Client: Clearfield Envirotech Limited
Address: Mc1, Road Five, Winsford Industrial Estate, Winsford, Cheshire, CW7 3RB

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ODOUR MANAGEMENT PLAN

06 September 2023

Our Reference: Clearfield-Winsford-RP06-Final (OMP)

Waste And Industry Compliance Ltd

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Clearfield-Winsford-RP06-Final (OMP)

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DRAWINGS

1 INTRODUCTION

1.1 BACKGROUND

1.1.1 This Odour Management Plan (OMP) has been prepared for a proposed non-hazardous waste plastic and carboard recycling facility at Mc1, Road Five, Winsford Industrial Estate, Winsford, Cheshire, CW7 3RB ***(the Site)***. It is submitted in support of an application for a bespoke Environmental Permit for the Site.

1.1.2 This OMP has been prepared in accordance with Government guidance:

- 'Control and monitor emissions for your environmental permit' https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#odour-management-plan), which was most recently updated on 24 November 2022;
- Additional Guidance for H4 Odour Management (March 2011).

1.1.3 Clearfield Envirotech Limited ***(the Operator)*** will operate the facility to treat a range of non-hazardous plastic and cardboard wastes for recovery and recycling. All waste streams are accepted for the purpose of recycling and recovery. No wastes are received for the specific reason of treating them for disposal.

1.1.4 Using state of the art washing and separation technology, the plant is designed to achieve high rates of recycling, typically 70% or greater. It will recycle many non-hazardous plastics that are typically either landfilled or incinerated, thereby moving these materials up the waste hierarchy and making a significant contribution to recycling targets. The Site will have an annual waste throughput of up to 100,000 tonnes. Hazardous wastes will not be accepted at the facility.

1.1.5 The Site incorporates a dedicated and enclosed building, of brick and steel portal frame construction, which incorporates a fully sealed impermeable concrete base and is fitted with 4 roller shutter vehicular access doors on the northern side and 5 roller shutter doors on the southern side. Pedestrian access fire doors are also fitted for emergency evacuation.

1.1.6 All waste treatment activities will take place inside the building. Processing equipment will comprise shredding equipment, up to two wash plants, which each incorporate rear end drying, up to two plastic extrusion plants and a baler for baling recycled products prior to off-site supply to customers.

1.1.7 There is an external yard, which incorporates an engineered, paved surface. It will be used for the storage of incoming baled wastes, prior to transferring them into the building for processing and recovery. A combination of open stockpiles with a minimum of 6m separation distances all around (i.e. to all four sides) and fireproof bays comprising 2 hour fire resistant concrete rear push walls and side walls will be used for the storage of baled waste. All incoming wastes will be baled and stored on the external yard, inside the engineered bays and designated stockpile areas. Wastes will only be processed inside the building (there will be no internal waste storage).

1.1.8 The Site will operate on a 24 hours x 7 days basis. There will be no waste deliveries or recycled product collections between the hours of 7.00pm and 7.00am. During this time period, the doors to the building will be kept closed, including the roller shutter vehicular access door (except in the event of an emergency, such as a fire) and all activities will take place inside. The building will be staffed

throughout the operational period.

1.1.9 The proposed permit boundary, site layout and storage areas are shown on Drawing 'Indicative Site Layout and Storage-DW01'.

1.1.10 This OMP provides an explicit list of the 'appropriate measures' required for effective odour management and control and serves to aid the decision-making process on the choice of controls, general site design and operational practice in line with current industry best practice. It is a working document with the specific aim of ensuring that:

- All potential odour sources are identified;
- Odour impact is considered as part of routine inspections;
- Odour is primarily controlled at source by good operational practices, the correct use and maintenance of plant, and operator training;
- All appropriate measures are taken to prevent or, where that is not reasonably practicable, to minimise odorous emissions to air from the Site that may be considered offensive at locations outside of the Site boundary;
- People outside of the Site are not exposed to levels of odour that would result in annoyance;
- The risk of unplanned odour incidents that would result in annoyance is minimised; and
- Site developments take into account odour potential and potential impacts from work carried out.

1.2 THE SITE

1.2.1 The Site is located on the Winsford Industrial Estate and is surrounded on all four sides by large industrial buildings. It is accessed off Road Five, which connects onto Road One that in turn leads onto the A54 'Middlewich Road'.

1.2.2 Winsford Industrial Estate is a large complex of industrial buildings and units extending circa 1.6km in a north south axis and circa 700m in an east west axis. The nearest non-industrial estate land to the Site are areas of farmland and woodland, circa 165m and 170m east of the Site.

1.2.3 The nearest residential properties are circa 540m west of the Site at the closest point, in the Wharton district of Winsford.

1.2.4 There are no hospitals or care homes within 1km of the Site. Wharton Primary Healthcare Centre is circa 855m West of the Site at the closest point.

1.2.5 Sunrise Nursery, for children up to 5 years old, and Willow Wood Community Primary School are respectively circa 760m west and 830m west of the Site at the closet point.

1.2.6 There is a railway line circa 525m west of the Site, which runs from Crewe to Runcorn and beyond, and serves Winsford Railway Station.

1.2.7 The Site is not located within an Air Quality Management Area (AQMA) or within 2km of an AQMA.

1.2.8 A review of Defra's Magic Map (https://magic.defra.gov.uk/MagicMap.aspx) shows that there are no European Sites, i.e. Special Protection Areas (SPA), Special Areas of Conservation (SAC), RAMSAR Sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR) or Local Nature Reserves (LNR) within 2km of the Site.

1.2.9 The nearest area of Priority Habitat is a belt of Deciduous Woodland located circa 250m north northeast of the Site. There are further areas of Priority Deciduous Woodland circa 570m and 730m northeast of the Site at the closest points. There is an area of Ancient Woodland circa 935m southeast of the Site.

1.2.10 There is a Scheduled Monument, Bostock Hall moated site, circa 580m northeast of the Site. There are no other Scheduled Monuments or any Registered Battlefield within 2km of the Site.

1.2.11 Sensitive receptors are shown on Drawing 'Sensitive Receptors'-DW02.

1.3 SITE RESPONSIBILITY OVERVIEW

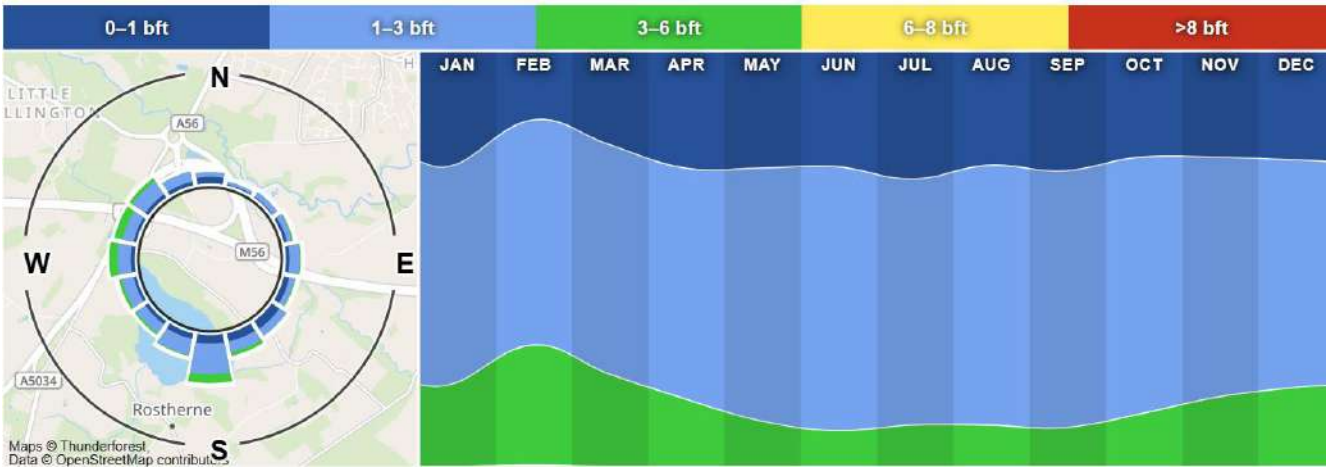
1.3.1 The Site Manager or, during periods of absence, other Technically Competent Person will have responsibility for ensuring that potentially odorous emissions arising from the Site are minimised and that all process controls are managed/maintained. Adequate staffing levels will be maintained at all times to ensure the effective operation of the facilities.

2 PREVAILING WINDS

2.1.1 Statistics on wind direction and speed are based on observations taken from the nearest weather station at Rostherne Mere (circa 18.5km northeast of the Site) between July 2015 and June 2023. This indicates that prevailing winds originate predominantly from the south, see Figure 1 monthly wind speed statistics and directions and Figure 2 monthly wind direction and strength distribution (including wind rose data).

Figure 1: Monthly wind speed statistics and directions for Rostherne Mere

Figure 2: Monthly wind direction and strength distribution



3 RECEPTORS

3.1.1 Sensitive receptors at potential risk from any odorous emissions at the Site are shown on the Drawing 'Sensitive Receptors'-DW02 and are listed in Table 1 below.

3.1.2 Table 1 uses the hierarchy of hospitals, schools, childcare facilities, elderly housing, convalescent facilities (i.e. areas where inhabitants are more vulnerable to the adverse effects of exposure to odour), residential properties, industry, major infrastructure, amenity areas and designated habitat sites.

3.1.3 Whilst odour would have no impact on flora and is unlikely to have any significant impact on fauna at the designated habitat sites, people accessing these locations for work or recreational reasons could be potentially impacted from odour. Therefore these sites are included in the risk assessment process.

3.1.4 In terms of predicted exposure risk, levels have been determined via a qualitative assessment which evaluates the likelihood of exposure to odour based on the receptors' proximity to the Site and the location of the sensitive receptors in regard to the prevailing wind direction, as shown in Figures 1 and 2.

3.1.5 There are no Special Protection Areas (SPA), Special Areas of Conservation (SAC), RAMSAR Sites, Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR) or Local Nature Reserves (LNR) within 2km of the Site. In addition, the Site is not located in an AQMA or within 2km of one. Therefore, a 1km radius has been used as this generally reflects the maximum potential distance that odour could reasonably be expected to cause affects in extreme meteorological conditions without any mitigation measures in place.

3.1.6 Due to the high number of sensitive receptors, not all residential properties and local businesses etc are individually assessed, as there are several thousand locations within the assessment distance. Table 1 assesses the most proximate receptors within each category to provide information on the highest level of risk that would be encountered. Where mitigation measures demonstrate that the level of odour risk is low at the selected sites, it can be assumed that risk would also be low at more

distant sites.

Table 1: Odour Emissions Risk Assessment

Receptor	Distance from Site	Risk Without Mitigation	Unmitigated Consequences	Comments	Risk After Mitigation
Medical					
Wharton Primary Healthcare Centre	885m W	Low	Low	Located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Waste pre-acceptance and acceptance documentation and checks will be used to identify any potentially odorous waste loads. Any loads identified as odorous will not be accepted at the Site. Any wastes delivered to the Site that are found to be odorous on arrival or deposit, will be reloaded onto the delivery vehicle for removal off-site to the waste producer or authorised facility. If the delivery vehicle has left the premises, the odorous waste will be loaded into a sealed and lidded container for removal off-site to an authorised facility within 24 hours of receipt. All waste treatment activities will take place inside a fully enclosed building, fitted with vehicular access roller shutter doors. Recovered products will be loaded inside the building for removal from the site to customers. The roller shutter doors will be kept closed other than when vehicles are entering and exiting the building. This will help to minimise any potential for odorous emissions. Incoming wastes will be wrapped and in baled form and stored on the external yard in fireproof concrete bays and designated stockpile areas. Wastes will be processed on a first in first out basis to ensure all materials are transferred into the building for processing and recycling typically within 4 days of receipt and, as a worst case scenario, within a fortnight. Bales will be split inside the building, prior to treatment. Regular emptying, sweeping and disinfection of waste storage bays, designated stockpile areas and operational areas in the building to ensure waste deposits are not allowed to accumulate over an extended period of time and give rise to potentially odorous emissions. Daily inspections of	Low

Receptor	Distance from Site	Risk Without Mitigation	Unmitigated Consequences	Comments	Risk After Mitigation
				the operational areas by the Site Manager or other Technically Competent Person to ensure odorous emissions are not escaping the Site boundary.	
Residential Care Home					
None	-	-	-	-	-
Schools and Colleges					
Sunrise Nursery	760m W	Low	Low	Located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Use of control measures in Section 5 and summarised above.	Low
Willow Wood Community Primary School	830m W	Low	Low	Located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Use of control measures in Section 5 and summarised above.	Low
Residential Properties					
Bradbury Road	540m W	Low/Moderate	Low/Moderate	Located upwind of the prevailing wind direction and over 500m from the Site. Use of control measures in Section 5 and summarised above.	Low
Bollin Close	545m WSW	Low/Moderate	Low/Moderate	Located upwind of the prevailing wind direction and over 500m from the Site. Use of control measures in Section 5 and summarised above.	Low
Bollin Avenue	635m WSW	Low/Moderate	Low/Moderate	Located upwind of the prevailing wind direction and over 500m from the Site. Use of control measures in Section 5 and summarised above.	Low
Greenheyes Farm	735m NE	Low/Moderate	Low/Moderate	Although the residential property is downwind of the Site, it is located significantly more than 500m from the facility. Use of control measures in Section 5 and summarised above.	Low
Properties off A54 'Middlewich Road'	755m S	Low	Low	Residential properties are located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Use of control measures in Section 5 and summarised above.	Low
Bostock Road	860m E	Low	Low	Residential properties are relatively distant from the site (over 750m). Use of control measures in Section 5 and summarised above.	Low

Receptor	Distance from Site	Risk Without Mitigation	Unmitigated Consequences	Comments	Risk After Mitigation
Stanthorne Grange	900m SE	Low	Low	Residential properties are located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Use of control measures in Section 5 and summarised above.	Low
Industrial and Commercial					
Henkel Ltd	10m N	Medium/High	High	The company is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
Renray Healthcare Ltd	10m S	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
GEMCO (Garage Equipment and Maintenance Company)	10m W	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
Valentte (Perfumes)	10m W	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
Tithebarn Ltd	65m SE	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
British Red Cross Depot	70m W	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low

Receptor	Distance from Site	Risk Without Mitigation	Unmitigated Consequences	Comments	Risk After Mitigation
Screw Fix	70m W	Medium/High	High	Although the company is upwind of the prevailing wind direction, it is in close proximity to the Site and there is the potential for significant odour impacts at this distance. Therefore it is important that the mitigation measures summarised above and detailed in Section 5 are used to prevent any significant risks to the neighbouring business.	Low
Sports and Playing Fields					
Bradbury Road Play Area	590m W	Low	Low/Moderate	Located upwind of the prevailing wind direction and over 500m from the Site. Use of control measures in Section 5 and summarised above.	Low
Railway					
Rail Line	525m W	Low/Moderate	Low/Moderate	Upwind of the prevailing wind direction and over 500m distant. Odour would not cause any impacts to railway infrastructure, and trains will quickly travel beyond the proximity of the Site, meaning exposure time is likely to be very short. Rail personnel maintaining the line in proximity to the Site would have longer periods of occupancy. The use of control measures detailed in Section 5 and summarised above would protect workers from any significant odour impacts.	Low
Surface Water					
Unnamed surface water ditch	157m E	Medium	Low/Moderate	Downwind of the prevailing wind direction. Odour would not cause any impacts on water quality or flora and fauna associated with the ditch. Personnel accessing the ditch in proximity to the Site could have potential exposure to odour for relatively short periods. The use of control measures detailed in Section 5 and summarised above would protect personnel from any significant odour impacts.	Low
Unnamed surface water ditch	178m NE	Medium	Low/Moderate	Downwind of the prevailing wind direction. Odour would not cause any impacts on water quality or flora and fauna associated with the ditch. Personnel accessing the ditch in proximity to the Site could have potential exposure to odour for relatively short periods. The use of control measures detailed in Section 5 and summarised above would protect personnel from any significant odour impacts.	
Agricultural Land					

Receptor	Distance from Site	Risk Without Mitigation	Unmitigated Consequences	Comments	Risk After Mitigation
Agricultural Land	165m E	Medium	Low/Moderate	Odour would not cause any impacts on land quality or arable crops, with insignificant impact on grazing animals. However, agricultural workers could have potential exposure to odour for relatively short periods. The use of control measures detailed in Section 5 and summarised above would protect personnel from any significant odour impacts.	Low
Ancient Woodland					
Ancient Woodland	935m SE	Low	Low	Located upwind of the prevailing wind direction and relatively distant from the site (over 750m). Odour would not cause any impacts on the flora and fauna. However, people accessing the woodland could have potential exposure to odour for relatively short periods. Use of control measures in Section 5 and summarised above.	Low
Scheduled Monuments					
Bostock Hall Moated Site	580m NE	Low/Moderate	Low/Moderate	Odour would not cause any impacts on the structure of the Scheduled Monument. However, people accessing the site could have potential exposure to odour for relatively short periods. Use of control measures in Section 5 and summarised above.	Low

4 WASTE MANAGEMENT

4.1 PERMITTED WASTES

4.1.1 The list of proposed wastes at the Site is detailed in Table 2 below, together with their associated odour emission risk under 'normal' operational conditions and without mitigation or control measures being applied. The maximum waste throughput at the Site will be 100,000 tonnes per annum and the maximum quantity of wastes stored on site at any one time will be 3,200 tonnes.

Table 2: Permitted Wastes

ECW Code	Description	Odour Emission Risk Without Mitigation
02 01	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**	
02 01 04	Waste plastics	Low
03 03	**Wastes from pulp, paper and cardboard production and processing**	
03 03 07	Mechanically separated rejects from pulping of waste paper and cardboard	Medium
03 03 08	Wastes from sorting of paper and cardboard destined for recycling	Low
07 02	**Wastes from the MFSU of plastics, synthetic rubber and man-made fibres**	
07 02 13	Waste plastic	Low
12 01	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**	
12 01 05	Plastics shavings and turnings	Low
15 01	**Packaging (including separately collected municipal packaging waste)**	
15 01 01	Paper and cardboard packaging	Low
15 01 02	Plastic packaging	Low
15 01 05	Composite packaging	Low
15 01 06	Mixed packaging	Low
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 09	Plastic	Low
17 02	**Wood, glass and plastic**	
17 02 03	Plastic	Low
19 12	**Wastes from the mechanical treatment of wastes (e.g. sorting, crushing, compacting, pelletising) not otherwise specified**	
19 12 01	Paper and cardboard	Low
19 12 04	Plastic and rubber	Low
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in in 19 12 11 (limited to dry recyclables only)	Medium
20 01	**Separately collected fractions (except 15 01)**	
20 01 01	Paper and cardboard	Low
20 01 39	Plastics	Low

4.2 WASTE RECEIPT

4.2.1 Waste pre-acceptance and acceptance procedures (see Section 5.3 below) will ensure that only compliant waste types are accepted. Customers delivering waste to the Site will be required to provide the Operator, in advance, with pre-acceptance documentation to fully characterise the nature of the proposed materials. In addition, a Waste Transfer Note or Season Ticket will be required to accompany the waste load during delivery to satisfy the requirements of the Duty of Care and the Waste (England and Wales) Regulations 2011.

4.2.2 The Operator will check pre-acceptance documentation from suppliers to ensure that only permitted waste streams are approved for delivery to the Site. Non-permitted wastes or other unsuitable wastes will not be accepted. Any pre-acceptance documentation that indicates the load may be odorous or putrescible will result in the load being refused prior to its delivery.

4.2.3 Checks will be made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration. Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site.

4.2.4 Site staff will examine the waste descriptions of incoming waste loads and the information will be checked against the previously supplied pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note or Season Ticket (as appropriate) and against the waste types permitted by the Environmental Permit.

4.2.5 Every delivery of waste will be recorded, detailing the date of the transaction, weight, waste type, registered carrier, Waste Transfer Note number, vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information. Waste loads will arrive in sheeted or fully enclosed vehicles. Where possible the load will be visually inspected on arrival (i.e. prior to a further check upon deposit) and any deliveries found to be odorous will not be accepted.

4.2.6 A banksman will ensure that incoming waste delivery vehicles are directed to the appropriate wastes storage bays and dedicated stockpile areas. The vehicle will reverse up to the appropriate bay or designated stockpile area, where it will be unloaded and the bales stacked by forklift or grab.

4.2.7 A visual inspection of the contents of all waste bales, including those received in enclosed containers, will be made during deposit. Any odorous wastes will be regarded as non-conforming waste and managed in accordance with Section 4.3.

4.3 NON CONFORMING WASTE

4.3.1 Any loads which contain non-permitted wastes or highly odorous wastes shall be rejected prior to delivery or unloading (see above). In the event that non-permitted or highly odorous waste has been inadvertently deposited, it will either be reloaded onto the delivery vehicle for immediate removal off-site or placed in a sealed and lidded quarantine skip or container (e.g. where the delivery vehicle has already departed the Site). The quarantined waste will be prioritised for rapid removal within 24 hours of receipt.

4.3.2 The Site Manager or, during periods of absence, other Technically Competent Person are responsible for ensuring adequate provision is made for the acceptance and processing of waste at all times.

Although the Site has been designed to ensure that the manning levels are sufficient to operate the facility at all times, including during peak periods, should there be indications that the capacity will be exceeded, the frequency of vehicles used to remove materials to off-site outlets will be increased. If necessary, additional temporary staff will be brought in to operate the Site at peak times, although manning levels have been set to provide sufficient cover at all times, including during peak periods.

4.4 WASTE STORAGE AND PROCESSING

4.4.1 Waste storage and processing areas comprise:

- A combination of designated stockpiles and fireproof concrete bays, located on the external yard area. Bay walls will be 4.4m high to provide a minimum 1m headroom above the top of the stacked bales, which will be up to 3.4m high. This will also provide some protection to stacked bales from winds.
- A fully enclosed and sealed building, incorporating a concrete base and fitted with 4 roller shutter vehicular access doors on the northern side, 5 roller shutter doors on the southern side and pedestrian access doors.
- Waste processing plant located inside the building:
    - Shredding plant, which incorporates an infeed conveyor to an enclosed hopper with suction point to control dust emissions. A fill level sensor is installed to enable automatic feed. Material is transferred from the hopper to the cutting unit within the shredder, where material is shredded to a size of circa 80 to 110mm. Shredded materials are then transferred along the line to the wash plant.
    - Wash water plant, which includes a 3 chamber pre-wash unit. The first chamber removes the largest fraction of contraries. Water injection causes an upward movement of the light fraction (i.e. plastics), whilst the heavier contraries fraction is discharged via a dual gate valve. The second chamber is designed for intensive pre-washing of the infeed material by injecting water to the surface. The material is conveyed by two parallel screws, the screw troughs of which are designed as screens. Contraries rinsed through the screens are removed via a gate valve. The water is steadily recirculated by a pump for reuse. The third chamber separates the remaining fines fraction of contraries. The cleaned and separated plastics fraction is transferred via a discharge chute and conveyor to mechanical drying and hydrocyclone density separation of light plastic fractions such as polyethylene (PE) and polypropylene (PP) from heavier fractions such as polyethylene terephthalate (PET), polyvinyl chloride (PVC) and any remaining contraries.
    - Wash water recirculation plant. Used wash water will drain to a sealed collection pit where it is agitated and pumped to two connected parallel vibrating screening machines, which are used to separate and collect the residual solids fraction. The residual solids fraction is passed through a screw press, with the sludge discharged to a sealed container for removal off-site to a suitably authorised facility. The cleaned water collects in a screened water tank, from where it is recirculated by pumping back to the wet shredder for reuse.

- Extruders. Shredded, washed and dried plastics are fed to the extruder plant via a feed hopper and inclined conveyor. The extruder plant incorporates a preconditioning unit, where any remaining large plastic film sections are cut and the feed material heated and dried. This removes residual moisture from the plastic and continuously fills the extruder with heated, pre-compacted material. Preconditioned and heated material is fed to a first stage filtration unit, which removes impurities to minimise out-gas emissions or unpleasant odour. Degassed plastic melt is pumped through the extruder to a second stage filtration unit to further enhance the quality of final products. A rotating screw arrangement in the barrel of the extruder forces the low viscosity plastics through a die attached to end of the extruder. Following exit from the extruder die, materials are passed to an automated cutter, which cuts the melted polymer into balls. The material is then cooled and bagged for export off site as a raw material plastic product for reuse.
- Baler.

5 ODOUR CONTROLS

5.1 BACKGROUND

5.1.1 In line with current industry best practice, the odour controls set out in the sections below will be used as the 'appropriate measures' to minimise and, wherever possible, prevent odour associated with operations at the Site.

5.2 WASTE FEEDSTOCK INVENTORY AND SOURCE MATERIALS

5.2.1 The proposed waste types and their potential to be inherently odorous are detailed in Table 2 above. None of the proposed waste types to be received at the facility are inherently highly odorous.

5.3 WASTE ACCEPTANCE PROCEDURES

5.3.1 The waste acceptance procedures detailed below will be the initial method of preventing odorous emissions at the Site. The requirements for waste producers to provide pre-acceptance documentation that includes identification of any potential risks to the environment, including from potentially odorous wastes, will help to identify any potential loads that should be rejected from the Site prior to delivery. Pre-acceptance documentation will record:

- The waste description;
- The European Waste Classification (EWC) code;
- The source and nature of the waste, including its physical form;
- Any special handling measures;
- Any potential risks to process safety, occupational safety and the environment (e.g. from odour or pests);

- Details of the waste producer (name, address and contact details);
- Where the waste holder is not the producer, details of the waste holder (name, address and contact details);
- Information on the nature and variability of the waste production process and the waste;
- Age of the waste;
- Type of packaging;
- An estimate of the quantity to be received in each load and in a year.

5.3.2 On arrival at the Site, a trained site operative will inspect the details on the Waste Transfer Note / Season Ticket and against the pre-acceptance documentation to confirm whether the delivered waste is authorised in accordance with the Environmental Permit.

5.3.3 The contents of the waste load will be inspected upon receipt where possible, i.e. prior to unloading, and during stacking and storage of waste bales in the fireproof concrete storage bays and designated stockpile areas. In the event that a load is highly odorous on arrival it will not be allowed to unload and will be rejected. A record of the non-permitted load will be made.

5.3.4 A further visual inspection will be made of the load upon unloading. In the event that any inadvertently highly odorous loads have been deposited, the contents will be reloaded back onto the delivery vehicle where possible or if it has already left the Site will be loaded into a fully sealed, enclosed and lidded skip or container for isolation and quarantine. The quarantined wastes will be prioritised for rapid removal off-Site to an authorised facility, i.e. within 24 hours of receipt.

5.4 WASTE STORAGE

5.4.1 Stock rotation will ensure that bales are filled and emptied in sequence, therefore ensuring that wastes are always processed on a first in first out basis (i.e. bays and designated stockpile areas containing the longest deposited materials will be emptied first). In this way each bay and designated stockpile area will typically be emptied completely every 4 days or, as a worst case scenario, every fortnight. Once empty, bays and designated stockpile areas will be thoroughly swept, including the corners, to ensure all wastes and debris are removed and the potential for wastes to accumulate over time and become odorous is prevented.

5.4.2 Checks are made during site inspections by the Site Manager or other Technically Competent Person to ensure all bays and designated stockpile areas are emptied and cleared completely, thereby ensuring that all materials are processed and dispatched from the Site and not allowed to accumulate over extended periods of time, which minimises the risks of wastes biodegrading over time and becoming odorous.

5.5 WASTE PROCESSING INSIDE THE BUILDING

5.5.1 All waste bales will be transferred into the building, where they will be split and processed to produce recycled products. The building is fully enclosed and fitted with vehicular access roller shutter doors. The doors will be kept shut except during vehicle delivery, off-loading and exiting the Site.

5.5.2 The splitting and processing of wastes entirely within the building and the use of good housekeeping measures to minimise the risk of odour emissions includes:

- Sweeping and disinfecting of processing areas; and
- Ensuring materials are processed on a first in first out basis.

5.5.3 Recycled products will be stored inside the building prior to transfer off-site and supply to customers.

5.6 HOUSEKEEPING

5.6.1 Wastes are processed on a first in first out basis (see above). Typically, waste storage times will not exceed 4 days and, as a worst case scenario, a fortnight. All materials are processed and fully recycled into products for customers within 4 weeks of receipt. Waste storage bays and designated stockpile areas, including the corners, are typically emptied and swept every 4 days and, as a worst case scenario, every fortnight so that materials and residues are not allowed to accumulate or become odorous.

5.6.2 Waste processing areas inside the building, including areas behind plant and equipment and corners etc, will be swept and cleaned during the working day.

5.6.3 Mobile plant such as forklift trucks will be cleaned of any odorous residues that may accumulate.

5.6.4 All of the Site, including the external yard area, comprises engineered impermeable surfaces with sealed joints. It will be swept and cleaned daily to ensure the facility remains clean and tidy.

5.6.5 In the event that circumstances beyond the control of the Operator (such as the breakdown of critical plant on site or the closure and general non-availability of sites that the recycled and recovered materials are typically sent to) result in the quantity of waste building up to levels approaching the maximum allowed in the permit, alternative authorised facilities will be sought as a matter of urgency to ensure that waste levels are quickly controlled and materials do not give rise to odour emissions.

5.7 PLANNED TEMPORARY ODOROUS ACTIVITIES

5.7.1 If it is necessary to complete planned temporary activities at the Site that have an associated high risk of off-site odour impact (e.g. plant refurbishment or removal of odorous unauthorised waste from the Site), the Site Manager or other Technically Competent Person will ensure that the Environment Agency and any local public liaison group representatives are contacted before such actions commence to advise them of:

- The operation being undertaken;
- The reason(s) for doing so;
- Planned additional odour mitigation measures; and
- Timescales for completion.

5.7.2 Consideration shall be given to the prevailing weather conditions when undertaking such activities in order to minimise any potential off-site odour impact. If the weather conditions are likely to lead to odour issues the work will be postponed until conditions are favourable. The exception to this is

where it is essential to complete works that day in order to minimise emissions from the Site or to prevent another emission or accident (for example unblocking a drain which may cause odour but prevent flooding or water pollution). In these exceptions control measures will be deployed to minimise the risk, for example the use of a temporary odour treatment spray.

5.7.3 Meteorological Office predictions and recordings of local weather data (https://www.metoffice.gov.uk/weather/forecast/gcqnwewjx#?date=2023-07-19) will be reviewed by the Site Manager or other Technically Competent Person to allow forward planning and information gathering on the direction that odour would travel from the Site in the event that planned or potentially odorous work activities have to be undertaken. Daily observations of weather conditions, including wind speed, direction and temperature, will be made so that site operations can be rearranged to adapt to changing conditions where necessary.

5.7.4 Unplanned temporary odorous activities (e.g. in the event of a site emergency) will be addressed in accordance with the Odour Action Plan set out below.

5.8 PLANT MAINTENANCE

5.8.1 Site infrastructure and plant will be inspected regularly for damage and wear by the Site Supervisor or other appointed responsible person. Records of these checks will be maintained in accordance with the EMS. All maintenance on the plant is programmed into the company's Planned Preventative Maintenance (PPM) system which generates work orders for up-coming maintenance and logs when that maintenance has been completed.

5.8.2 Trained maintenance staff can be called on to effect plant repairs quickly where required. Typically plant repairs can be undertaken within one working day, depending on the availability of spares.

5.9 TRAINING

5.9.1 All site personnel working at the facility will be subject to a formal documented training programme in accordance with Company procedures and EMS. Matters relating to site odour management and control form part of this core training programme for all individuals. Additional training is also provided for personnel required to complete subjective odour surveys.

5.10 COMMUNITY LIAISON

5.10.1 Clearfield Envirotech Ltd operates an open-door policy and neighbouring businesses and members of the public are welcome to contact the Site to discuss any issues with the management team. Prior arrangement will be made with site personnel, where possible, for any site visit that may be required.

5.10.2 Direct feedback to site will be encouraged at all times in relation to any perceived issues associated with operational activities.

5.11 CONTINGENCY ARRANGEMENTS

5.11.1 Contingency arrangements are available at short notice to divert incoming waste loads or transfer wastes already received at the Site to other suitably authorised facilities should the need arise.

5.11.2 Incidents that may cause contingency arrangements to be implemented include:

- Extreme weather that prevents vehicles or staff safely reaching the Site or compromises the operational efficiency of the facility;
- If the Site reaches a capacity where further waste loads cannot be received without compromising operational efficiency or compliance with the Environmental Permit;
- Identification of a waste load that is unacceptable for receipt or may cause odour levels that cannot be adequately controlled;
- Any major incidents such as fire or flooding which prevent or compromise the safe and efficient operation of the Site.

5.11.3 In reality the requirement to implement contingency measures is only likely to arise infrequently, if at all. However, contingency arrangements will be maintained throughout the life of the Site as a necessary safeguard.

5.12 EMERGENCY

5.12.1 In the event of a site emergency, the Site Manager or other Technically Competent Persons will be notified without delay. The emergency measures will be implemented as a priority to mitigate the incident, as appropriate.

5.13 SITE INSPECTIONS

5.13.1 The Site Manager or other Technically Competent Person will undertake both daily and weekly inspections of the Site. The daily inspections will include the waste storage areas on the external yard and the processing areas inside the building. The weekly inspections will be recorded and include the external perimeter area of the Site.

5.13.2 Monthly management meetings will include a review of current and planned site operations with respect to their potential for generating odorous emissions. Identified actions arising from the meetings and responsibilities for their completion will be recorded.

6 SUBJECTIVE ODOUR SURVEYS

6.1.1 All site personnel are responsible for reporting any odour problems immediately to the Site Manager or other Technically Competent Person.

6.1.2 The Site Manager or other Technically Competent Person will ensure that daily inspections are made of the external areas to the building during operational periods in order to establish whether any significant odours are discernible. The frequency will be increased if significant odour is detected at the boundary or in the event of odour complaints. The increased frequency will continue until any odour is suitably mitigated and levels have been reduced.

7 ODOUR ACTION PLAN

7.1 PROCEDURES IN THE EVENT OF A COMPLAINT

7.1.1 Clearfield Envirotech Ltd operates and maintains a detailed EMS for the Site, see Clearfield-Winsford-RP02-Final (EMS). Any complaints received concerning odour at the Site will be dealt with in accordance with the company`s EMS complaints procedure.

7.1.2 Any complaints about odour will be reported to the Site Manager and other Technically Competent Person (with appropriate EPOC or WAMITAB Certificate) who is responsible for the site management, e.g. in the absence of the Site Manager due to illness or annual leave etc.

7.1.3 The following actions will be taken on receipt of an external complaint:

- The responsible person receiving the complaint at the Site will immediately record the key details, initiating the investigation process. Details will be entered on the Complaint Report Form (see below). The form sets out the key information that should be recorded at this time in order to facilitate further suitable investigation.
- The Site Manager or other Technically Competent Person will be informed of the complaint as soon as possible, including the location, time and date of the complaint being lodged.

Complaints Record	
Who made the complaint?	
Name:	
Address:	
Phone No:	
Date and time of complaint	
What caused it?	
Was anyone else aware of this? If so who	
What was the source of the problem, what went wrong? If source is unknown contact a suitably qualified person to investigate.	
What have you done to make sure it won't happen again?	

Was there any significant pollution – for example oil entering a surface water drain?	
If there was then you must notify Environment Agency ***Have you done so?*** ***You must also notify the local Environment Agency Office via email or letter.***	***Yes/No/not applicable*** ***Date and Time:*** ***Environment Agency Incident number:***
Please print name and sign:	

7.1.4 In recognising that some complaints can be transient and short-lived, timely notification of complaints directly from the complainant or Environment Agency is imperative to allow for appropriate investigation. If the complaint occurs more than 12 hours before notification is provided to the Operator, it may not be possible to substantiate the complaint or pinpoint the cause. The Operator will, however, contact the complainant where possible, review any operations at the time which had the potential to cause the complaint and complete and record a comprehensive complaint investigation. For complaints received within 12 hours of the incident the following actions will be undertaken:

- The Site Manager or other Technically Competent Person will visit the complaint location as soon as possible, with the aim of undertaking monitoring within 2 hours if this is possible within the working day. The Site Manager or other Technically Competent Person will subjectively determine the presence or absence of the cause of the complaint. Opportunities to meet the complainant to discuss the matter directly will be pursued, wherever possible.
- If the cause of complaint is present, the key 'FIDOR' criteria will be assessed at the complaint location, as follows:
    - Frequency – is the cause of the complaint, intermittent or persistent; is there a history of complaints at this location?
    - Intensity – is the cause of complaint faint, moderate, strong, or very strong?
    - Duration – how long is the cause of complaint present at this location?
    - Offensiveness – provide a description of the cause of complaint; is it high, moderate, or low offensiveness?
    - Receptor sensitivity - is the cause of complaint present at a remote or highly sensitive location; is it localised or widespread?

7.1.5 The Site Manager or other Technically Competent Person will subsequently undertake the following further assessment process:

- Review of the operations at the Site prior to and at the time of the complaint;

- Review of the environmental control systems prior to and at the time of the complaint;
- Review of the previous complaint history at the location identified.

7.1.6 Where a significant complaint is substantiated by the Site Manager or other Technically Competent Person, the Operator will contact the Environment Agency to discuss the incident as soon as possible following receipt of the complaint details, allowing sufficient time for the above investigation to be completed, and within a maximum target response period of 24 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested the Operator will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation, and any actions arising.

7.1.7 Once actions have been completed the Site Manager or other Technically Competent Person will visit the complaint location to ensure that the cause of complaint has subsided.

7.2 MITIGATION MEASURES IN THE EVENT OF A SUBSTANTIATED COMPLAINT

7.2.1 In the event of a substantiated odour complaint, the investigation undertaken by the Site Manager or other Technically Competent Person will incorporate detailed assessment of the site infrastructure and waste operations against the specific requirements of the facility odour controls set out above, to determine any diversion away from 'normal' site operating conditions.

7.2.2 Key items for consideration will be as follows:

- Material inputs – change in waste type, volume, odour characteristics;
- Mechanical breakdown – e.g. of processing plant or delays in waste handling;
- Procedural failure (human error);
- Short-term abnormal weather patterns – wind direction, temperature, inversions, etc;
- Abnormal operating conditions – temporary highly odorous activities.

7.2.3 Upon identification of the likely odour source(s), the appropriate corrective and preventative measures will be identified and implemented under the direction of the Site Manager or other Technically Competent Person. Additional support and technical expertise will be provided by internal / external technical specialists, as required.

7.2.4 Where necessary, the DEMP requirements will also be reviewed in order to ensure it continues to represent 'all appropriate measures'.

7.3 TIMESCALES

7.3.1 In the event that it proves impracticable to carry out adequate remedial measures within one working day, the Site Manager or other Technically Competent Person will notify and agree with the Environment Agency the proposed actions and the timescales for their completion as a programme of works.

8 REVIEW AND AUDIT

8.1.1 The Operator maintains a Non Conformance Register, which includes a unique reference number for any non-conformance or incidents, the date of the incident, who reported the incident, a description of the incident, who investigated the incident, what were the actions or outcomes of the investigation (including any mitigation measures) and whether the incident has been addressed and closed or is still ongoing.

8.1.2 The Non Conformance Register will be reviewed each month as part of the monthly management meetings. Any complaints about amenity issues such as odour will be discussed and actions suggested and agreed to ensure improvements are made and the likelihood of such incidents reduces going forward.

8.1.3 The Operator will undertake an annual audit of the EMS and the Non Conformance Register (including complaints history). The purpose is to ensure the Site is:

- Continually improving;
- Minimising the risk of pollution incidents and preventing any significant impacts to sensitive receptors, including detriment to local amenity;
- Operated in accordance with the latest regulatory guidance;
- Meeting environmental objectives independent of the Environmental Permit.

8.1.4 This OMP will also be formally reviewed at annual intervals in order to ensure the stated management controls and conditions continue to reflect best available techniques and the operational requirements/sensitivities at the Site, which may change over time.

8.1.5 An updated copy of the OMP will be submitted to the Environment Agency following review, as required. Where the Operator recognises the requirement for the immediate implementation of changes to the OMP to prevent or reduce significant odorous emissions, measures will put in place to prevent any pollution or harm.

8.1.6 If, on review of the performance of the facility, the Operator and/or the Environment Agency propose to seek revision of this plan, then the following course of action will be undertaken by both parties:

1. In potentially critical circumstances where the Operator recognises the requirement for the immediate implementation of changes to the OMP to prevent or reduce significant odorous emissions, these changes will be discussed with the Environment Agency without delay but may be actioned by the Operator, as necessary.

2. Where the Operator proposes changes to the OMP that involve a more strategic and/or phased approach rather than a need for immediate implementation, a formal proposal will be submitted by the Operator to the Environment Agency setting out the specific issues arising from document review, and the options/issues requiring the Operator's further attention following Environment Agency approval. The Environment Agency will review the Operator's submission/updated OMP and confirm they are satisfied with the proposed changes. The agreed required changes will then form the future 'appropriate measures' for

the Site with regard to odour management and control.

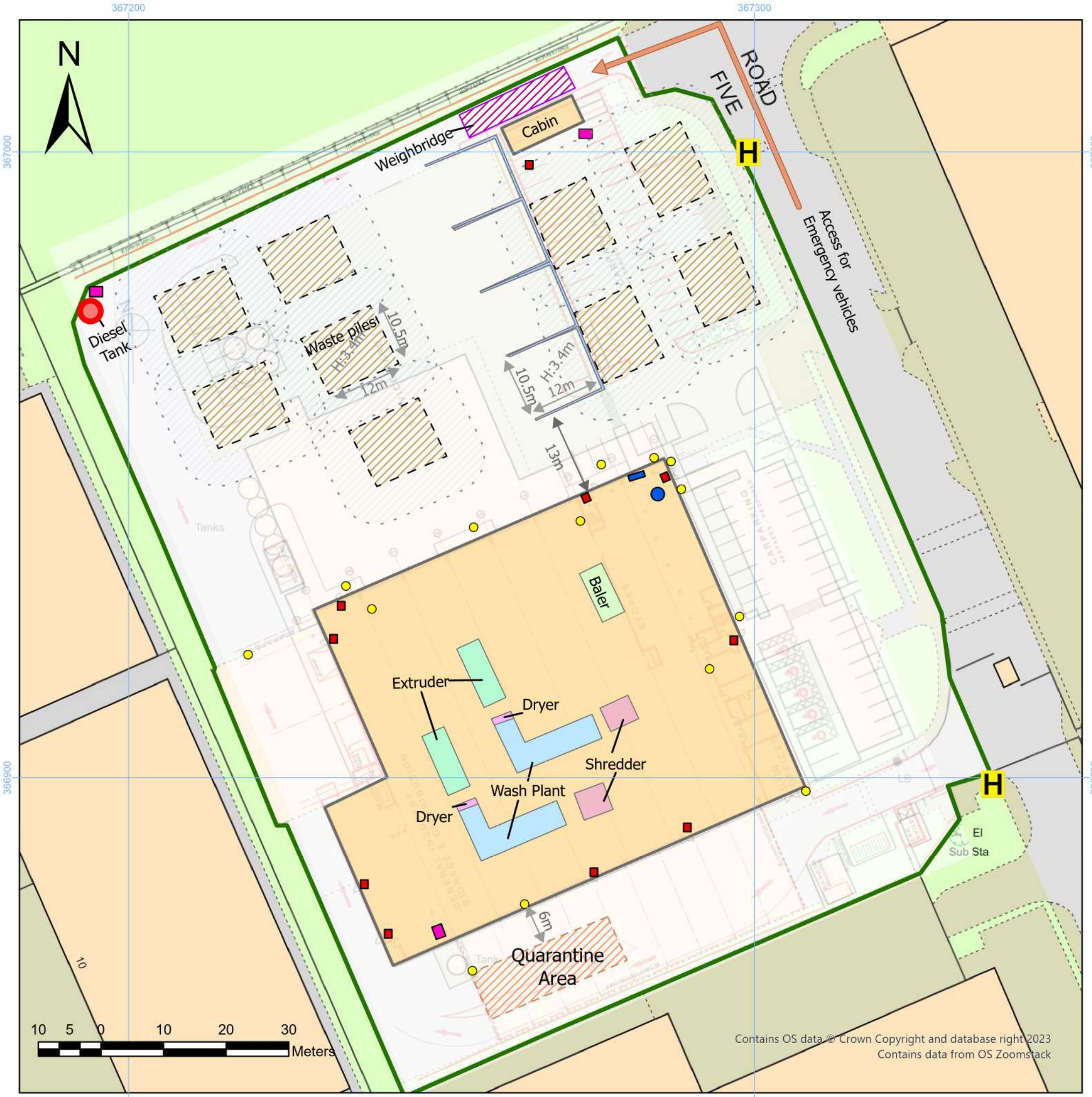
8.1.7 Where changes to the OMP are proposed by the Environment Agency, these will be discussed with the Operator setting out the Environment Agency's clear expectation from the changes, in addition to timescales for their implementation. It is recognised that these changes may range from matters that require immediate implementation to those that may be implemented over an extended timeframe. In each case, the required changes will be discussed with the Operator and an appropriate action plan agreed. The Operator will (wherever possible) undertake the identified changes in accordance with the timescales proposed for the work, at which point the updated 'appropriate measures' will take effect.

9 RECORDS

9.1.1 Records will be kept in accordance with the Environmental Permit and the requirements of this OMP.

9.1.2 Records will include:

- Details recorded during the weekly site inspections by the Site Manager or other Technically Competent Person;
- Copies of any completed Complaint Reporting forms (including mitigation measures), in the event of a complaint;
- Incidents of any odour issues recorded on site at any time (i.e. not just during daily and weekly inspections);
- Copy of Non Conformance Register.



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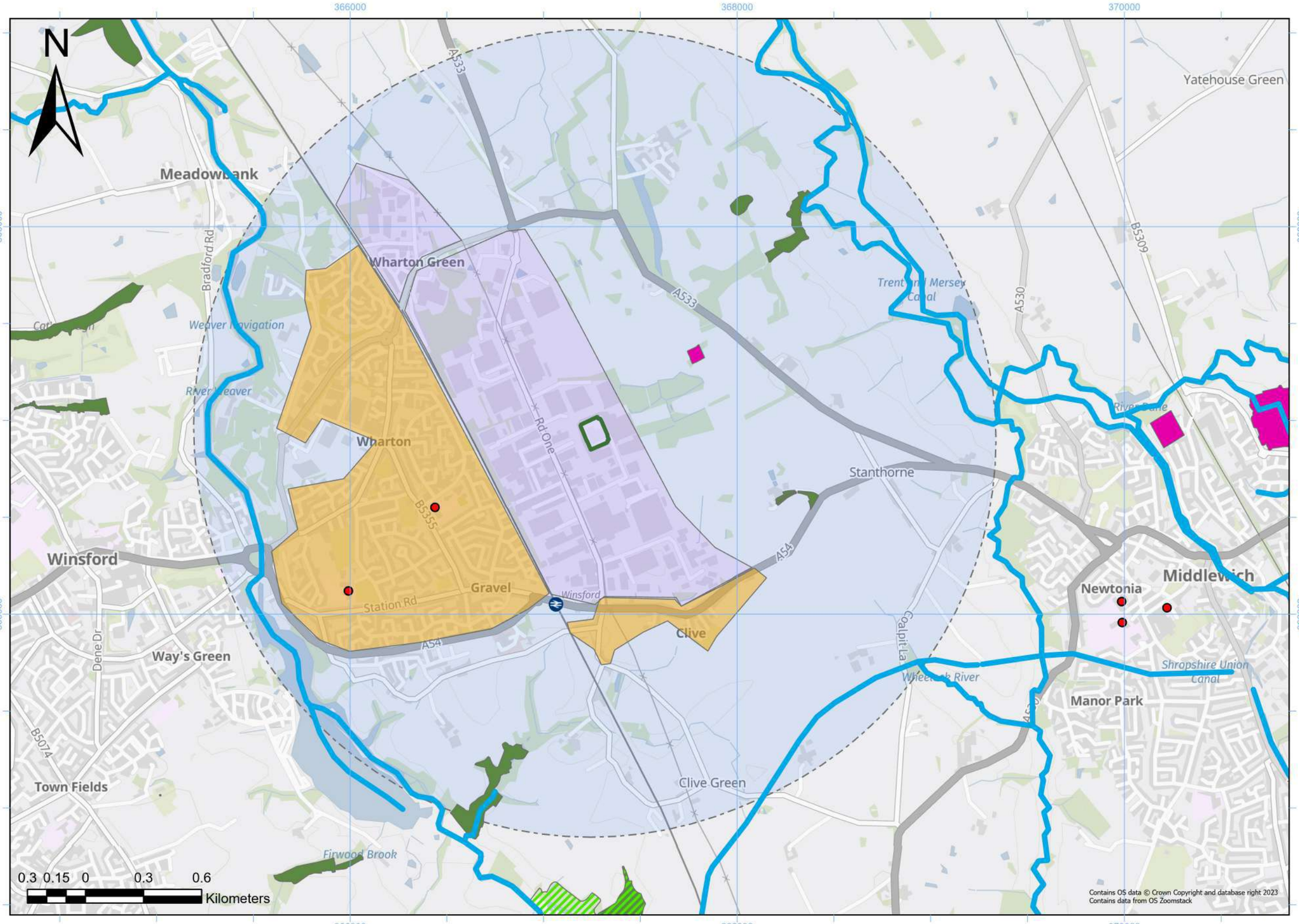
Title: indicative Site Layout & Storage		
Site Location: Rd Five, Winsford Industrial Estates, Winsford, CW7 3QY		
Scale: 1:650	Page Size: A3	Author: S. Barnes
Date: 04/09/2023		Version: FINAL
Drawing Number: Clearfields-Winsford-DW01		

Legend

- Permit Boundary
- Bays 6m separation buffer
- Fire Extinguisher
- Water Mains tap
- Spill Kit
- Water Hose
- Diesel Tank
- CCTV
- Fire Hydrant

Grid ref:
SJ 67255 66946



Waste And Industry Compliance Ltd
ENVIRONMENTAL CONSULTANCY SERVICES

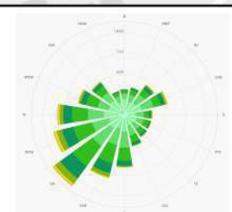
Clearfields Envirotech Ltd.

Legend

- Permit Boundary
- Buffer

Receptors

- Commercial
- Residential
- School
- Watercourse
- Special Protection Areas
- Special Areas of Conservation
- Sites of Special Scientific Interest
- Ancient Woodland
- Scheduled Monuments
- National Nature Reserves
- Local Nature Reserves



Author: S. Barnes. Contains OS data © Crowncopyright [OS OpenMap Local] [2023]. Emapsite 885778.
All Dimensions to be checked on site and not scaled from this drawing.
This drawing is not for construction

All services to be checked on site and not scaled from this drawing

Title: Sensitive Receptors	Date: 15/08/2023	Page Size: A3	Drawing Number: Clearfields-Winsford-DW02
Site Location: Winsford Industrial Estate, Road Five, Winsford, CW7 3SG.	Version: FINAL	Scale:1:20,000	Grid reference: SJ 67273 66909