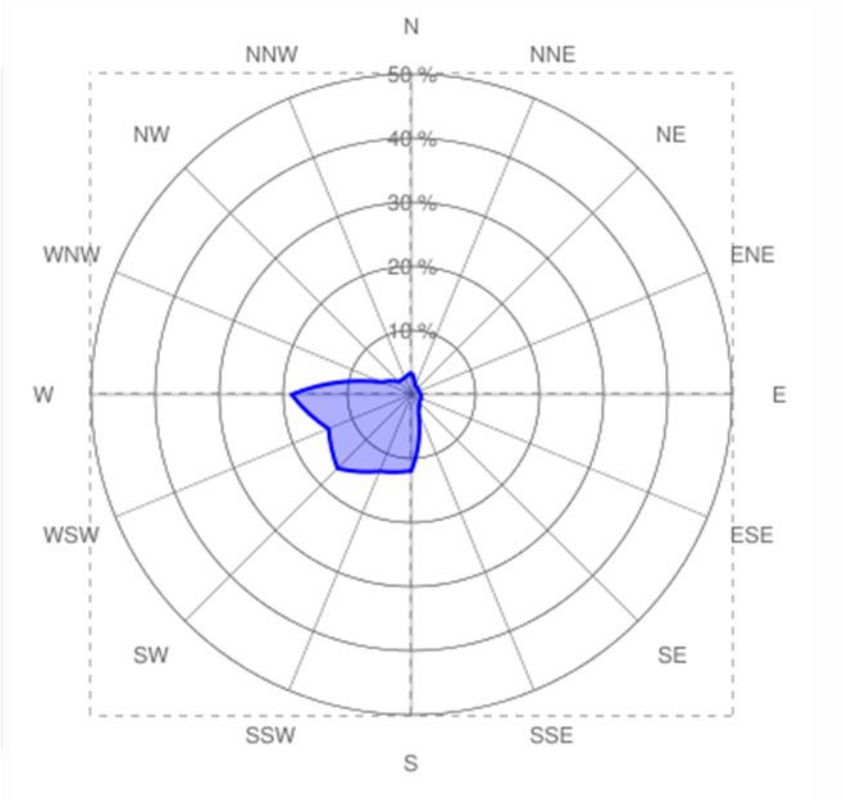
1.6 Overview of On Site Meteorological Conditions

1.6.1 The closest meteorological station is located at Pembrey Sands which is situated *c.* 17km south-west of the site. In terms of its environmental setting, the station at Pembrey Sands is situated on the coast, whereas the MRF's can be considered to be situated at an inland position. However, data is only available from 3 weather stations across South Wales (Pembrey Sands, RAF St Athans and Cardiff Airport). Weather stations in England which may be more appropriate in terms of their inland setting have been deemed inappropriate due to their intervening distance from the site. Therefore, the station at Pembrey Sands is deemed the most appropriate for use.

1.6.2 Data from RenSMART Wind data archive, for a 10 year period between 2000 and 2010 at Pembrey Sands has been utilised to characterise the meteorological conditions which are likely to be experienced at Nantycaws RWMRF.

1.6.3 The wind rose for Pembrey Sands is illustrated in Figure 1, and indicates that the predominant wind direction is from the west and south west. Therefore any receptors situated to the east and northeast of the site would be potentially most likely to be at risk from fugitive odours. In this case receptors that lie to the east/north east include; the wider extent of the waste management site, residential properties (Bronhaford, Falcondale, Afalon), as well as the A48. The risk to identified receptors is considered low given the both the position and distance between the site and the nearest residential receptor (*c.* 305m to the south east).

Figure 1: Wind rose for Pembrey Sands 2000-2010 (inclusive)



1.7 Potential Off site Odour Sources

1.7.1 The site itself lies within a larger waste management site, which includes composting activities as well as the operation of a landfill and HWRC which all have the potential to produce odour.

1.7.2 Beyond the applicant's landholding, there are large areas of fields which are utilised for agricultural activities such as crop cultivation and livestock grazing. The presence of livestock and land cultivation (e.g. ploughing, fertiliser application etc) could be a potential off-site source of odour.

1.7.3 Notwithstanding the operators wider activities at the site, the activity with the greatest potential to produce odour are the poultry houses situated *c.* 780m to the south/south west.

2.0 ODOUR SOURCE INVENTORY

2.1.1 The main sources of odour associated with the operation will tend to be those wastes which are organic and putrescible in nature, which have the potential to readily biodegrade over a short timeframe. There will be elements of readily biodegradable waste accepted within the mixed 'black bag' type waste received from local authority collections at the Residual Waste Materials Recycling Facility (RWMRF) and potentially utilised as feedstock for the RDF process.

2.1.2 In addition to the above, it is considered that there could be residues of biodegradable waste upon the co-mingled recyclate accepted at the site, but the risk is considered to be low given the likely quantities which are expected to present.

2.1.3 Storage of putrescible materials over a period of time, and physical treatment activities could potentially give rise to fugitive emission odour source, which could be considered problematic if mitigations management techniques were not available and/or were not applied.

2.1.4 A list of wastes by EWC code has been included in **Appendix 8** to the Supporting Statement document (**Report Reference CWM1005/04**) and within **Appendix OMP1** of this report.

2.1.5 The waste chapter types with the greatest potential for odour from the MRF's (particularly the RWMRF) process have been considered in **Table 3** below. It should be noted, that those with the greatest potential or the "high" odour potential, is in reference to a select waste types from the various chapters listed. Other waste types within that chapter i.e. those relating to recyclable materials, e.g. plastics, metals and glass, are considered to have low odour potential.

Table 3 Sources of Odour (Waste)

EWC Chapter	Waste Description	Odour Potential
Chp 02	Wastes from Agriculture, Horticulture, Aquaculture, Forest, Hunting and Fishing	High
Chp 03	Waste from Wood Processing and the Production of Panels and Furniture, Pulp, Paper and Cardboard	High-Medium
Chp 04	Wastes from Leather, Fur and Textile Industries	Medium
Chp 05	Wastes from Petroleum refining, Natural Gas purification and pyrolytic treatment of coal	Low
Chp 06	Wastes from Inorganic Chemical Processes	Medium
Chp 07	Wastes from Organic Chemical Processes	Medium
Chp 08	Wastes from the Manufacture, Formulation, Supply and Use (MFSU) of coatings (paints, varnishes and vitreous enamels), Adhesives, Sealants and Printing Inks	Low
Chp 10	Wastes from Thermal Processes	Low
Chp 11	Wastes from Chemical Surface Treatment and Coating of Metals and Other Materials; Non Ferrous Hydro-Metallurgy	Low
Chp 12	Wastes from Shaping and Physical and Mechanical Surface Treatment of Metals and Plastics	Low
Chp 15	Waste Packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	Low
Chp 16	Wastes not otherwise specified in the list	Low
Chp 18	Wastes from Human or Animal Health Care and/or Related Research	Low
Chp 19	Wastes from Waste Management Facilities, Offsite Waste Water Treatment Plants and the Preparation of Water Intended For Human Consumption and Water For Industrial Use	Medium
Chp 20	Municipal Wastes (Household Waste and Similar Commercial, Industrial and Institutional Wastes) Including Separately Collected Fractions	Medium-High

*It should be noted that the above table provides an 'average' of the odour potential, and each chapter identified will include a range of waste types with varying odour potential

2.1.6 Potential odours from sources discussed above from the MRF's operation are fugitive in nature and have already been considered in terms of risk to the environment within the relevant risk assessments submitted as part of the Environmental Permit Variation Application (**Report Number CWM1005/04 Appendix 3** and **4**). The OMP further develops how these possible source of odour (fugitive emissions) can be managed and controlled.

2.2 Normal Activities Involving Odour Sources

2.2.1 The normal activities involving the sources of odour would include;

- Waste Delivery;
- Waste Storage; and
- Waste Treatment

2.2.2 As discussed above, whilst the potential for odour emissions is more associated with specific element of the activities e.g. delivery, treatment and storage of putrescible wastes, it is not exclusively the case.

2.3 Maintenance Activities Involving Odour Sources

2.3.1 Operational interaction between odour sources and maintenance activities could include the following;

- Waste storage cleansing – this could include containers associated with materials transport or the internal processing offloading areas or storage areas
- Building Fabric Maintenance –this could include maintenance on building access and egress points (vehicle/plant and personnel doors) which results in pathways for fugitive emission which are normally not present;
- Treatment Infrastructure maintenance – this could include routine upgrades to treatment and storage tanks, vessels and pipes; and
- Drainage maintenance and cleansing – clearing blocked channels, drains and ensuring sumps or tanks are regularly emptied and cleansed to prevent additional point sources of odour.

2.4 Accidents/Incident Events Involving Odour Sources

2.4.1 Within **Appendix 4** of the Supporting Statement (**Report Reference CWM1005/04**), accidents and their consequences are considered for a range of potential risks from the overall operation.

2.4.2 Notwithstanding the existing information, with regards to accident/incident events involving sources of odour, these could be related to;

- Spillages and loss of containment;
- Damage/faults with buildings or treatment infrastructure; and
- Faults with processing equipment or storage areas

2.5 Location of Potentially Odourous Activities

2.5.1 It can be considered that the processing and storage of putrescible waste streams has the potential to be the cause of unacceptable fugitive odourous emissions. The area on site that has the greatest potential to be the greatest potential to be the location of the unacceptable emissions is the waste reception area/bag splitting area of the RWMRF. Further to this, the storage of residual putrescible waste prior to treatment/baling into RDF also represents a potential risk. This will be carried out internally within the main RWMRF building.

2.5.2 There is a limited possibility that the storage and treatment of co-mingled recyclate which may contain residues of biodegradable wastes at the Clean MRF may also give rise to an odour emission. However, it is considered that the risk from this activity is far reduced than that associated with the RWMRF activities.

3.0 APPROPRIATE ODOUR MITIGATION CONTROLS

3.1 Process Controls

Waste Acceptance and Reception

3.1.1 The intention of onsite acceptance procedures is to verify and characterise the waste as it arrives at the permitted facility.

3.1.2 Wastes will not be accepted at the waste facility unless an assessment has been made of the suitability for treatment and recovery. CWM Environmental has a robust waste acceptance procedure as highlighted below:

- The CWM employees will ensure that prior to being accepted on the site that the wastes meet the operational criteria of the site. Where necessary, they will conduct audits of the suppliers to ensure that contracts are being adhered to and waste is not being stored for significant periods of time prior to arrival at site (where applicable);
- All wastes will be inspected on delivery to ensure the waste conforms with the Permit and the Waste Transfer Note. Any non-conforming waste, including malodourous wastes, will be removed from the site and a non-conformance note issued;
- The storage of any non-conforming material will be kept in a quarantine area, separate from the reception area and where it can be removed immediately. It may be covered with oversized materials or similar which will act as a simple biofilter or sprayed directly with odour neutraliser to reduce the release of odours;
- The site will ensure there is sufficient trained staff to deal with the anticipated waste loads coming in; and
- Waste inputs will be managed to ensure there is sufficient capacity within the facility to deal with the incoming waste materials and if necessary, inputs will be suspended or reduced.

3.1.3 By ensuring the above pre-acceptance checks, this reduces the risk of potentially overly malodourous wastes being accepted at the site. In the event that a non-compliant waste type which has specific odour issues is received, this will be quarantined within the identified quarantine area whilst awaiting dispatch off site to an appropriately permitted facility. Such events will be recorded in the site diary and NRW informed.

Waste Storage

3.1.4 For the management of the incoming waste streams (especially in the instance of potentially odourous putrescible 'black bag' wastes), first in, first out principles will be employed at the permitted facility reception areas to ensure good management of waste and to prevent excessive storage times in so far as is possible. The typical waste storage times of the different waste types received at the MRF or RDF reception areas are shown in **Table 4**. However, it should be noted that if a waste becomes malodourous and is likely to cause a

nuisance beyond the site boundary, then this waste will be prioritised for treatment or if not possible, removed from site to a suitably permitted facility.

Table 4 – Maximum Waste Storage Times

Waste Type	Period
Residual Waste awaiting RDF processing	48 hours
Mixed 'Black Bag' Waste awaiting RWMRF treatment	48 hours
Segregated Recyclates from RWMRF waste stream	8 hours-10hours
RDF bales	48 hours
Co-mingled recyclate awaiting Clean MRF treatment ('Blue Bag' waste)	1 week
Treated recylate from the Clean MRF treatment process	<1 week
Residual material from the Clean MRF awaiting transfer to the RWMRF	Transferred as soon as practicable within the working day

MRF

3.1.5 The reception and storage of incoming wastes to the RWMRF and 'Clean' MRF will be undertaken within the designated waste reception area which is sited within a building (either the RWMRF or 'Clean' MRF building depending on the incoming waste stream), upon impermeable concrete surfacing with sealed drainage. All incoming waste which is to be processed via the sort line in order to remove recyclables, is stored within the main RWMRF/ Clean MRF building as appropriate. Specific waste streams will be stored in specific areas. A system is in place to ensure that the correct storage area is utilised via instructions given from the weighbridge. The sealed drainage system will ensure that any waste spillage does not enter the wider site surface waste drainage network, which will result in a potential transfer offsite.

3.1.6 All materials are housed within the buildings for the purposes of fugitive emission and general environmental control. All operational access and egress points will be kept closed, other than when entry by vehicles or personnel is required. This will ensure that any potential odours associated with the more mixed organic waste stream are contained within the buildings.

3.1.7 There is likely to be very little run off generated from the internal storage of this material, with quantities dictated by individual moisture contents. Generation of contaminated water which could in turn become odourous will be limited. Sorted recyclate rich waste emanating from the MRF processes is stored in dedicated bays or as baled recyclate on an impermeable surface with appropriate drainage arrangements in place.

RDF

3.1.8 As above, all RDF materials are stored and treated within the RWMRF building for the purposes of fugitive emission and general environmental control. All operational access and egress points will be kept closed, other than when entry by vehicles or personnel is required.

3.1.9 Internal residual waste RDF feedstock storage and handling areas are provided with impermeable pavements and sealed drainage systems to a sump that will be emptied by tanker and removed to an appropriate facility at regular intervals to maintain capacity. Any contaminated water arising therefore will be controlled and collected in a sealed tank.

3.2 Physical Controls

Roller Shutter Doors

3.2.1 The MRF buildings have roller shutter doors installed to minimise the amount of time where a potential pathway is created for fugitive emissions to leave the building.

Sealed Storage

3.2.2 All waste streams (including RDF) will be stored and treated within an enclosed environment, unless stored as a "specified waste" in accordance with the Environmental Permit or stored with cognisance to the S2 Exemption which is attributed to the site. Storage of materials will be in dedicated storage areas or bays. The odour potential of materials can be considered to be low given the operational and engineering measures and proposed management techniques that will be employed at the site. All wastes will be handled and stored in a manner that prevents odour release. Materials that are inherently odourous will not be accepted for treatment within the MRF's. Impermeable surfacing and sealed drainage will ensure water is shed away from the storage areas, therefore minimising the amount of process effluent that is generated, that in turn could become odourous.

Building and General Structures

3.2.3 As already discussed in the aforementioned sections, all waste operations will take place within the building (and proposed building extension area) as well as the 'Clean' MRF building. The buildings have been operating as MRF's for a number of years and have therefore been engineered with the appropriate controls to prevent/minimise odour release. All apertures within the building fabric are designed to minimise opening times, therefore personnel doors will be self-closing and vehicle doors will be a roller shutter door type.

3.2.4 The transfer of recyclates and residual waste between the 'clean' MRF and RWMRF will be via an enclosed conveyor system which will ensure fugitive emissions including odour, are minimised.

3.3 Management Controls

Reception and Storage Operational Procedure

3.3.1 Waste delivery vehicles will enter the MRF buildings via one of the roller shutter doors in order to deposit their load into a designated storage area. Reception

and storage within the MRF buildings will ensure that any potential for emissions to air (such as odour) is minimised and managed.

3.3.2 Once the vehicle has discharged its load, it will either leave the site directly or via the weighbridge if a tare weight is required.

3.3.3 The main waste reception and storage areas are designed and will be engineered in accordance with the specific requirements of types of materials they hold and with due regard to NRW guidance on Environmental Permitting and the protection of surrounding environmental resources.

3.3.4 Storage of wastes within the MRF buildings will have the required primary and secondary levels of containment applied as appropriate to the materials.

3.3.5 Some of the feedstock for the RDF activity is derived from the residual waste from the adjacent 'Clean' MRF processes, therefore the reception management controls are the same as detailed previously. All waste is stored in an appropriately managed and engineered way in order to prevent/minimise odour emissions.

3.3.6 All waste materials accepted at the waste facility will be stored broadly in accordance with **Drawing Reference Number CWM1005/5/03** which is included within the Supporting Statement document (**Report Reference CWM1005/04**) to the Environmental Permit Variation Application.

3.3.7 The use of a building for MRF (RWMRF and 'Clean' MRF) reception/storage and treatment will provide the following benefits to the operation;

- An enclosed, secure and controlled area in which waste can be stored and treated;
- The buildings will be maintained as an enclosed environment. The vehicle access points are fitted with roller shutter doors and will only be open during transfer of materials. At all other times the entry points will be closed.
- Adequate storage capacity for maintaining the required site treatment throughput for waste i.e., buffering capacity between waste delivery and waste processing;
- Temporary storage for materials to allow for any unplanned or planned maintenance;
- Prevention and or mitigation of fugitive emissions such as odour; and
- Prevention of pests and scavengers.

3.3.8 Where RDF materials are transferred from the 'Clean' MRF Building, this will be via a covered conveyor as discussed above in the 'Physical Controls' section. Discharge of materials are monitored to ensure compliance with the site permit, and to ensure any potential issues are spotted early on in the process.

3.3.9 Strict storage time limits on specific waste streams will ensure that any organic fractions will not have the time on site to decompose and become odourous to the extent where there is an environmental emission issue.

Waste and Feedstock Acceptance Parameters

3.3.10 There will be acceptance procedures in place for materials received at the site and there will also be emphasis on the Duty of Care requirements undertaken as part of the overall site operation. Should particularly malodourous wastes be received for storage, they will be rejected, a note made within the site diary and Natural Resources Wales (NRW) informed at the appropriate juncture.

Minimising Evaporation of Odourous Materials

3.3.11 Materials that have the potential to be odourous will be stored under specific conditions which will ensure emissions such as odour are minimised and/or negated. Wastes with the highest potential to be/become odourous will be stored within appropriately engineered areas with suitable levels of containment applied (where necessary).

Housekeeping and Routine Cleaning

3.3.12 The site will be subjected to a strict housekeeping regime which assists with the aim of proactive management and associated environmental compliance. Daily inspections of the site will be undertaken as part of the management procedures. Daily checks are reinforced and supported by weekly supervisor and monthly manager inspections.

3.3.13 Routine cleansing of the relevant areas of the site, such as reception hall, waste storage bays and receptacles (in both MRF buildings) will be undertaken at appropriate frequencies. These will be arranged to ensure there is no disruption to the continuity of operations.

Responsible Reporting

3.3.14 As part of the operator's overall management system, reporting of relevant issues will be undertaken in accordance with the conditions of the Environmental Permit. The operator will be tasked with ensuring a level of 'self-policing' and will therefore be responsible to ensure that any matters that warrant it are brought to Natural Resources Wales attention within the required timescales.

Odour Control Conclusions

3.3.15 The Materials Recycling Facility (RWMRF) consists, broadly speaking, of the recovery of Household, Commercial and Industrial materials through the static sorting and separating plant. The resultant material produced as part of the RWMRF process is produced into Refuse Derived Fuel from the residual element of waste, which may contain certain amounts of organic fractions. Given the stringent management controls that are implemented at the site, it is unlikely that odours arising as a result of the MRF operations will be regarded as an issue.

3.3.16 The Fugitive Emissions Risk Assessment (**Report Reference CWM1005/04 Appendix 3**) and this OMP detail the mitigation measures to be put in place to

ensure odour emissions do not become an issue. In summary the following management controls will be implemented;

- All vehicles hauling waste will be sheeted or fully enclosed;
- All waste will be stored within a building (unless specified in the Environmental Permit or covered by an S2 Exemption);
- All wastes will be stored strictly in accordance with their time limits;
- Daily inspection of the site for odour will be performed as part of the; management procedures, which include olfactory monitoring techniques; and
- Odour neutralising agents can be used if necessary.

3.3.17 In addition to the above, housekeeping protocols will be adhered to that will ensure odour risks are minimised. Whilst the wastes accepted (particularly at the RWMRF) do have the potential to become malodourous if they are not handled correctly, the acceptance of malodourous wastes on receipt is to be monitored closely. Waste acceptance criteria, as defined in the sites Management Plan will be strictly adhered to. Only those waste types listed in within the sites Environmental Permit will be accepted to the site and all wastes will be stored in the appropriate areas in order to reduce the likelihood of an odour issue. A list of the EWC codes accepted at the site are included in **Appendix OMP1**.

3.3.18 Storage times, as defined in Table 4 of this document, will be strictly adhered to. Waste will be introduced to the process on a first-in, first out principle to ensure continual turnaround of waste materials. Good housekeeping, including wash down of waste storage areas will also be undertaken to maintain appropriate standards.

3.3.19 All vehicle and personnel access doors to the enclosed waste reception, storage and treatment building will be closed at all times, except for when access and egress is required.

3.3.20 As previously indicated, the Fugitive Emissions Risk Assessment included within **Appendix 3** to the Supporting Statement (**Report Reference CWM1005/04**) also examined the odour control measures at the operation and concluded that the risks from odour were not considered significant.

4.0 ODOUR MONITORING AND REPORTING

4.1 Odour Monitoring

4.1.1 Ambient Monitoring will be undertaken daily in accordance with the guidance set out NRW Horizontal Guidance document 'H4 Odour Management – How to Comply with your Environmental Permit'. This monitoring will be undertaken both on site and off with the latter having cognisance of the prevailing weather conditions. 'Sniff' testing sheets will be completed and filed accordingly. Any odour emissions noted will result in the implementation of the Odour Management Plan protocols are detailed herein. Any complaints received in relation to odour will be fully investigated in accordance with site's Quality Management System (QMS) and is detailed in the following sections. The resultant actions will be recorded in the Site Diary.

4.1.2 Further details of the proposed odour monitoring to be undertaken are provided within the following paragraphs.

Meteorological Conditions

4.1.3 Meteorological forecasts and weather conditions (including atmospheric pressure and wind speed and direction) are monitored daily to enable potential odour problems to be predicted and necessary remedial actions to be implemented.

Regular Inspection/Olfactory Monitoring

4.1.4 Odour monitoring will be undertaken in order to assess how successful the operational management and mitigating control measures are at the Facility and to identify if necessary whether odour is causing a potential nuisance to ensure that appropriate remediation measures are adopted early.

4.1.5 All Facility personnel will be responsible for reporting any odour problems as soon as reasonably possible to the Site Manager or the next level of management if the Site Manager is not available.

4.1.6 The Site Manager will ensure that daily inspections are made of the Facility and its perimeter in order to identify any sources of odour and to establish whether any odours are discernible at the perimeter of the Facility which is attributed to the process.

4.1.7 Site and monitoring staff will carry out odour monitoring. The role of monitoring staff, who are not based at the facility, will be essential to confirm the findings of the inspections carried out by facility personnel and thereby minimise the potential impacts of odour fatigue.

4.1.8 Odour Monitoring at the Facility will consist of the items outlined in Table 5 below.

Table 5 – Odour Monitoring Proposals

Parameter	Monitoring Technique	Frequency
Meteorological Monitoring	On site weather station or appropriately obtained meteorological data	Continuous
Olfactory Monitoring (sniff testing)	Site perimeter and off Site checks (towards the identified sensitive receptors)	Ad-Hoc (min of 3 per day)
Complaints Monitoring	Telephone or written representations direct from the public or via the regulatory authorities	Ad-Hoc

* – Note: Frequency will be reviewed monthly within the first 12 months of operation, subject to operational experience and complaints which may require more frequent monitoring.

4.1.9 As part of the regular inspections, appropriately trained and experienced site personnel will carry out olfactory monitoring off-site towards the location of the nearest sensitive receptor and paying particular attention to the wind direction. The location of monitoring will also depend on the location of any complaints received at the Facility with the monitoring results recorded in the site diary.

4.1.10 Olfactory monitoring or sniff testing will be carried out in accordance with the recommendations detailed in the NRW H4 guidance, including avoid strong foods or drinks and strongly scented deodorisers or toiletries etc for at least half an hour prior to the monitoring. In addition individuals suffering from a cold, sore throat or sinus problems that may impair their ability to detect odours. Likewise, the olfactory monitoring will be undertaken by employees that have not been desensitised by exposure to compost odours during their normal job practices.

4.1.11 The designated person will exit their vehicle and remain in the locality for a minimum of 1 minute whilst breathing normally. Any external activities that may contribute to odour generation in the surrounding area will also be noted together with weather conditions (including wind direction and speed) and then an assessment of the intensity of the odour will be made using the guide below.

Intensity Scale

0. No detectable odour
1. Very faint odour (only just detectable)
2. Faint odour (barely detectable, need to stand still and inhale facing into the wind)
3. Distinct odour (detected while walking and breathing normally)
4. Strong odour (easily detected while walking and breathing normally, possibly offensive)
5. Very strong odour (bearable, but offensive)
6. Extremely strong odour (not bearable)

4.1.12 In the event odour is detected above intensity ranking 3 (Distinct odour), the Facility management will be informed immediately and the approximate location and extent of the odour plume assessed and site operations reviewed/suspended. However it is not simply the intensity that is being

assessed, as consideration will be given to the FIDOR (**F**requency of detection, **I**ntensity, **D**uration, **O**ffensiveness and **R**eceptor sensitivity) principle such that for example a long duration lower intensity odour or a very offensive short duration event be assessed and investigated.

4.1.13 An example inspection form that could be used is attached at **OMP Appendix 2**. The locations of the offsite odour monitoring points are illustrated on **Drawing Reference Number CWM1005/5/OMP01** contained with OMP **Appendix 3**.

4.2 Odour Diaries and Community Surveys

4.2.1 Full records will be kept with regards to a range of incidents that may occur in relation to the site activities.

4.2.2 The main site diary will be used to record the status of the operation and its emissions in relation to odour. This will act as a site wide document confirmation that odour monitoring has been undertaken, and summarise the conclusion of that exercise.

4.2.3 On review of meteorological data and any complaints received, should a clear pattern emerge, if necessary, community surveys will be undertaken at set intervals with frequency proportionate to the risk from said emissions posed. These surveys will be a more detailed assessment of specific locations within the receptor areas identified. These surveys will be made available as required as part of on-going community liaison commitments.

5.0 COMPLAINTS HANDLING

5.1 Complaints Process

5.1.1 Any complaints received at the Facility or via the Regulatory bodies including Natural Resources Wales and Local Authority, will be recorded and will instigate further olfactory monitoring at the location of the complaint and on site to determine the extent and location of the plume and the odour causing materials and / or process will be identified. Where possible, as much information and detail about the complaint will be recorded, whether this be from the relevant authority or complaint direct to site. This information will assist in the investigation and determining the source of the odour.

5.2 Means of Contact

5.2.1 The facility will be readily contactable to outside organisations and to members of the public. The site signage board (placed in a readily visible location) contains the necessary contact details for both the site operations and Natural Resources Wales.

5.2.2 Contact details are also made available through the local community liaison groups.

5.2.3 As part of the on-going facility operation and development, a community engagement plan will be developed if found to be necessary, the purpose of which would be to identify all sensitive receptors and formulate a communications plan. The community engagement plan will detail the complaints management and reporting procedures, to include, but not limited to;

- Information will be provided to the local neighbours (via Natural Resources Wales) regarding the point and method of contact for the Facility in the event an odour has been detected or they want to discuss any activities etc at the Facility;
- The neighbours will be advised that any complaints / concerns will be addressed immediately following identification / notification and contingency action implemented; and
- The neighbours will be advised of any corrective action and a follow up call carried out if required.

5.2.4 Any complaints received directly to site will be notified to the Regulator as soon as is practicably possible.

5.2.5 Should an off-site issue arise therefore, the complainant has readily available means of getting in touch with the operator.

5.3 Complaint Recording

5.3.1 Should a complaint be received, the following information will be recorded;

- Complaint details (including address of complainant wherever possible) and the location where odour is perceived;
- Weather conditions including atmospheric pressure, wind speed and wind direction;
- Results of latest olfactory monitoring carried out by facility personnel;
- Operational status of the facility (noting any abnormal conditions that may have caused the complaint); and
- Details of the proposed corrective action if required.

5.3.2 Records of complaints received will be kept in the appropriate file in the site office for inspection and review by both internal and external personnel.

5.4 Complaint Screening

5.4.1 As part of each odour complaint received, these will be objectively assessed against the wider environment to ensure that the source of the emission is traced back to the correct source. As discussed earlier in this OMP, it is essential that the source is correctly identified in order that mitigating measures can be applied effectively and correctly. The complaint will also be assessed against previous records to place the nature of the complaint into context.

5.5 Complaint Investigation

5.5.1 In the event that odour is found to be causing a problem at the Facility, as determined and confirmed by investigation into off site complaints or during routine monitoring; measures will be taken to determine the source, and the following courses of action as detailed below shall be taken;

- Additional olfactory monitoring as detailed above to identify the extent of the plume and potential cause for the odour i.e. waste material and / or process activity;
- Examination of the operational activities at the Facility at the time of the odour complaint or odour identification;
- Examination of the meteorological conditions at the time of the complaint or odour identification;
- Examination of the process conditions via the plant operational records/telemetry;
- Carry out a review of the operational procedure and process controls and instigate any control measures immediately following identification of the problem; and
- Further olfactory monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.

5.5.2 It is the operator's experience that complaints submitted to regulatory authorities can be made long after the actual odour event or delayed in their relay to the Permit holder for actioning, thereby making some investigations difficult due to the often transitory nature of odour or changing meteorological

conditions. All complaints will be investigated, however, direct calls to site from complainants will allow for an immediate response and review.

6.0 ACTIONS, CONTINGENCIES AND RESPONSIBILITIES DURING PROBLEM EVENTS

6.1 Default Procedure

6.1.1 In the event that an emission of odour is identified during the normal course of operations, either through daily routine monitoring, or in response to off-site complaints, the default procedure will be to investigate the emission in line with Section 5.5 above which is an appropriate response to both off site complaints as well as on site investigations following on from routine inspections.

6.1.2 It is the responsibility of the site management team (Site Manager and associated supervisors) to ensure procedures as set out are put into action.

6.2 Emergency Procedure

6.2.1 Hourly monitoring for odourous emissions will be undertaken during a time in which extreme release of odour is experienced. Odour masking agents can be utilised if necessary and operations which may lead to increased odour release will be temporarily stopped.

6.2.2 Consideration will also be made as to suspension of receipt of malodourous wastes and/or the removal of waste from the site that is held in storage areas (if necessary).

6.3 Event Reporting

6.3.1 In the event of any significant environmental emergency/incident, a representative of CWM Environmental will notify NRW by telephone immediately, but first having due regard for the incident at hand and any remediation actions required to ensure the safety of site personnel and the immediate environment.

6.3.2 Details of any environmental incident will be confirmed to NRW in writing by first class post or fax, on the next working day after identification of the incident. This confirmation will include: the time and duration of the incident, the receiving environmental medium or media where there has been any emission as a result of the incident, an initial estimate of the quantity and composition of any emission, the measures taken to prevent or minimise any further emission and a preliminary assessment of the cause of the incident.

6.3.3 Any incident notified to NRW will be investigated, and a report of the investigation sent to NRW. The report will detail, as a minimum, the circumstances of the incident, an assessment of any harm to the environment and the steps taken to bring the incident to an end. The report will also set out proposals for remediation (if appropriate) and for preventing a repetition of the incident.

6.4 Problem Resolution

6.4.1 Once the identified problem has been rectified, a report will be prepared assessing the nature of the incident, the actions taken to resolve, and what

changes could be made to the operational practises that would ensure, wherever possible, that the issue had less of a chance of arising in future.

6.4.2 The Odour Management Plan Risk Assessment will also be reviewed in the event that management practices require updating.

6.4.3 This information will be provided to Natural Resources Wales in accordance with the Event Report procedures discussed in Section 6.3 above. Any improvements or amendments to operational practices will be discussed with Natural Resources Wales prior to their implementation.

7.0 DOCUMENT REVIEW, HISTORY AND REFERENCES

7.1 Document Review

7.1.1 As with the Supporting Statement to the Environmental Permit Variation Application, this document will be subject to on-going review and revision where necessary. This review will be undertaken in response to events which may occur on site, and also to ensure that it accords with the latest regulations and associated guidance documents, but no less than annually.

7.2 Amendment History

7.2.1 All revisions to the documentation will be recorded, and details of said revisions described as part of the required record relating to document review. This is a requirement in any event as part of CWM Environmental's Quality and Environmental Management Systems and procedures.

7.3 References

Environmental Permitting (England and Wales) Regulations 2017;

Environmental Permitting Core Guidance (DEFRA, Updated March 2013);

How to Comply with Your Environmental Permit (EPR1.00), Natural Resources Wales (V8 October 2014); and

Additional Guidance for H4 – Odour Management: How to Comply with Your Environmental Permit, Natural Resources Wales (March 2011)