Caulmert Limited

Engineering, Environmental & Planning Consultancy Services

Arpley 2 Waste Transfer Station

FCC Recycling (UK) Limited

Environmental Permit Variation Application

Odour Management Plan Addendum

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Odour Management Plan

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1.0 INTRODUCTION

1.1 Background

1.1.1 Caulmert Limited have been appointed by FCC Recycling (UK) Limited ('the Operator') to prepare an environmental permit variation application to add a non-hazardous bulking up and waste transfer activity to the existing permit ref. EPR/JB3633RP for their Arpley 2 Waste Transfer Station ('the Site') in Huyton, Liverpool, postcode L36 6JF. FCC Recycling (UK) Limited is a wholly owned subsidiary of FCC Environment (UK) Limited.

1.1.2 It is proposed to add a new waste activity to the permit and retain the existing listed activity. The proposed activity involves accepting up to 120,000 tonnes per year of Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up within concrete bays in the building prior to transferring off-site for further recovery and/or recycling. All delivery, handling, storing and loading of wastes into vehicles will be undertaken within the building, which will have roller shutter doors kept closed when not in use and impermeable concrete surfacing.

1.1.3 The Site is currently permitted as an installation for the pre-treatment of non-hazardous waste prior to incineration, specifically a Section 5.4A(1)(b)(ii) activity for shredding of waste and production of Refuse-Derived Fuel (RDF) within the building and this activity is to be retained in the permit, however, is not currently operational. For this activity an existing Odour Management Plan (OMP) is in place for the Site as document ref. 2124/R/001-03, dated August 2016.

1.1.4 This report is an Addendum to the existing Odour Management Plan for the Site that covers the proposed new waste activity, the bulking and transfer of MDR and MSW and other wastes within the building at Arpley 2 Waste Transfer Station. This OMP Addendum forms part of the operating techniques for the proposed new waste activity and does not cover the existing RDF activity for which the above OMP covers (ref. 2124/R/001-03).

1.2 Objectives

1.2.1 This Odour Management Plan Addendum provides a means of assessing the effectiveness of control measures at the site. The proposed Odour Action Plan should be implemented in cases of failure of control measures and odour emission events. This document also reviews the current procedures for investigating odour emission events and includes reference information on the understanding of odour nuisance.

1.2.2 This Odour Management Plan has been prepared with reference to the Environment Agency's technical guidance 'H4 Odour Management – How to comply with your environmental permit' published April 2011, and to the 'Best available techniques for the assessment and control of odour' published June 2005.

1.2.3 In addition, an Environmental Risk Assessment (ERA) report has been produced as part of this permit application which considers any potential risks (including odour) associated with the proposed waste transfer and bulking operations, under document ref. 6109-CAU-XX-XX-RP-V-0301.

1.2.4 The Operator intends to use this OMP during the facilities' expected operational life. The Plan will be reviewed on a regular basis and when a new activity or element of site infrastructure is introduced, as is the case with this most recent permit variation.

1.3 Site Location & Setting

1.3.1 The Site is located in an industrial estate off Stretton Way in Huyton, Liverpool, at postcode L36 6JF and is centred on National Grid Reference SJ 45870 90085.

1.3.2 The Site is situated 620m north-northwest of Junction 6 of the M62, approximately 2.5km to the southwest of Prescot. The site is in an industrial area, with other industrial units and warehouses surrounding the site to the northwest, west and south. The M57 motorway is 100m to the east of the Site boundary and the Liverpool to Manchester railway is located 690m to the north. The River Mersey is located over 7.2km to the southeast at its closest point and leads to the Mersey Estuary over 15km to the west. The Site location is shown below in Figure 1:

Figure 1 - Site Location Plan (approx. Permit boundary in green) (map from: Google Earth)

1.4 Existing and Proposed Site Operations

1.4.1 The Arpley 2 Site is currently permitted as an installation, specifically a Section 5.4A(1)(b)(ii) activity for the "Recovery of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration". The facility when operational pre-treats up to 120,000 tonnes per year of waste primarily to produce a Refuse Derived Fuel (RDF) which is baled and stored prior to being sent for incineration. Ferrous metals and other recyclable materials are also recovered as part of the treatment process. This activity is already covered by existing Odour Management Plan (OMP) is in place for the Site as document ref. 2124/R/001-03, dated August 2016. This activity is to be retained in the permit, however is not currently operational.

1.4.2 This application is to add a "*Household, commercial and industrial waste transfer station*" activity to the existing permit ref. EPR/JB3633RP and retain the existing listed activity. The proposed activity involves accepting up to 120,000 tonnes per year of Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up to 3m high within 4m tall concrete bays in the building prior to transferring off-site for further recovery and/or recycling.

1.4.3 All unloading, handling, storing and re-loading of wastes into vehicles will be undertaken within the building, which will have roller shutter doors kept closed when not in use and impermeable concrete surfacing. There will be no change to the existing permit boundary as part of this permit variation.

1.4.4 Surface water from waste storage areas discharges to a public foul sewer located on the road outside the facility. Surface water from the northern end of the site discharges to Logwood Mill Brook through a private outfall and the southern end discharges to the same brook via a surface water sewer.

2.0 POTENTIAL SOURCES OF ODOUR

2.1 Waste Types

2.1.1 The proposed waste types to be accepted include materials with the potential to cause odour, including municipal wastes (potentially contaminated with food and green waste) from council kerbside collections, and commercial and industrial businesses, and also plant and biodegradable wastes from parks, gardens, cemeteries and other household, commercial and industrial sources.

2.1.2 The majority of wastes proposed to be brought to site will be council collections of Municipal Solid Waste (MSW) and Mixed Dry Recyclables (MDR) and wastes from commercial and industrial premises.

2.1.3 The non-hazardous waste types to be accepted at the site for the proposed transfer station activity at Arpley 2 will be as follows in Table 1 below:

Table 1 – Proposed Waste List for Waste Transfer and Bulking Activity

EWC Code	Description
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 03	plant tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 06	**wastes from the baking and confectionary industry**
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 03	wastes from chemical treatment
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**

03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 02	**wastes from the textile industry**
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic
12	**WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 05	plastics shavings and turnings
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 03	end-of-life tyres
16 01 19	plastic
16 03	**off-specification batches and unused products**
16 03 04	inorganic wastes other than those mentioned in 16 03 03
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 03	plastic
17 09	**other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in

	17 09 01, 17 09 02 and 17 09 03
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 02	**wastes from physico-chemical treatments of waste (including dechromatation, decynadation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mention in 19 02 08 and 19 02 09
19 05	**wastes from aerobic treatment of solids wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than those mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 10	clothes
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 41	wastes from chimney sweeping
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

2.2 Waste Delivery and Reception

2.2.1 Odour can be released during transit of wastes, particularly those with high biodegradable fractions, in exposed vehicles and on warm days.

2.2.2 There is also the potential for accidental spillages of wastes from delivery vehicles onto the site surfacing.

2.3 Waste Unloading and Handling

2.3.1 Agitation of wastes during tipping and spreading out of the load can release odours into the air, particularly if bags or containers of waste split open, or if unloading is done outside then odours have the potential to leave the site boundary. Odour which may have built up inside the vehicle will be released upon deposit of wastes. Odorous wastes may taint other non-odorous materials.

2.4 Waste Storage

2.4.1 Odours can be generated by storing wastes for long periods of time which can create anaerobic conditions forming within stockpiles, or when wastes get wet or warm which encourages decomposition of any biodegradable fractions within the waste, generating odours. The age of waste received, and storage temperature will influence odour type and generation. It is recognised that in general, increased odours are linked to longer storage of municipal type wastes. Wastes will be collected and transferred off site on a daily basis so wastes will typically be removed the same day or the following day depending on the time of arrival. Storage times may be extended at weekends and bank holidays periods or in the event of breakdowns but will not exceed 5 days.

2.5 Other Sources of Odour

2.5.1 Other sources of odour associated with the proposed operations include from the storage or accidental spillage of fuels and oils for the maintenance of plant and machinery on-site. These will be stored in appropriate secondary containment to contain any potential spillages and leaks.

2.6 Odorous Materials Inventory

2.6.1 The odour generation potential of MSW wastes is considered high on account of the potentially putrescible nature of the waste (contaminated with food). The odour generation potential is linked to the age of waste prior to collection, which with kerbside collections is typically two weeks. However, there are no treatment activities proposed at the site, only bulking and storage, therefore less agitation of the waste that could increase the release of odours.

2.6.2 Other wastes collected from non-food industry rounds such as factories, or from road sweepings may contain higher proportions of mixed packaging and miscellaneous items with low odour potential.

2.6.3 The following Table 2 provides an inventory of potentially odorous materials that will be stored and handled on site:

Table 2 – Odorous Materials Inventory – Arpley 2 Waste Transfer and Bulking Operation

Material Type / Description	Odour Potential	Quantity Limits	Waste Types (EWC)	Source of waste	Age of waste	Storage / treatment method & location	Storage time limits	Monitoring & Records
Municipal Solid Wastes (MSW) Waste streams identified to have a higher proportion of putrescible food waste contamination e.g. from restaurant collection contracts or large businesses which may have on site catering facilities. **Biodegradable and plant wastes** Wastes identified to contain high proportions of biodegradable or plant matter. **Road Sweepings** Waste may contain organic matter such as decomposing leaf litter.	**Medium to High Odour Potential**	A maximum of 1,000 tonnes to be stored at any one time on site.	02 01 03 02 01 07 02 03 02 02 03 03 02 03 04 02 05 01 02 06 01 02 06 02 02 07 01 02 07 03 02 07 02 02 07 04 19 05 03 20 02 01 20 03 01 20 03 02 20 03 03	Council kerbside collections (municipal) and commercial and industrial premises.	From kerbside collections typically 2 weeks old.	Storage of wastes under cover within building. Storage of wastes in stockpiles in concrete bays on impermeable concrete site surfacing.	N/A Storage of wastes no longer than 5 days. although typically less than 2 days. First-in first-out waste rotation principles observed to prevent anaerobic conditions forming within stockpiles of waste. Wastes bulked up and typically taken out of bays in one load which prevents wastes being left behind.	Monitoring & records as per Section 7.0 of this OMP. Maximum storage time of all waste materials on site will be minimised, typically no more than 5 days turnaround time, but generally on a first-in first-out basis.

Material Type / Description	Odour Potential	Quantity Limits	Waste Types (EWC)	Source of waste	Age of waste	Storage / treatment method & location	Storage time limits	Monitoring & Records
Mixed Dry Recyclables (MDR) Wastes that include dry mixed packaging etc. **Textile** **Soft Furnishings & Bulky Furniture** **Other non-hazardous household, commercial and industrial wastes with low odour potential (see Table 1).**	**Low Odour Potential**	A maximum of 1,000 tonnes to be stored at any one time on site.	02 01 04 02 01 07 03 01 01 03 01 05 03 03 01 03 03 07 03 03 08 03 03 10 04 02 15 04 02 21 04 02 22 07 02 13 12 01 05 15 01 01 15 01 02 15 01 03 15 01 05 15 01 06 15 01 09 15 02 03 16 01 03 16 01 19 16 03 04 17 02 01 17 02 03 17 09 04 19 02 03 19 02 10 19 05 01 19 05 02 19 12 01 19 12 04 19 12 07 19 12 08 19 12 10	Council kerbside collections (municipal) and commercial and industrial premises.	From kerbside collections typically 2 weeks old.	Storage of wastes under cover within building. Storage of wastes in stockpiles in concrete bays on impermeable concrete site surfacing.	N/A Storage of wastes no longer than 5 days. although typically less than 2 days. First-in first-out waste rotation principles observed to prevent anaerobic conditions forming within stockpiles of waste. Wastes bulked up and typically taken out of bays in one load which prevents wastes being left behind.	Monitoring & records as per Section 7.0 of this OMP. Maximum storage time of all waste materials on site will be minimised, typically no more than 2 days turnaround time, but generally on a first-in first-out basis.

Material Type / Description	Odour Potential	Quantity Limits	Waste Types (EWC)	Source of waste	Age of waste	Storage / treatment method & location	Storage time limits	Monitoring & Records
			19 12 12 20 01 01 20 01 10 20 01 11 20 01 38 20 01 39 20 01 41 20 03 07					
Oils inc. hydraulic oils **Diesel fuel** **Lubricants** **Ad-blue** If these substances are spilled/containers damaged, vapours and odours could be released.	**Low to Medium Odour Potential**	Small, sealed containers within secondary containment (drip trays etc) for storing small amounts in the building for plant maintenance only. Disel fuel tank self-bunded and stored outside. All stored on impermeable concrete site surfacing.	N/A – not wastes	Not waste – sourced from oil/lubricants supplier.	N/A	Within containers that have secondary containment – some inside building and the fuel tank will be outside. Refuelling of mobile plant undertaken by trained site staff in designated area with impermeable surfacing and spill kits nearby.	N/A – oils and lubricants do not require storage time limits.	Records will be kept in the Site Office of oils, fuel and lubricants stored on site. Inspections of the integrity of storage containers, site surfacing and secondary containment will be made regularly as part of daily site inspections.

2.7 Odour Sources Summary

2.7.1 Based on the above, the potential odour sources on-site are therefore as follows:

- Odour from delivery of non-hazardous household, commercial and industrial wastes including Municipal Solid Waste (MSW), Mixed Dry Recyclables (MDR), road sweepings and other wastes which contain small amounts of biodegradable fractions.
- Odour release from waste agitation, tipping and handling activities.
- Odour from anaerobic conditions developing within waste piles due to inefficient waste turnover during storage.
- Odour from storage or spillage/leakage of potentially odorous liquids/substances onto site surfacing i.e. diesel fuel, hydraulic oil etc.

3.0 RECEPTORS & PATHWAYS

3.1 Local Sensitive Receptors

3.1.1 The sensitivity of each receptor is based on the impact of unmitigated fugitive emissions to air (i.e. odour) from the facility. For example, a school or dwelling would have a high sensitivity, a retail showroom would have a medium sensitivity and a waste facility or farm would be of a low sensitivity. This is determined by the immediate locality to the receptor (e.g. heavy industry or countryside), the frequency of receptor use or periods of occupancy, who or what uses the receptor (children at school, wildlife in a SSSI) and any pollution contributed by the receptor itself (e.g. a pig farm contributes its own odours).

3.1.2 The main receptors sensitive to odour are humans living or working near to the site, particularly if downwind of the site. Receptors sensitive to odour surrounding the permitted boundary are shown in drawing ref. 6109-CAU-XX-XX-DR-V-1800 'Sensitive Receptors Plan'.

3.1.3 The closest human receptors to the Site are workers and visitors of the surrounding industrial units located <10m north-northeast (Pine Precision Engineering), 20m east (Knowsley Council Depot and a Cemex Site), 20m south (Knowsley MBC Depot), 25m southwest (Caravan Storage/John Mason International Ltd) and 40m northwest (Veolia Depot). The Site is in an industrial area, with numerous other industrial and commercial units and warehouses to the northwest, west and south. These premises are likely to be less sensitive to odour emissions due to the nature of the activities carried out on their own sites.

3.1.4 The nearest residential receptors to the Site are houses located within the residential area around Logwood Rd 395m west-southwest from Site. Numerous other residential areas are located further to the east, north, west and south (see Table 1 below).

3.1.5 St. Gabriel's Primary School is located 780m northwest of the Site and Sylvester Primary School is located 980m west. There are no hospitals within 1km of the Site, but there is one medical facility, Tarbock Medical Centre located 980m west of the site.

3.1.6 There are no public rights of way (footpaths, bridalways, byways) crossing the site or immediately adjacent to the site. The closest public right of way is located 200m northeast, associated with numerous other interconnecting paths crossing Stadt Moers Park (West View).

3.1.7 There is one Ancient and Semi-Natural Woodland within 1km of the Site, The Old Wood (North and South) located 980m and 1km southeast of the Site, bordering the M62 motorway. Users of these sites for walking may be sensitive to odour however they are at such a distance as unlikely to detect any odour.

3.1.8 There are no Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNR), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site.

3.1.9 The sensitive receptors to odour identified within 1km of the site boundary are presented in Table 3 below:

Table 3 – Summary of Sensitive Receptors within 1km of the site boundary

Receptor	Type	Distance/Direction
Pine Precision Engineering	Commercial/Industrial	<10m NNE
Knowsley Council Depot	Commercial/Industrial	20m E
Knowsley MBC Depot	Commercial/Industrial	20m S
Cemex Site	Commercial/Industrial	20m E
Caravan Storage/John Mason International Ltd.	Commercial/Industrial	25m SW
Veolia Depot	Commercial/Industrial	40m NW
Tarmac Huyton	Commercial/Industrial	70m NE
Commercial Units inc. Dulux Centre	Commercial/Industrial	85m NW
Commercial/Industrial Units along Ellis Ashton Street and Wilson Road	Commercial/Industrial	Between 20m and 545m to SSE Between 85m and 925m to NW
Users of M57 motorway	Public Road	100m E
Huyton HWRC	Commercial/Industrial	130m SSW
Industrial Units on Fallows Way/Windy Arbor area	Commercial/Industrial	Between 170m and 500m to E
Users of Stadt Moers Country Park and associated public footpaths/rights of way	Recreational	200m NE, 210m N
Residential area around Logwood Rd	Residential	395m WSW
Residential area off Hale View Rd	Residential	435m NW
Residential area around Bridgewater Way	Residential	450m SW
Residential area off Cronton Rd and Bishop Drive	Residential	505m E
Users of Playing Fields	Recreational	580m NW, 585m W, 830m NW, 860m E
Residential area off Juniper Avenue	Residential	625m SE
Residential area south of Cronton Rd	Residential	675m SW
Residential area off Wood Lane	Residential	695m NNW
Users of M62 Jnc. 6 and Coppice Lane Services (inc. hotels, food outlets etc.)	Public Road	705m SSE
St. Gabriel's Primary School	Residential	780m NW
St. Nicholas Church	Recreational	805m NE
Residential area off Pottery Lane	Residential	885m NE
Allotments	Recreational	900m NE, 920m N

Receptor	Type	Distance/Direction
St. John's Millenium Green	Residential	950m W
Sylvester Primary School	Residential	980m W
Tarbock Medical Centre	Residential	980m W

3.2 Pathway Characterisation

3.2.1 The principal mechanism for the transit of odorous emissions from site operations to adjacent sensitive receptors is via ambient air. The distance and direction that these emissions will be carried is determined by the following factors:

- Source related pathways
- Meteorological conditions
- Topography

Source Related Pathways

3.2.2 The pathway an odorous emission takes from a site may depend on the specific source term and/or location it arises from. For example, odour arising from the Waste Reception Hall may follow a different route to that issuing from external storage areas. The nature of the source related pathway could also influence the scale of the resulting impact on a sensitive receptor.

Meteorological Conditions

Wind Direction

3.2.3 The prevailing wind direction will determine which receptors will be affected and at what frequency. The main controlling factor in determining the pathway of odour is the ambient meteorological conditions. This is fundamental to the transportation of odour to sensitive receptors.

Wind Velocity

3.2.4 Wind velocity will affect the distance an odour emission will travel. Conversely, increased wind speed could also beneficially improve dispersal. However, those receptors closest to the installation are still considered at the highest risk of a negative impact.

Air Temperature

3.2.5 Warm air may carry odours upwards by convection for their dispersal away from the site. However, warm weather will encourage the onset of biodegradation of exposed or temporarily stored wastes and therefore increase odour potential.

Adverse Weather Conditions

3.2.6 Unusual weather conditions may increase the risk of odour emissions from the site. Site staff shall be vigilant to unusual trends in the meteorological data or forecasts which may indicate strong winds or extremes of temperature which may cause a potential problem.

Topography

3.2.7 Undulating topography i.e. hilly terrain, causes disruption to air flow and causes wind to move differently, often being obstructed or rise or fall due to air convection, when compared to flat land, where wind can move more freely across. Therefore, odours transported by wind can affect receptors differently depending on their location and surrounding topography.

Local Weather Station

3.2.8 Fugitive emissions of odour from the site are likely to be affected by local weather conditions, in particular by wind direction. Wind statistics observed from Widnes weather station, the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 2 below). Widnes weather station is located over 7km to the southeast of the site.

3.2.9 A review of the data recorded daily between February 2012 and January 2024 on the Windfinder.com[1] website indicates that the most dominant wind direction is from the east-southeast to the west-northwest, but with variations throughout the year. With reference to Table 3 above, predominant annual wind conditions are likely to blow towards the industrial/commercial units to the west-northwest along Ellis Ashton Street and Wilson Road but could also blow towards the residential area to the west.

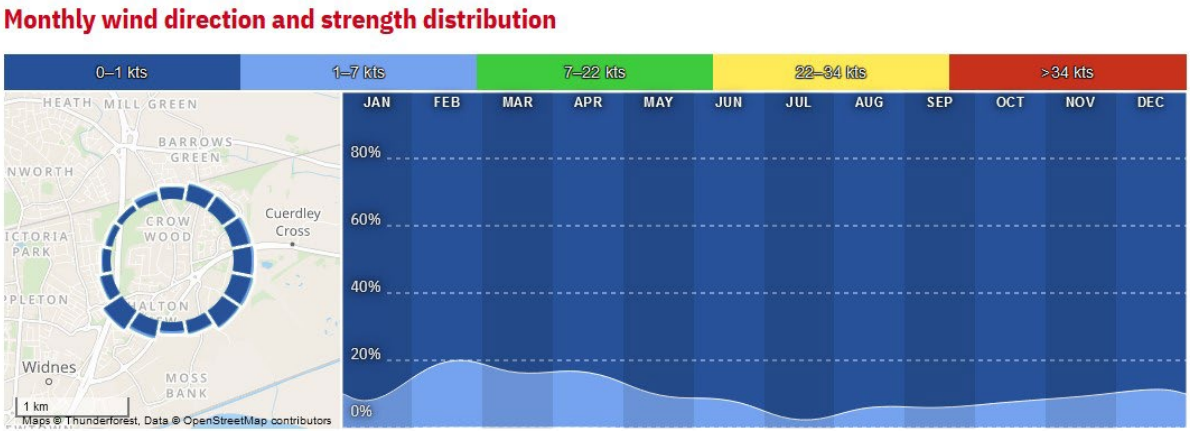

Figure 2 – Widnes wind statistics – average wind direction & strength 2012-2024

[1] https://www.windfinder.com/windstatistics/widnes

4.0 WASTE OPERATIONAL ODOUR CONTROLS

4.1 Overview

4.1.1 The site will employ control measures to ensure odour emissions are minimised and these are outlined below.

4.1.2 Existing control measures have been included, such as olfactory monitoring, quick waste turnover, good housekeeping, operating within the building, and ensuring roller shutter doors are closed when not in use, which have been successfully used to control odour at the site for the previous operations to produce a Refuse Derived Fuel (RDF).

4.2 Waste Delivery and Reception

4.2.1 The site will ensure there is sufficient trained staff to deal with the anticipated waste loads coming in, to ensure incoming wastes are processed as quickly as possible.

4.2.2 The majority of wastes will be brought to site in covered, sheeted or otherwise contained council kerbside waste collection vehicles and delivery vehicles for industrial and commercial waste collections and therefore unlikely to generate significant odours during transit due to the wastes being enclosed within the vehicles, not exposed to wind blow and unlikely to spill out of the vehicle.

4.2.3 Wastes will be predominantly dry and relatively fresh due to regular council collections ensuring biodegradable materials are not at the later stages of decomposition and generating significant odours.

4.2.4 Control of incoming wastes will be managed according to the Operator's waste acceptance procedures contained in their Environmental Management System. Wastes will be weighed and visually checked at the weighbridge to ensure the waste conforms to the Permit and the waste transfer note, and records made and retained in accordance with waste Duty of Care requirements. The following records will include the following and be retained for each waste load delivered:

- Date and time of delivery
- Vehicle details and carrier registration
- Waste description (inc. any odours)
- Waste origin/company name
- Quantity

4.3 Waste Unloading and Handling

4.3.1 The waste load is then sent into the building for unloading. Wastes will only be unloaded within the building in designated areas within the tipping hall or directly into the bulk storage bays in the building. Mobile plant can move wastes into bays that are tipped within the tipping hall area.

4.3.2 The building doors will be kept closed at all times except when in active use allowing vehicles in or out. Remote sensors are installed to each of the roller/shutter doors to allow these to automatically close during periods of inactivity. The Site Manager or designated deputy will ensure that the automated roller/shutter doors are operating appropriately and that they are only open for an absolute minimum amount of time required for access.

4.3.3 Drop heights of wastes will be minimised to prevent agitation of the wastes and entraining odour into the air.

4.3.4 Daily site inspections of the site by trained staff will include checking storage areas for any odours being generated, and these will be logged directly into FCC's online database. In the event that odour is detected at or leaving the site boundary, additional monitoring will be undertaken at the sensitive receptors downwind of the site to assess the impact on nearby receptors.

4.4 Waste Rejection

4.4.1 The waste acceptance protocols aim to identify significantly malodourous waste which will be rejected and redirected to a suitable facility for alternative treatment or disposal. Every effort will be made to identify significantly malodorous waste prior to delivery at site. However, if odorous waste is detected upon arrival at the site it will be rejected.

4.4.2 A waste acceptance check will be undertaken at the weighbridge with an additional visual check being undertaken at the point of discharge in the building. If malodorous waste is detected upon unloading at the site, it will either be reloaded directly into the delivery vehicle and sent off-site, or where this is not possible, transferred and quarantined in an available bay within the building (to limit odours leaving site) prior to removal from site to a suitably permitted facility for recovery or disposal as quickly as practicable and no later than 24 hours after receipt.

4.4.3 A record will be made of wastes found not to be permitted and this may include: waste type, deliverer, date of receipt and the producer. Following rejection, the operator will inform the Environment Agency and direct the waste for alternative treatment or disposal to one of the designated contingency sites. Actions will be undertaken to identify the origin of the waste and site management system reviewed to prevent re-occurrence of the issue. Any associated odour issues will be addressed as soon as practicable.

4.5 Waste Storage

4.5.1 It is considered that actions aimed at reducing storage times, limiting stockpile sizes, minimising temperature, limiting evaporative losses and controlling odorous inputs are preferable and practical control methods.

4.5.2 Operations staff will be vigilant for malodorous wastes and daily olfactory odour checks will be undertaken. Regular checks will be made of the waste stored which will consider odour, storage time and stockpile size. Procedures are employed so that stockpile age can be

determined and to allow the oldest wastes to be collected from site in advance of the more recent deposits should odour issues be identified.

4.5.3 The Operator will ensure that the building has the necessary capacity to receive the waste for all storage areas. Wastes are not received if capacity at the site is not available for storage.

4.5.4 Wastes will only be stored within the building, within 3-sided concrete bays, or, in the case of site generated general waste/litter, in a covered 40m^3 skip. The building will provide shelter from wind, rain and heat from the sun and therefore this will minimise the biodegradation of any biodegradable fractions within the waste by keeping it dry and cool.

4.5.5 Where wastes are stored overnight in the building, it will be ensured that all access doors are securely closed. It is considered that in the exception of extreme weather conditions during summer periods, temperatures overnight are significantly cooler than during the daytime and the potential to generate odours are therefore reduced.

4.5.6 Waste will be dealt with on a first-in, first-out basis, typically entire bays will be filled and emptied in one go. Waste will be turned around quickly to minimise the risks of odour generation, ensuring municipal wastes typically will typically be removed the same day or the following day depending on the time of arrival. Storage times may be extended at weekends and bank holidays periods or in the event of breakdowns but will not exceed 5 days.

4.5.7 The waste reception hall will be subjected to a strict housekeeping regime and be kept tidy, with regular sweeping to ensure no build-up of excess debris from the storage of wastes. Routine cleansing of the relevant areas of the waste reception area, such as waste storage bays (including top of the push wall), receptacles, drains and areas of hard-standing within the vicinity of the roller/shutter doors will be undertaken by competent staff as a result of the findings of daily inspections. Cleansing will include (but not be limited to) a full scrape (using shovel loader) and 'brush down' of each bay and push wall and use of a road sweeper if required, and a deep clean of cleared bays including with the use of disinfectant. These will be arranged to ensure there is no disruption to the continuity of operations.

4.5.8 In addition to the above, staff will be instructed to ensure that all external areas leading from the weighbridge to the waste reception hall are clear of any litter, debris or other wastes. If additional cleaning is required, the mobile washer or road sweeper may be utilised.

4.5.9 The site will be inspected on a daily basis to make sure that no fugitive emissions of odour are detected. Any significant emissions of odour will be investigated immediately and remedied as per the site's procedures.

4.5.10 Staff will be trained to understand the potential risks of odour associated with the site activities and particular waste types and their role in managing those risks. An induction will also be provided for contractors and visitors so that they are aware of any environmental requirements during the course of their work or visit on-site to minimise odour emissions.

4.6 Waste Transfer Off-Site

4.6.1 Once the storage limits are reached for the bays (individual bays or a number of bays depending on storage requirements of the wastes and incoming waste types) then the Operator will transfer the bulked wastes off-site for recovery in covered/sheeted vehicles. This may include sending wastes for recycling or to an Energy from Waste (EfW) plant, or for further treatment such as biological or mechanical treatment.

4.7 Other Sources of Odour

Drainage

4.7.1 Drainage infrastructure will be inspected daily and maintained and repaired as necessary. Routine maintenance includes flushing through pipework, checking the manhole chambers and interceptors and periodic emptying of the water holding sump. Tanks and drainage infrastructure will be cleaned/jetted as necessary and no less frequently than annually in any case.

4.7.2 In the unlikely event that odour should become an issue as result of the on-site drainage system, a full review of the infrastructure will be conducted, and cleaning and inspection frequencies adjusted accordingly.

Fuels & Oils

4.7.3 The fuel (diesel) will be stored outside the building in a self-bunded fuel tank on the impermeable concrete site surfacing, and the hydraulic oils and lubricants stored securely in sealed containers inside the building with drip trays and stood on the impermeable concrete site surfacing.

4.7.4 Mobile plant will be maintained as per the site's Planned Preventative Maintenance Programme (PPMP) to ensure leaks and spillages of oils and fuels are prevented and minimised from potentially faulty or loose parts.

4.7.5 Daily site inspections will include checking substances and liquids on site are stored correctly in the correct containers/tanks and no tanks have been overfilled and bunds are clear of liquids that could be a potential source of odour.

5.0 ACCIDENT MANAGEMENT PLAN

5.1 Accident Scenarios

5.1.1 In accordance with Environment Agency (EA) guidance, the following abnormal situations have been considered which have the potential to cause odour emissions:

5.2 Spillages or Leaks of Odorous Substances

5.2.1 Spillages of odorous liquids such as diesel during refuelling or maintenance of mobile plant. Leaks of fuel, oils or lubricants from mobile plant during operation.

Control Measures

5.2.2 Only trained operatives to refuel mobile plant in the designated refuelling area to prevent accidental spillages. Only trained operatives to undertake maintenance work on mobile plant such as topping up oils and lubricants on plant in designated areas. The fuel tank is situated on impermeable concrete surfacing outside, and spill kits will be available on-site for trained site staff to contain and clean up any spillages as quickly as possible, reducing potential for odour emissions.

5.3 Plant Failure or Malfunction

5.3.1 Breakdown or malfunction of the mobile plant resulting in wastes being left for extended periods of time on-site within the storage bays due to inability to remove wastes within normal timeframes. This allows for anaerobic conditions to form within stockpiles and produce odours.

Control Measures

5.3.2 It is unlikely this would cause an odour issue quickly or lead to an odour emission off-site due to the wastes being stored inside the building ensuring wastes remain dry and cool. The roller shutter doors on the building will remain shut when not in use preventing odours escaping the site easily if they were to form.

5.3.3 In the event of a plant failure or malfunction, alternative equipment will be sourced as soon as possible until the existing equipment can be repaired or hired in as necessary.

5.3.4 Incoming waste deliveries will be stopped temporarily or diverted to other facilities e.g. FCC Wigan or Ellesmere Port waste transfer stations (for which emergency procedures to deal with this would be within the site's Management System) until such time that the site can be operational again.

5.3.5 All plant and equipment will be maintained and regularly serviced in accordance with the manufacturer's recommendations and site's Planned Preventative Maintenance Programme (PPMP) to minimise breakdowns. Replacement plant will be available within 24-48 hours. Specialist equipment will be replaced or repaired as soon as practicably possible.

5.4 Adverse Meteorological Conditions

5.4.1 Periods of adverse weather conditions including high rainfall leading to flooding, low / high temperatures, temperature inversions and high winds towards the direction of the sensitive receptor.

Control Measures

5.4.2 It is unlikely adverse weather such as heavy rainfall, extreme temperature or high winds would affect the site operations due to all waste tipping, storage, handling and reloading to be undertaken within the building with roller shutter doors that will shelter site activities from external weather conditions.

5.4.3 Some extreme weather events may affect deliveries to site, inhibiting travel for example during high winds or flooding in the local area and road network. However, this would not have any effect on odour potential of the site.

5.4.4 The site is within a Flood Zone 1, meaning very low probability of flooding by rivers or the sea, however it is adjacent to the Logwood Mill Brook which has a Flood Zone 3 designation along its banks, meaning a high probability of flooding in these locations, but still unlikely to affect the site directly. Flooding would be unlikely to affect the site's infrastructure or cause an odour issue.

5.4.5 The building covers the waste storage and handling areas to prevent excessive rainwater collecting on the site surface. Surface water from waste storage areas is able to be discharged to an existing public foul sewer connection located on the road outside the site.

5.4.6 Following adverse weather conditions, if sensitive receptors have complained of odour issues from the site, liaison and dealing with complaints from neighbours will be undertaken.

5.5 Waste Collection/Transport Haulier Problems

5.5.1 The identified destinations for bulked waste to be sent for recycling, Energy from Waste (EfW) or site for further treatment (biological/thermal) are no longer able to accept the waste at short notice or the transport haulier is unavailable.

Control Measures

5.5.2 This is unlikely to cause an odour issue at the site. FCC have a number of alternative waste hauliers and sites who can be contacted in the event the regular haulier is unavailable to remove the wastes from the site, ensuring the transfer process can continue.

5.6 Power Cut & Roller Shutter Doors

5.6.1 Power failures can have a negative impact on the operation of power doors and spray systems. In the event of a power cut notification will be completed and submitted to the Agency. This will record the duration of the power failure, and if applicable, the management systems that

were non-operational. If the power cut is attributed to a problem with the national supply, then the supplier will be notified as soon as possible. If the problem relates to issues with the electrical supply on the site premises, then a suitably qualified contractor will be brought onto site without delay to make necessary repairs or make appropriate replacements to relevant equipment.

5.6.2 In case of failures of any automatic roller shutter doors the site must inform the Environment Agency immediately. The contractual agreement for an engineer response to an issue is 4 hours. In the event the door cannot be repaired the same day the door will be manually operated or permanently closed if not possible. If the door cannot be closed due to damage the Environment Agency will be made aware and site will repair the affected door as soon as possible.

5.7 Force Majeure and Odour

5.7.1 Finally, unexpected circumstances such as a fire or explosion on site or an act of vandalism could trigger the release of discernible odours. Under these circumstances odour related contingency measures will be covered under the 'Odour Action Plan' and will be dealt with as promptly as possible. Remediation and reporting procedures for the above are as required within the Permit.

6.0 ENGAGING WITH THE NEIGHBOURS

6.1 Complaints Procedure

6.1.1 As part of this Odour Management Plan, engagement with the neighbours will be undertaken. Prevention of odour emission is viewed as the most effective means of controlling odour before an impact or complaint occurs.

6.1.2 Any complaints received at the site are likely to be direct to the Operator, who is willing to deal directly with the complainants, however complaints could also be received through the Environment Agency or Local Authority. Where necessary the following can be implemented:

- Information can be provided to the local neighbours (via the Environment Agency) regarding the point and method of contact for the site in the event an odour has been detected or they want to discuss any activities etc. at the site.

- Complainants can be advised that any complaints/concerns will be addressed immediately following identification/notification and contingency actions implemented.

- Complainants can be advised of any corrective action and a follow up call carried out if required.

6.1.3 The primary point of contact at the site for complaints and liaison with the neighbours is the Site Manager, who will ensure that the recording, investigation and close-out of any complaints is undertaken as described as below and in accordance with company management procedures.

6.1.4 In the event of an odour complaint being received by the Local Authority or the Environment Agency (EA), the complaint is passed to the Operator for the investigation, and a response to the complaint is provided typically within 48 hours.

6.1.5 Every complaint is recorded directly into FCC's EcoOnline database system, as detailed below:

- All complaints are recorded on to FCC EcoOnline database by the site manager or site staff, describing the complaint and severity.
- The complaint is forwarded to the Regional Environment Manager to undertake further investigation.
- Depending on the severity, the complaint can be escalated to senior management for investigation if necessary.
- The system is a digital process and records a wide range of reporting.

6.1.6 The FCC EcoOnline database is already in place as part of the company's accredited Integrated management system and includes reporting to the EA of the findings of the odour investigation. The following details will be recorded for a complaint received at the site:

- Date and time of complaint;
- Extent of complaint;
- Meteorological conditions at time of complaint;
- The complainant's contact details including name and contact telephone;
- Name of person filling out form;
- Actions taken to resolve complaint or investigate complaint further.

6.1.7 The odour investigation procedure will also include the following elements:

- Site walk-over coupled with olfactory monitoring along the site boundary, an assessment of the site operations which took place prior to and at the time of the complaint in relation to their odour potential, and other on-site sources of odour.

- Assessment of the weather conditions prior to and at the time of the complaint.

- A suitably trained person who is familiar with the site conditions and the 'sniff-testing' monitoring technique will carry out odour investigations at the site. In the event of a substantiated complaint being received, then mitigation measures will be used for the areas/activities which were cause of the particular odour event.

6.1.8 A follow up report on the investigation will be issued to the EA if the complaint is found to be substantiated. The report will identify improvements proposed to reduce the potential for future complaints. Any new recommendations will then be incorporated in the Odour Management Plan and the operating procedures for the site.

7.0 MONITORING

7.1 Schedule

7.1.1 Odour monitoring will be undertaken daily as part of site inspections and will cover the site and its perimeter during active operations in order to assess how successful the operational management and mitigating odour control measures are at the site, and also to identify whether odour is causing a potential nuisance to ensure that appropriate remediation measures are adopted early.

7.1.2 Monitoring at the site will consist of the following in Table 4:

Table 4 – Monitoring Schedule

Parameter	Monitoring Technique	Frequency
Meteorological Monitoring	Local weather information	**Daily –** manually checked at start of each working day and logged (inc. wind direction/speed).
Olfactory Monitoring	On-site and at site perimeter. In the event odours are detected on-site/at boundary, or an odour complaint is received, then off-site checks will be undertaken (towards the identified sensitive receptors). If numerous complaints received, operations at site stopped until source can be found by more frequent monitoring and remedial actions taken.	**Daily –** on-site olfactory monitoring as part of daily site inspections. Recording test on the 'Odour Report Form' in Appendix 1. (More frequently during day following odour complaints).
Complaints Monitoring	Logged in accordance with Complaints procedure.	Ad-Hoc

7.2 Olfactory Monitoring

7.2.1 Appropriately trained and experienced site personnel will carry out olfactory monitoring on-site at selected locations using the 'Odour Report Form' in Appendix 1. Additional locations for monitoring may also be included, depending on the frequency and location of any complaints received at the site.

7.2.2 Olfactory monitoring will be carried out in accordance with the recommendations detailed in the Environment Agency's H4 Guidance on 'Odour Management', including individuals avoiding 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 will not undertake the olfactory monitoring.

7.2.3 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 on the form and an assessment of the intensity of the odour will be made using the key provided. The routine monitoring points have already been assessed for sensitivity, but should any additional locations be used, the sensitivity will be entered using the key provided.

7.2.4 In the event odour is detected above intensity ranking 3 (moderate odour), the site management will be informed immediately, and the approximate location and extent of the odour plume assessed, and site operations reviewed and remediated. See Table 5 below for odour intensity scale.

7.2.5 Monitoring will be undertaken by trained and designated staff who will be fully trained by Site Management. The parameters to be recorded on the 'Odour Report Form' in Appendix 1 are as follows:

- Date and time
- Location on site
- Weather conditions (dry, rain, fog, snow etc.)
- Air temperature
- Wind strength & direction
- Odour intensity (as Table 4 below)
- Duration of test
- Is the odour constant or intermittent?
- Is the source evident?
- Other comments or observations

Table 5 – Odour Intensity Scale (from H4 Guidance)

Value	Odour Intensity
0	**No odour**
1	**Very faint odour**
2	**Faint odour**
3	**Distinct odour**
4	**Strong odour**
5	**Very strong odour**
6	**Extremely strong odour**

7.2.6 All site personnel will be responsible for continual process monitoring and for reporting any problem odours identified during their day-to-day operations.

7.3 Meteorological Monitoring

7.3.1 The nearest weather station will be utilised for meteorological monitoring at the site and will include monitoring for wind speed and direction.

7.3.2 If an odour survey is undertaken following a site inspection where odour was detected leaving the site boundary, or following an odour complaint, then weather conditions will be noted at the time of the survey and assessed in terms of any odour effects beyond the site boundary. This would indicate which local receptors lie downwind of the site. The following weather conditions are considered to be unfavourable with regard to the effects of the potential odour emissions and should be considered when assessing odour events:

- Weather conditions, especially wind speed and direction, are important factors which influence odour dispersion. Stronger winds (>6 m/s) reduce the impact of odours due to greater dilution and dispersion than lighter winds, whereas wind direction determines the direction of odour dispersion.

- The greatest risk of poor odour dispersion tends to occur on cool nights, with low wind speed, during anti-cyclonal conditions and in the presence of a temperature inversion. These conditions often happen during the cold part of the year and can result in odours being transported over long distances from the source.

- Calm weather spells (wind speed <0.1m/s) results in omni-directional dispersion of odours from the site as it is regulated largely by diffusion in the air. Under such conditions, all locations directly adjacent to the source would be expected to be impacted by fugitive emissions.

- The mean wind direction recorded at the nearest station at Widnes, is recorded as from the east-southeast.

7.3.3 In the event of odour complaints, the data enables complaints to be assessed against the meteorological conditions for the relevant period. Meteorological information will be recorded on the Safeguard system which is logged internally and sent to the EA.

7.4 Complaints Monitoring

7.4.1 Any complaints received directly by the Site or via the Regulatory Bodies, including the EA and Local Authority, will be recorded on the FCC EcoOnline database. Investigation will then be undertaken via olfactory monitoring at the location of the complaint and on-site to substantiate the extent and location of the plume and to identify the source of the odour.

7.4.1.1 If necessary, odour monitoring will also be carried out at the nearest sensitive receptors to the site and the monitoring results recorded.

8.0 REMEDIAL ACTION PLAN

8.1 Action Plan

8.1.1 Following receipt of a complaint or identification of an odour at the site, the following action plan will be undertaken, including:

- Additional olfactory monitoring as detailed above to identify the extent of the odour plume and potential cause for the odour i.e. waste material and/or activity;
- Examination of the operational activities at the site 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 i.e. waste types, length of storage etc;
- Carry out a review of the operational procedure and process controls and instigate any control measures immediately following identification of the problem;
- Further olfactory monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.

8.1.2 It is the responsibility of all site personnel to maintain an awareness of odour and continual process monitoring, and for reporting any problem odours identified during their day-to-day operations. The Site Manager/Nominated Deputy will be responsible for investigating the cause and taking immediate action to minimise further emissions.

8.1.3 If odour emissions leaving the site boundary are the result of equipment failure i.e. roller shutter doors not closing, then faulty items of plant will be repaired/replaced as required. As part of plant maintenance, records will be made of repairs or replacement parts.

8.1.4 If unacceptable odour emissions occur, appropriate remediation measures will be put in place with immediate effect. The frequency of inspections will only be reduced once the issue has been fully resolved.

8.1.5 A record must be made of any odour emission incidents and actions taken. A review of the operational procedure and process controls will be initiated.

8.1.6 Waste storage and handling procedures should be reviewed, and additional controls imposed as deemed necessary by the Site Manager, with the OMP updated as required.

9.0 GENERAL SITE PROCEDURES

9.1 Record Keeping and Reporting

9.1.1 The Odour Management Plan will be stored at the Site Office and within the Operator's computer system.

9.1.2 The procedure for recording via the FCC EcoOnline database will be undertaken as detailed above. All information is recorded digitally and maintained within a digital database. All information can be accessed via computer within the Site Office and will be made available to the Environment Agency on request. This record keeping already forms part of the Site's Management System.

9.2 Staff Training

9.2.1 The designated person or Site Manager will be responsible for ensuring staff receive proper and adequate training in respect of odour management.

9.2.2 Site staff will undergo training to ensure that they understand how their actions and the site operations can affect odour emissions. Staff will be instructed to not operate unless the site controls are operational and to alert site management at times when the site could potentially cause an odour nuisance. Staff will be trained to identify offensive odours caused by operations that could potentially leave the site boundary. Staff will be instructed to report odour emissions to the designated person or the Site Manager with immediate effect.

9.2.3 Staff training records will also be updated and stored within the Site Office.

9.3 Odour Management Plan Review

9.3.1 This Odour Management Plan (OMP) will be reviewed on a regular basis and in the event there are relevant changes in the site operations or procedures or following receipt of a significant and substantiated complaint that requires a change in management procedures for the site.

DRAWINGS

6109-CAU-XX-XX-DR-V-1800	Sensitive Receptor Plan
EC-22022-071- S03	Proposed Operations Plan

LEGEND

- PERMIT BOUNDARY
- 1000m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- RECREATIONAL
- EDUCATIONAL FACILITY
- COMMERCIAL / INDUSTRIAL
- RESIDENTIAL
- MEDICAL FACILITY
- AGRICULTURAL
- MAJOR ROAD
- MINOR ROAD
- RAIL
- EUROPEAN EEL MIGRATORY ROUTE
- ANCIENT WOODLAND

PREVAILING WIND DIRECTION

REV	MODIFICATIONS	BY	RE	AP	DATE
P02	WIND ROSE ADDED	EJD	SH	SH	16.04.24
P01	ISSUED FOR INFORMATION	EJD	SH	SH	21.02.24

PURPOSE OF ISSUE: FOR INFORMATION

STATUS: S2

CLIENT: FCC Environment

PROJECT: ARPLEY 2 TRANSFER STATION

TITLE: SENSITIVE RECEPTOR PLAN

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	SH	SH

DATE	SCALE @ A3	JOB REF:	REVISION
20.02.2024	1:10000	6109	P02

DRAWING NUMBER: 6109-CAU-XX-XX-DR-V-1800

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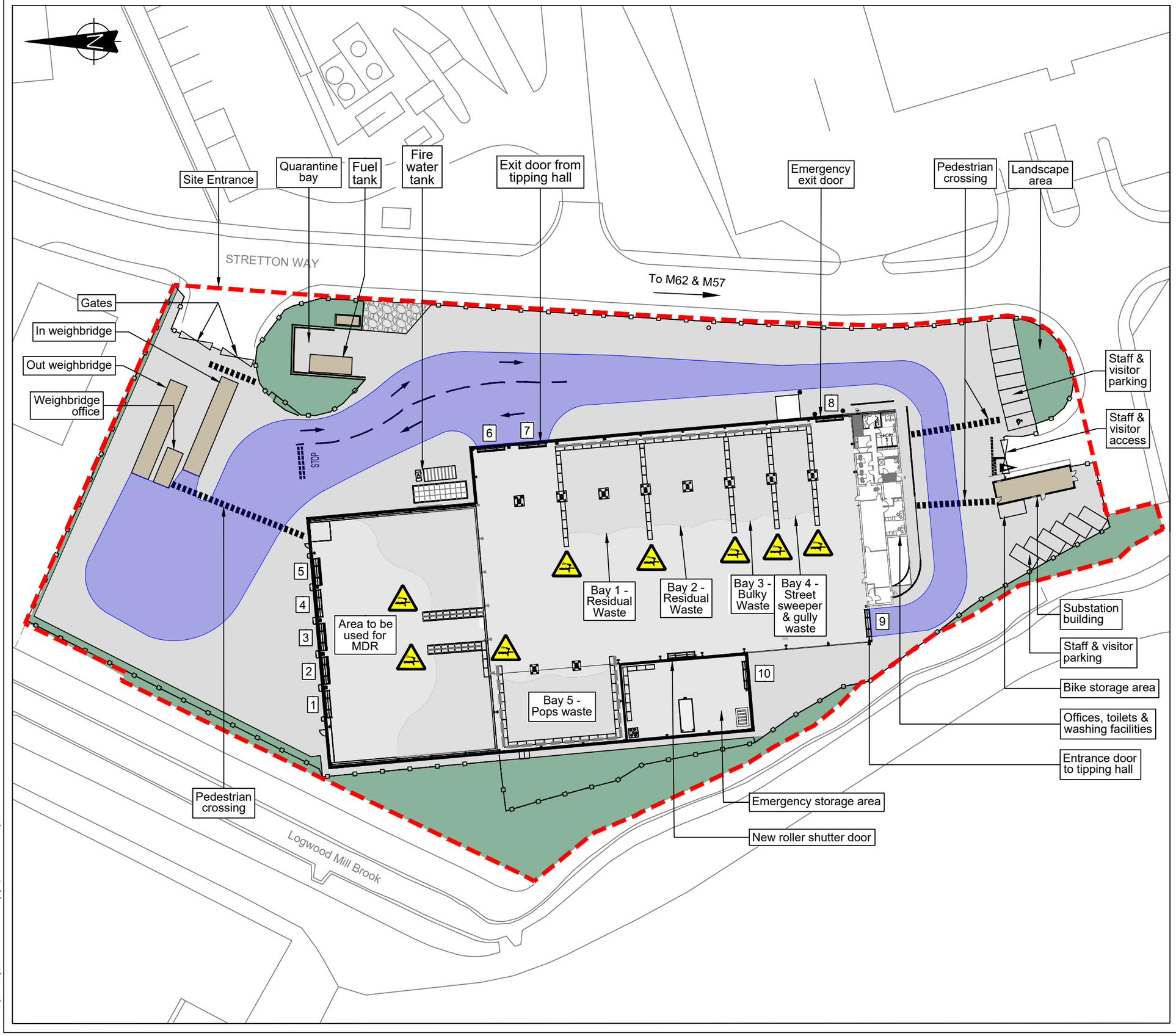

Notes:

1. All dimensions in metres and all levels in metres above ordnance datum unless specified otherwise.
2. Do not scale from this drawing.
3. Any anomalies identified with the details shown on this drawing are to be brought to the attention of FCC environment (UK) limited prior to construction works commencing.

Legend:

- Environmental Permit Boundary
- Fence
- Concrete Hardstanding
- Landscape Area
- Rough Ground
- HGV & RCV Turning & manouvering apron
- Water Cannon

Bays 1 & 2 - Residual waste from household, trade, CRC, street cleansing & ground maintanence wastes (wastes destined for thermal treatment)

Bay 3 - Bulky Wastes and Bulky waste extracted from Bays 1 and 2 (Wastes destined for shredding & Thermal treatment)

Bay 4 - Gully Arisings and Mechanical Sweeping wastes destined for Mechanical & biological treatment

Bay 5 - Bulky Pops and CRC Pops Waste (Wastes destined for shredding & Thermal treatment)

Revision:	Date:	Description:	By:	Chk:
S01	09.04.2024	First Issue	MT	

FCC Environment (UK) Limited
3 Sidings Court, White Rose Way, Doncaster. DN4 5NU

Site: **Arpley 2**

Drawing Title: **Proposed Operations Plan**

Drawn By:	Checked By:	Date:	Scale:	Paper Size:
MT		09 April 2024	NTS	A3

Status:	Project No:	Revision:	Plan Number:
Level 1	EC-22022	S01	211

Last Saved By: Matthew.Tyrace Date: 28-Mar-24 Plot By: tyrace, matthew Date: 10-Apr-24

APPENDIX 1

Odour Report Form

ODOUR REPORT FORM			DATE:
Name of Person:			
Person's Position:			
Time of Test:			
Location of Test:			
Weather Conditions: (dry, rain, fog, snow etc.)			
Temperature: (very warm, cold or °C if known)			
Wind strength: (none, light, steady, strong, gusting) use Beaufort Scale (if known)			
Wind direction: (e.g. from NE)			
Odour Intensity: 0 – no odour 1 – very faint odour 2 – faint odour 3 – distinct odour 4 – strong odour 5 – very strong odour 6 – extremely strong			
Duration of test:			
Is the odour constant or intermittent?			
What does it smell like?			
Is the source evident?			
Any other comments or observations:			

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