Dust and Emissions Management Plan

Inert Storage Facility

Towens of Weston Ltd

Towens Kleen Kutt Yard
Land off Springway Lane,
Westonzoyland,
TA7 0JS

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Quality Control

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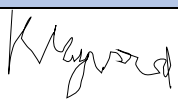
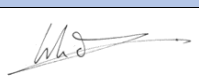
1.0	01/02/23	Original Draft for permit application	Kasia Haywood		Luke Bridges	

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1.0 Introduction

1.1 Background

1.1.1 This document comprises a Dust & Emissions Management Plan (DMP) and has been written by MTS Environmental Ltd on behalf of the operator, Towens of Weston Ltd, Plot 2 Warne Road, Weston Super Mare, North Somerset, BS23 3UU. The Towens Kleen Kutt Yard site is located at Land off Springway Lane, Westonzoyland, TA7 0JS. The main activities on site will consist of soil and aggregate storage with some treatment to allow the reuse of the material on CL:AIRE projects

1.1.2 The site is not located within an Air Quality Management Area (AQMA). The nearest AQMA is Yeovil AQMA located 22.2 km away set by South Somerset District Council. The AQMA was declared for Nitrogen dioxide (NO_2) and PM_{10} in 2002.

1.1.3 Without any abatement controls, the site has the potential for dust and particulates to be generated by the following sources:

- Dust raising from public, haul roads and operational surfaces through vehicle movements
- Dust raising from the mechanical loading/unloading of wastes
- Dust raising from the treatment operation such as shredding, screening and loading
- Dust raising from stockpiles

1.1.4 This DMP has been written to support an environmental permit application and is based on the following guidance:

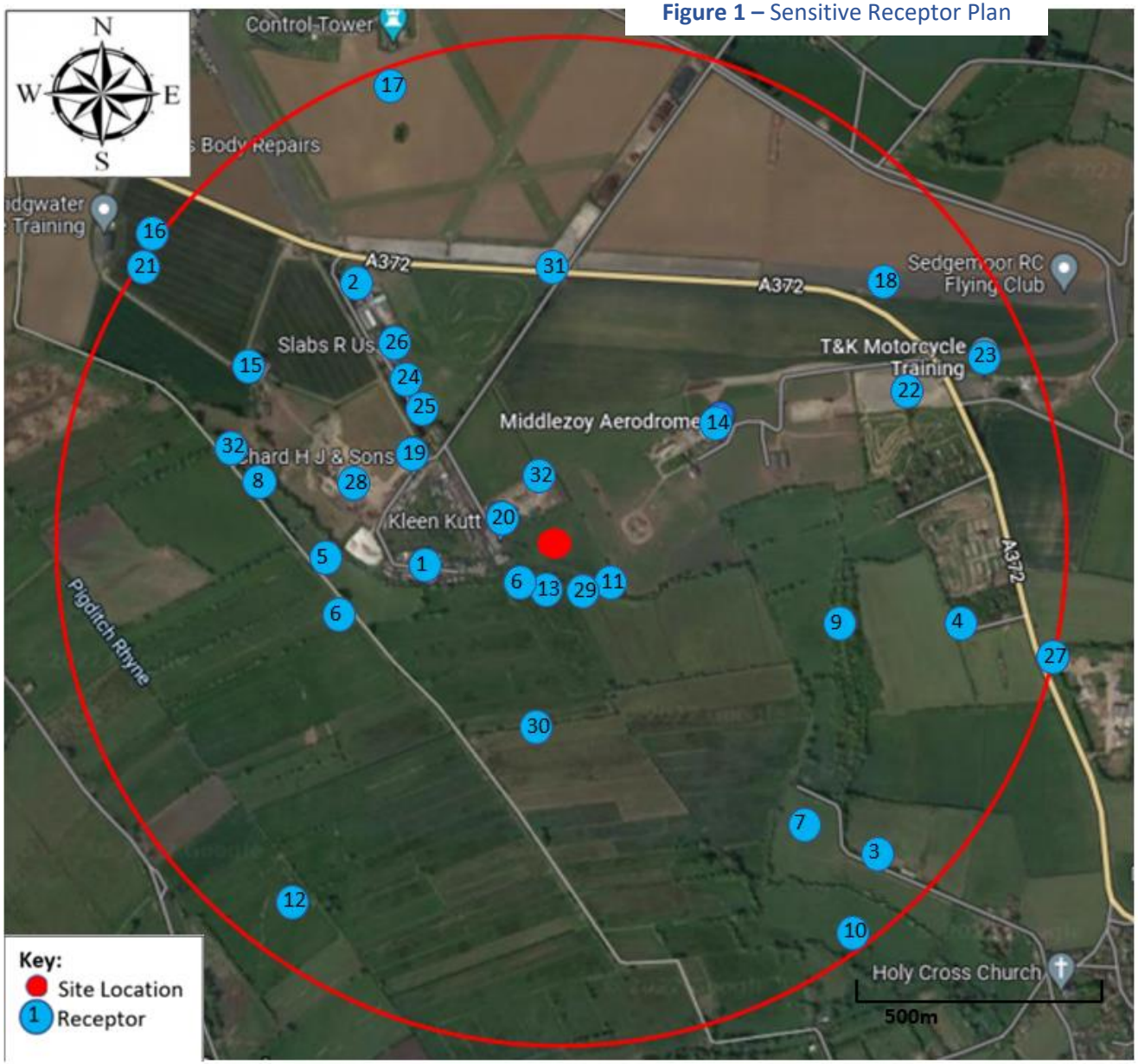
- Guidance on the assessment of dust from demolition and construction (Institute of Air Quality Management) (2014) (version 02)
- TGN M8 Monitoring ambient air, Version 02 (2011)
- TGN M17 Monitoring particulate matter in ambient air around waste facilities, Version 02 (2013)
- Good practice guide: control and measurement of nuisance dust and PM10 from the extractive industries (AEAT/ENV/R3140 Issue 1, February 2011)
- Non-hazardous and inert waste: appropriate measures for permitted facilities (Environment Agency guidance)

1.1.5 This document outlines the potential sources of dust at the Towens Kleen Kutt yard, what receptors this may affect and how this will be managed by implementing mitigation strategies and infrastructure. All dust management plans align with the Towens of Weston Ltd site-specific Environmental Management System (Appendix A).

1.2 Sensitive Receptors

1.2.1 A site location map (Figure 1) shows all the receptors identified by an initial assessment, undertaken by MTS Environmental Ltd, within a 1000m range from the site, the red circle indicates the threshold area.

Figure 1 – Sensitive Receptor Plan



ID	Receptor
Residential	
1	Caravan Park
2	Springway Farm
3	Property on Knowleyards Road
4	The Old Ambulance House
Designated Land and Waterways	
5	Site of Special Scientific Interest (SSSI) – Langmead and Weston Level
6	Priority Habitat Inventory (PHI) – Lowland Meadows
7	PHI–Lowland Dry Acid Grassland
8	PHI – Coastal and Floodplain Grazing Marsh
9	PHI – Deciduous Woodland
10	PHI – Traditional Orchards
11	Important Plant Areas Plantlife
12	Somerset Level and Moor
13	Pigditch Rhyne Network
Sensitive Land Uses	
14	Middlezoy Aerodrome
15	Farm
16	Westonzoyland Allotments
17	Westonzoyland Airfield
18	Sedgemoor RC Flying Club
Industrial/Commercial	
19	JWF Engineering
20	Kleen Kutt
21	Bridgwater Motorcycle Training
22	Grandfields Motor Track
23	T&K Motorcycle Training
24	Burnham Coal Supplies
25	Regency
26	Slabs R Us
27	Seven Acres Industrial Estate
28	Towens Westonzoyland Depot
Public Rights of Way	
29	Restricted Byway
30	Public Footpath
Infrastructure/utilities	
31	A372
Priority species	
32	Priority Species – Curlew/Lapwing/Redshank/Water Vole

1.2.2 Thirty-two receptors are listed on the map, eight of which are sensitive receptors for dust (highlighted in bold in Table 1): Caravan Park (Receptor 1), Langmead and Weston Level SSSI (Receptor 5), Somerset levels and Moors (Receptor 12), Pigditch Rhyne Network (Receptor 13), Middlezoy aerodrome (Receptor 14), and three priority/protected species (Receptor 32). The remaining receptors are low sensitivity receptors, all have been added to Figure 1 and the relative distances to the centre of the site detailed in Table 1.

1.2.3 Activities listed in 1.1.3 could emit dust and particulate which could impair the view of the road users on the A372 (Receptor 31), however no visible pollutants should leave the boundary of the site and obstruct forward views on the surrounding local highways with the mitigation measures outlined in this plan in place.

1.2.4 Receptor 13, the Pigditch Rhyne Network surrounding the south of the site have been classed as a sensitive ecological receptor as they are open watercourses with the closest located ~60m from the centre of the site, it runs along the southern border. Dust and particulates have the potential to cause ecological stress within the animal and plant community in the watercourse. However, damage will be mitigated by the control measures set out in this management plan and the planting between the site and receptor acts as a buffer for any dust and particulates that, in the unlikely event, escape from the site boundary. Any dust from the site will not be blown in the direction of the rhynes by the north easterly prevailing winds as the rhyne network is not located to the north east of the site. The operations on site are highly unlikely to produce large amounts of dust and emissions as little processing takes place.

1.2.5 Properties in the caravan park (Receptor 1) is considered to be a sensitive receptor as they are within 500m of the site. The properties in the caravan park are not in the direction of the prevailing winds as they are located to the west of the site. However, due to their proximity to the site, dust could have a negative effect on the residents. The site is surrounded by vegetation to act as a boundary against dust escaping the site. Alongside the mitigation measures outlined in this document and the Environmental Risk Assessment, any fugitive emissions and dust will be prevented from escaping the site boundary and impacting this receptor. The operations on site are highly unlikely to produce large amounts of dust and emissions as little processing takes place. Towens of Weston Ltd will also keep an open-communication channel with the residents at this receptor to ensure any issues with dust are corrected as soon as possible. Due to the nature of the residential site being a caravan park it is unknown how many permanent residents live there, it is expected that there are few which limits the potential impacts.

1.2.6 Other residential properties, Receptors 2, 3 and 4 are all located over 500m from the site. These receptors are unlikely to be susceptible to the adverse effects of exposure to any increased levels of dust and particulates. The distance between the site and the residences forms a potential buffer zone and allows time for dust and particulate to disperse before it could reach the receptors. Adding to this, visible pollutants will be mitigated from leaving the boundary of the site following the measures set out in this management plan.

1.2.7 Receptors 6-12, Priority Habitat Inventories, Important Plant Areas Plantlife and Higher Level Stewardship Target Area (Somerset Level and Moor) are considered ecological receptors. Members of the public using these sites for recreational purposes or plant/animal communities at these sites may be affected by increased dust and particulates. The mitigation procedures outlined in this plan will prevent any fugitive emissions from reaching these areas. The surrounding infrastructure of the site will also act as a buffer to screen dust and particulates from reaching these receptors. No dust will be

carried to the receptors on the prevailing winds as they are not located to the north east of the site, the prevailing wind direction. Receptor 12 – the Somerset Level and Moors is considered a sensitive receptor due to its proximity and because it is a Special Area of Protection.

1.2.8 There is a Site of Special Scientific Interest (SSSI) named as Langmead and Weston Level, Receptor 5, located 60m south and 350m south west of the centre of the site. This is considered a sensitive receptor as it is designated because of grasses and aquatic invertebrate. Natural England (NE) have been consulted. They acknowledge that the prevailing wind is in an opposite direction from the SSSI (Figure 4) but raised concern that any high dust levels may affect the designated grasses. The dust suppression system installed on-site and dust and particulates, if arising, will be managed in accordance with our Environmental Management System, which covers this scenario. The site is screened from the SSSI by vegetation/planting, boundary fence and high bank with tall mature scrub and trees, which is potentially also adequate to mitigate the effects of dust in average wind conditions.

1.2.9 There are three areas of priority species of birds (Curlew, Lapwing, Redshank - Receptor 32) with Lapwing covering the area of the site, Redshank located 135m to the North and West of the centre of the site and Curlew located 620m west of the centre of the site. There is one mammal priority species (European Water Vole) which cover the site location (Receptor 32). All of which are considered sensitive receptors except the Curlew species due to their further proximity from the site, therefore dust and particulates are unlikely to spread to this receptor. A general ecological impact assessment was conducted for Towens' neighbouring site and found that "No protected or invasive, non-native species of plant were identified and the habitats within the site which will be impacted by the proposed development were not deemed to provide critical resources for any other protected or notable species of animal." Dust will be contained within the site boundary through the perimeter fence and dust suppression measures outlined in this management plan so will not affect these species. Due to the nature of activities and waste accepted on site, it is highly unlikely that dust will be produced on site as assessed in the Environmental Risk Assessment. Communication with Natural England will be ongoing to ensure that any changes in the species whereabouts are known and appropriate additional measures are implemented.

1.2.10 Middlezoy Aerodrome (Receptor 14) is located 230m east from the centre of the site and is considered a sensitive receptor due to its proximity and the nature of activity conducted there which relies on air quality and vision. Dust may be carried to this receptor through high winds as it lies on the outskirts of the prevailing wind direction. Dust will be contained within the boundary of the site through the perimeter fence and mitigation measures outlined within this document and the Environmental Risk Assessment. The operations on site are highly unlikely to produce large amounts of dust and emissions as little processing takes place. Visual monitoring will be conducted on site daily at and outside the site boundary to ensure that no dust and particulate emissions are travelling off site and affecting this receptor. Westonzoyland Airfield (Receptor 17) is similar in nature to Middlezoy Aerodrome but is not considered a highly sensitive receptor as it is located 700m north west from the centre of the site. Therefore, it is not in the direction of the prevailing wind and located further away.

1.2.11 There are multiple other sensitive land uses surrounding the site (Receptors 15-16 and 18) which are considered medium risk receptors. Dust and emissions from the site could cause negative environmental and human health impacts at these receptors. However, with the mitigation measures outlined in this dust management plan and proposed activities on site, dust will be prevented from reaching the receptors. Due to the industrial uses of the surrounding area, this site will not generate more dust than the existing level at the location.

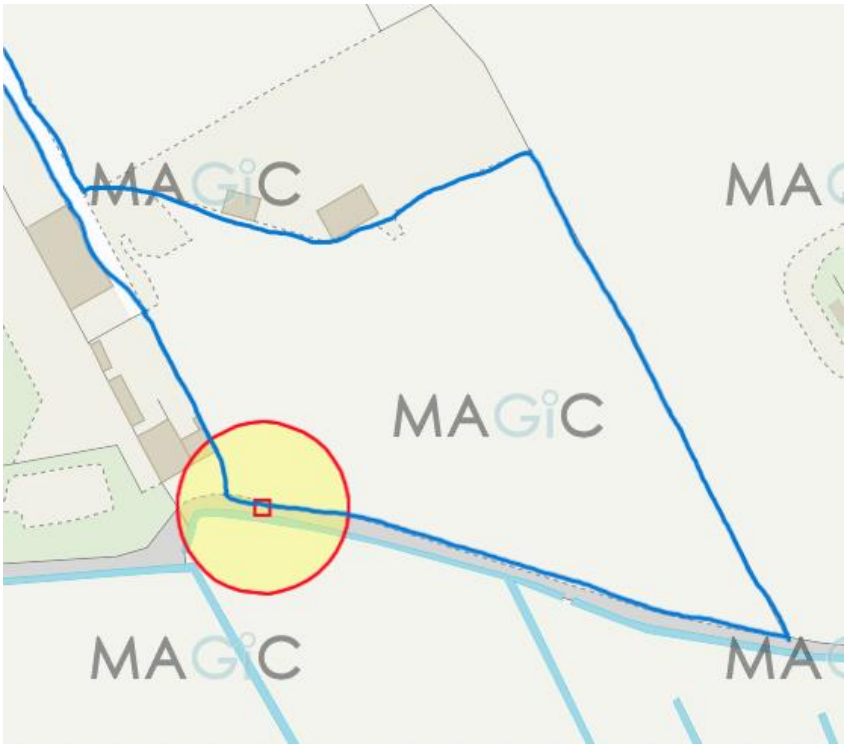
1.2.12 There are multiple industrial and commercial businesses located within 1000m from the site (Receptors 19-28). These are at a low risk due to the nature of the businesses. The likelihood of dust and particulates being emitted from the site which would affect these businesses and the people involved is very low with the abatement measures identified within the Environmental Risk Assessment and this document.

1.2.13 There is one public footpath and a restricted byway located within 1000m of the site (Receptors 29 and 30). The perimeter fence acts as a barrier between the paths and the site. No dust will escape from the site and effect these paths due to its location surrounded by other industrial infrastructures and the abatement controls according to this Dust Management Plan.

1.2.14 There are many local wildlife sites, farmland and open space within 1000m of the site that are not marked on Figure 1 that are considered as low risk or low sensitivity in accordance with IAQM guidance. These have not been added as receptors to Figure 1.

1.2.15 An ecological assessment of the site has also been conducted and found that there is an active badger sett at the south west corner of the site, shown in Figure 2. The site has the potential to disrupt the badgers but the site has implemented a non-disturbing works 30m buffer (shaded yellow on Figure 2) exclusion zone segregated from the site by an animal-proof fence to ensure no works are conducted near the sett. This will protect the sett from any dust production.

Figure 2 – Location of badger sett identified in an ecological assessment



1.2.16 Table 1 details all receptors and their relative distances from the centre of the site.

Table 1 - Distances to selected, representative sensitive receptor locations

Receptor	Distance from site (m)	Direction
Residential		
Caravan Park	160m	West
Springway Farm	550m	North West
Property on Knowleyards Road	860m	South East
The Old Ambulance House	755m	East
Designated Land and Waterways		
Site of Special Scientific Interest (SSSI) – Langmead and Weston Level	60m and 350m	South and West
Priority Habitat Inventory (PHI) – Lowland Meadows	155m	South
PHI – Lowland Dry Acid Grassland	635m	South East
PHI – Coastal and Floodplain Grazing Marsh	60m	South and West
PHI – Deciduous Woodland	535m	East
PHI – Traditional Orchards	1000m	South East
Important Plant Areas Plantlife (GB)	60m	South and West
Somerset Levels and Moors	0m	All directions
Pigditch Rhyne Network	60m	South and West
Sensitive Land Uses		
Middlezoy Aerodrome	230m	East
Farm	545m	North West
Westonzoyland Allotments	1000m	North West
Westonzoyland Airfield	700m	North West
Sedgemoor RC Flying Club	950m	North East
Industrial/Commercial		
JWF Engineering	250m	East
Kleen Kutt	70m	East
Bridgwater Motorcycle Training	930m	North West
Grandfields Westonzoyland Motor Track and Learner Driver Area	600m	East
T&K Motorcycle Training	800m	East
Burnham Coal Supplies	345m	North West
Regency	320m	North West
Slabs R Us	400m	North West
Seven Acres Industrial Estate	970m	East
Towens Westonzoyland Depot	280m	West
Public Rights of Way		
Restricted Byway	60m	South
Public Footpath	430m	South
Infrastructure/utilities		
A372	470m	North
Protected species		
Priority Species - Curlew	620m	West
Priority Species - Lapwing	0m	All directions
Priority Species - Redshank	135m	North and West
Protected Species-European Water Vole	Up to 500m	All directions
Badger Sett	60m	South West

Groundwater		
The site is not within a source protection zone or drinking water safeguard zone		

1.3 Dust Contributing Receptors

1.3.1 There are multiple existing local contributors of dust within 1km of the site. These have been identified on the map below in Figure 3.

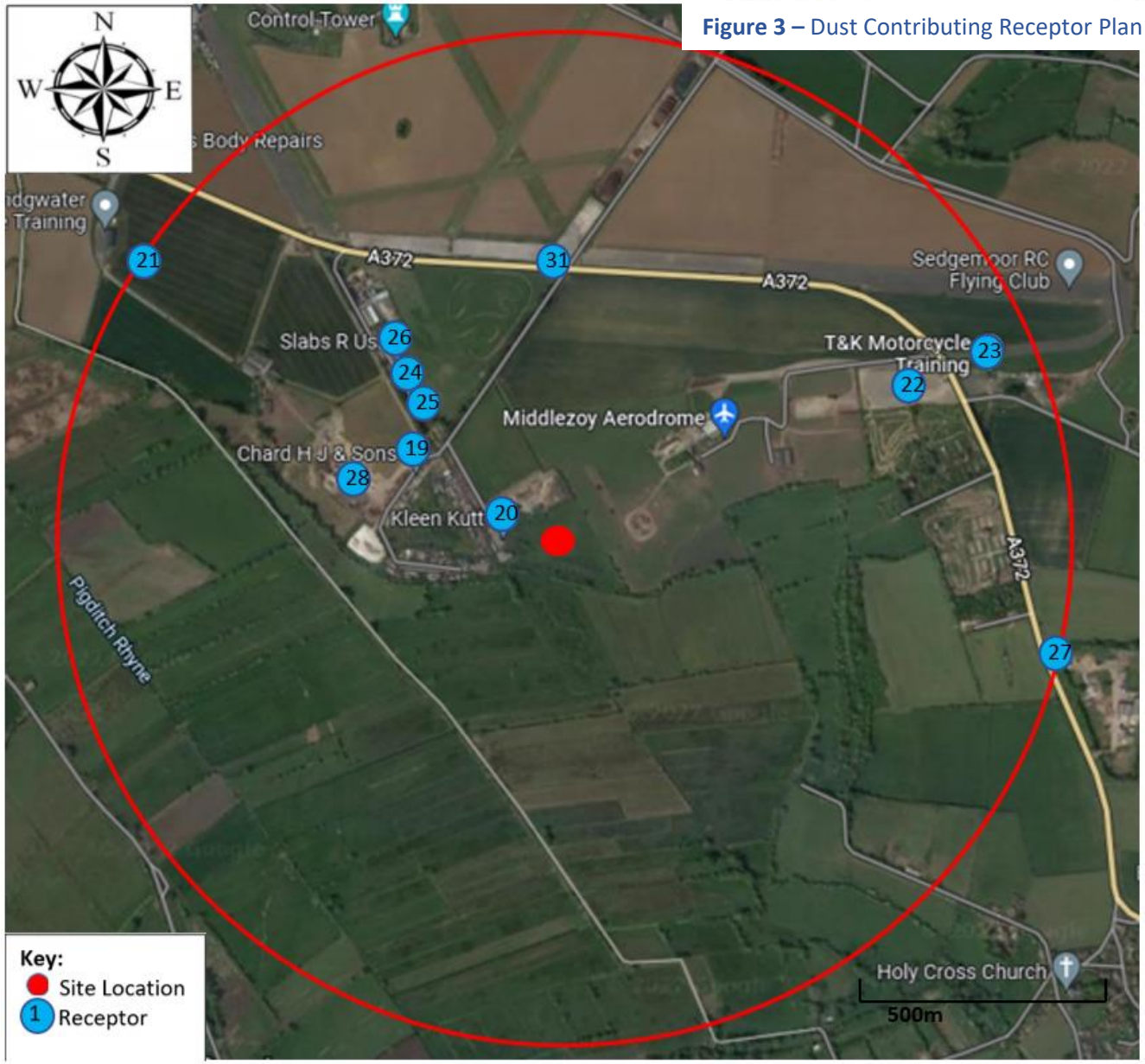


Figure 3 – Dust Contributing Receptor Plan

ID	Receptor
Industrial/Commercial	
19	JWF Engineering
20	Kleen Kutt
21	Bridgwater Motorcycle Training
22	Grandfields Motor Track
23	T&K Motorcycle Training
24	Burnham Coal Supplies
25	Regency
26	Slabs R Us
27	Seven Acres Industrial Estate
28	Towens Westonzoyland Depot
Infrastructure/utilities	
31	A372

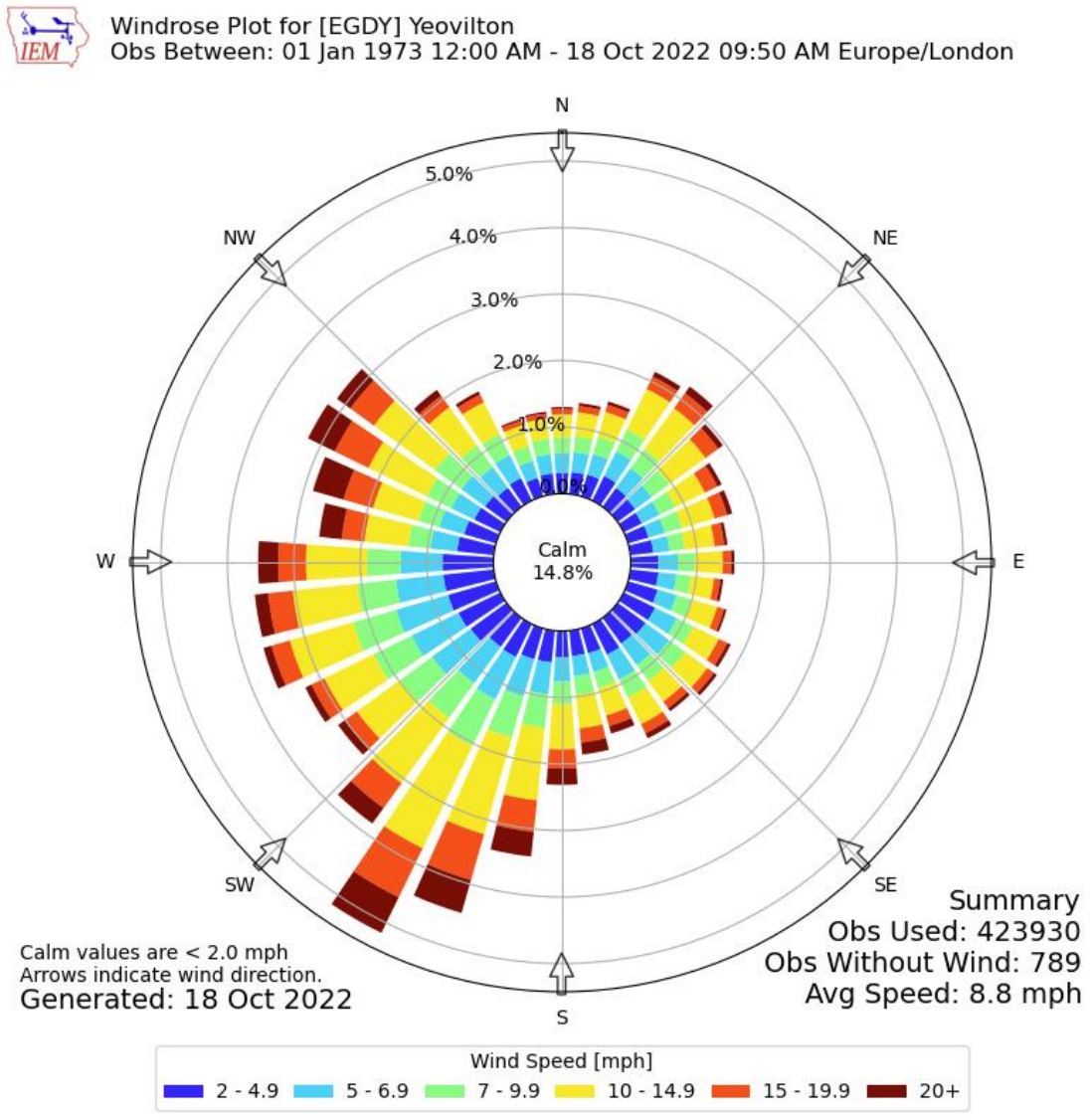
1.4 Environmental Effects

1.4.1 Wind Direction

Winds with speeds exceeding >5m/s from the direction of the dust source that occur more than 20% of the time are considered to increase the likelihood of dust being raised and blown from the site. The data for Royal Naval Air Station Yeovilton, South Somerset does not define the percentage of that period which is dry. This assessment will therefore assume a worst-case scenario of all winds >5m/s occurring on dry days.

Wind rose data from Yeovilton weather station show that the prevailing wind is on average only 3.9 m/s (8.8 mph) (a gentle breeze on the Beaufort Scale) to the North East east where winds of >5m/s occur ~3% of the time, which is considered infrequent (Figure 4). Winds from the west and north west blowing to the east/south east should also be noted as they are above 5 m/s but they occur less than 2% of the time. Winds of >5m/s from all other directions are defined as 'infrequent' occurring ~1% of the time.

Figure 4 - Wind rose showing the average wind data at Yeovilton Meteorological station (source: Iowa Environmental Mesonet)



1.4.2 Yeovilton Meteorological weather station is located 21.2km from the Towens Kleen Kutt yard and has a similar topography and similar weather conditions to those at the depot. Therefore, this wind rose data is comparable to that of the site. This station was chosen over Weston-Super-Mare weather station, as it is located inland which is similar to the location of the Towens site as opposed to Weston-Super-Mare which is by the coast so will have different weather conditions.

1.4.3 Rainfall

0.2 mm rainfall a day is considered sufficient to effectively suppress wind-blown emissions, however analysing days with greater than 1 mm rainfall is considered to be a more robust approach. As shown in Table 2, the average number of days per month with greater than 1mm rainfall is quite consistent throughout the year. Using this climatic rainfall data, it is likely that for 34.48% of the year dust will be suppressed due to meteorological conditions.

Table 2 – Climatic rainfall Data from 1991 - 2020 at Yeovilton Meteorological station (source: metoffice.gov.uk)

Month	Rainfall (mm)	Days of rainfall ≥1 mm (days)	Proportion of the month with days of ≥1mm rainfall (%)
January	70.03	12.23	39.45
February	50.87	10.37	37.04
March	48.52	9.97	32.16
April	51.49	9.97	33.23
May	47.15	9.17	29.58
June	57.12	8.70	29.00
July	50.22	8.33	26.87
August	60.72	9.77	31.52
September	53.25	9.07	30.23
October	80.89	12.03	38.81
November	81.87	13.21	44.03
December	77.40	12.97	41.84
Annual	729.53	125.79	34.48

2.0 Operations at Towens Kleen Kutt Yard

2.1 Waste Deliveries to Towens Kleen Kutt Yard

2.1.1 Waste will arrive on site in HGVs entering from the west off the A372. They will travel along a

haul road onto the site (of which Towens own half of) and will exit along the same road back onto the A372.

2.1.2 Waste will be covered when transported in vehicles into and out of the site. When tipping, material will be dampened down when necessary.

2.1.3 Every waste movement coming onto site will be recorded by a Waste Transfer Note (WTN), no hazardous waste consignment notes (HWCN) will be sued as no hazardous waste is permitted on site, with the following information:

- A description of the waste and European Waste Code (EWC) code
- The Quantity of the waste
- The Origin of the waste
- Delivery data and the identity of the waste producer

2.1.4 The Operator shall keep a copy of the WTN on site. All waste received at the site shall be visually inspected to confirm that the description and composition conform to the written description and the EWC on the relevant WTN and to the description as detailed in the permit, and any other accompanying documentation.

2.1.5 If a vehicle load, upon inspection, is non-compliant with the Environmental Permit, waste will be refused entry and the event shall be recorded into the site diary. The site diary shall be kept on site.

2.1.6 Waste types and EWC Codes accepted on site are outlined in the Environmental Management System (EMS) (Appendix A).

2.1.7 The waste acceptance procedures, implemented through the Towens of Weston EMS, will be applied to ensure that only permitted waste is accepted. Wastes that include dusts, powders or loose fibres are not accepted at the site and waste that is stored during prolonged dry periods will be damped down.

2.1.8 Waste will be tipped in the relevant stockpiles, processed and then placed into their appropriate outgoing stockpile to await collection and removal from site.

2.1.9 Material will not be accepted onto site under the following circumstances:

- If there is insufficient storage capacity within the waste transfer building
- If there are extreme weather conditions, such as site flooding
- Abnormal site conditions preventing normal working

2.2 Overview of Waste Processing, Dust and Other Emission Controls

The Site Layout (Appendix B)

2.2.1 The site is split into different areas for safety reasons with clear safe working areas around all working plant. See Appendix B for a detailed site layout plan, where the red line boundary indicates the permit boundary.

2.2.2 The site comprises an open yard utilised for storage of materials.

2.2.3 The site is enclosed within a fence on the southern and eastern boundary, along with planting and vegetation at the borders which acts as a physical barrier to prevent dust and particulates escaping from site.

2.2.4 The site has designated paths for the entrance/exit of HGVs to move around the site to avoid the vehicles from disrupting and coming into contact with any dust in the processing area or stockpiles.

2.2.5 The only access to the site from public roads is via the A372. Loads are inspected upon arrival before being accepted on site. Once inspected, wastes are tipped into the appropriate stockpile. Vehicles then exit the site on the same haul road leading back onto the A372.

2.2.6 Wastes will be stored in open stockpiles limited to 5m high to prevent wind-whipping. They will be stored first at the northern side of the site and filled southwards to reduce impacts on the southern rhyne. Any non-conforming waste will be stored in the quarantine area and removed from site within 7 days.

2.2.7 The whole site is surfaced in permeable hardstanding. Run off water will drain naturally into ground as the site only accepts non-hazardous and inert wastes in the form of as-dug naturally occurring materials to be used on CL:AIRE projects. There is a low risk of contaminated surface water run off. The rhyne to the south of the site will be further protected by a 10m buffer zone of planting.

2.2.8 The site will operate an excavator, crusher (on a campaign rare occasion), screener and telehandler. The wastes are mainly being stored on site and processing will occur infrequently. Any wastes that are being processed on site are not dusty and any processing is conducted in suitable weather conditions. Therefore, activities should not produce fugitive dust emissions.

2.2.9 The eastern boundary has a 5m wide planting area protected by a fence to provide ecological enhancement on site.

3.0 Dust and Particulate (PM_{10}) Management

3.1 Responsibility for Implementation of this plan

3.1.1 The Technically Competent Manager (TCM) or the Nominated Competent Person/s (NCP) is responsible for the DMP.

3.1.2 The TCM/NCP will undertake daily visual checks on all plant and operational activities.

3.1.3 A designated member of staff will undertake regular inspections of the site and its boundary to check for any evidence of dust deposition. These checks and observations would be recorded in the site diary. The frequency of checks would be increased when activities with a high potential to produce dust are being carried out and/or during prolonged dry or windy conditions.

3.1.4 Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the plant and airborne emissions. Training will be given to all operatives on all aspects and impacts relating to the operation. All HSEQ (Health Safety Environment & Quality) training will be

delivered in accordance with site RAMS (Risk Assessment & Method Statements) documentation. Additional training requirements will be reviewed annually, or if there are any procedural changes or changes in plant.

3.1.5 The TCM/NCP will review the DMP during annual audits to make sure it complies with the Environment Agency (EA) guidance. The DMP will also be reviewed if any dust complaint is received.

3.2 Environmental Monitoring for Vulnerable Receptors

3.2.1 Environmental monitoring may be required where there are vulnerable receptors. No visible dust is permitted to leave the site boundary therefore it should not cause nuisance to any of the receptors identified.

3.2.2 Mitigation measures are listed in Section 3.3 to minimise any adverse impact.

3.3 Sources and Control of Fugitive Dust/Particulate Emissions

Emission Limits

3.3.1 The following emissions limits shall apply:

Table 3 - Emission Limits and Monitoring Requirements

Emissions	Sources	Limit	Monitoring
Dust	Dust raising from public, haul roads and operational surfaces through vehicle movements	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust raising from the mechanical loading/unloading of wastes	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust and particulate raising from the treatment operation such as screening	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust and particulate raising from stockpiles	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.

3.3.2 The site Environmental Risk Assessment includes a source – pathway – receptor model for the

control of site environmental impacts. This can be reviewed in Appendix C.

3.3.3 The operator shall record observations and weather conditions on the dust monitoring sheet. Any abnormal dust observations will be recorded in the site diary. The records must include the time, location and result of the visual assessment. The record must be kept by the operator for at least two years and be made available to the regulator for examination, on request.

3.3.4 Any historical records kept off site should be made available to the regulator for inspection within one working week of a request.

Control Techniques

3.3.5 BPM (Best Practicable Means) will be met in terms of emission limits outlined in Table 3. Towens of Weston will also comply with the 'Non-hazardous and inert waste: appropriate measures for permitted facilities' guidance given by the Environment Agency, found on the gov.uk website. The control techniques that shall be used are given below and further defined in the operators Environmental Management System document (Appendix A). Other techniques may be used providing Towens of Weston Ltd can demonstrate that an equivalent level of control will be achieved. Prior written approval must be obtained from the regulator prior to using any other technique.

Stockpiles and Ground Storage

3.3.6 Airborne emissions from stockpiles shall be controlled. Methods such as limiting the location of stockpiles, covering or damping down will be used. Consideration shall be given to prevailing winds and weather conditions, such as a change in wind speed or wind direction and dust suppression used or operations modified accordingly, for example suspension of operations at times of high winds and dry weather.

3.3.7 Transferring of all materials to and from stockpiles shall be carried out in such a manner as to minimise airborne emissions this may include damping down when required, minimising drop heights from all plant and machinery and covering tippers. Operational areas will be regularly swept and washed or dampened as part of the housekeeping regime detailed in Section 3.6.

3.3.8 All non-hazardous waste will be stored in the designated stockpile and kept below 5m high to prevent wind whipping. Any hazardous waste will not be accepted on site and rejected following waste acceptance procedures. Waste types will not be mixed or come into contact with the other to prevent any cross contamination. Loads will be inspected upon arrival and any non-conforming material will be stored in quarantine. Wastes are screened by the perimeter fence to aid the retention and reduce the likelihood of dust being blown off site from stored materials.

3.3.9 Typically dusty wastes are not permitted on site but if stockpiles become dusty in dry weather conditions will be covered with sheeting or damped down during high winds or drought or when dust emissions can be seen during visual monitoring. Covering of waste and stockpiles will be recorded in the site diary.

3.3.10 Stockpiles will not be higher than 5m. These stockpile height limits will help to prevent wind whipping.

Process Operations

3.3.11 The mobile water bowser located on site will supply adequate water to implement dust abatement measures such as damping down. In the event of drought and if water restrictions are imposed an assessment will be made regarding water availability and operations suspended until enough water is available. The mobile water bowser is always on site and an extra one can be hired in when necessary and will always be available when needed.

3.3.12 Pole-mounted water spray dust suppression will be used on crushing and screening plants. All operators will be trained and implement the necessary dust mitigation activities. If a load is overly dusty then operations will be ceased. If sub-contractors are required on site for large volumes of processing, the TCM/designated responsible person will brief the specialist on this DMP to ensure dust impacts are mitigated. Activities (permitted by local authority Part B installation Permits) are to be monitored by local environmental health officers.

3.3.13 When depositing material into stockpiles or for processing, drop heights shall be minimised to reduce dust production. Any loads where dust is visible upon inspection on arrival or during dry periods where some dust may be present on the site surface will be sprayed prior to tipping. It is unlikely that these loads will be dusty due to their nature.

3.3.14 Processing operations will be ceased in high winds (<25 mph).

3.3.15 There is also a 360 excavator, telehandler and grab on site, these are mobile, and their location will vary during operating hours depending on where they are needed on site.

3.3.16 Mobile plant machines have functioning air conditioning systems.

3.3.17 Respiratory Protective Equipment (RPE) is made available in the form P3 cartridge half mask respirators for site staff during processing activities.

Loading and Unloading

3.3.18 When loading vehicles, materials will be dampened down if any dust is generated and the material will not be placed higher than the vehicle sides. Any spillage of material during loading will be removed as part of routine housekeeping measures. Vehicles shall be sheeted when entering or leaving. Any vehicles which have materials covering external surfaces will be cleaned with a high-pressure hose to prevent dust generation before leaving site.

Roadways and Transportation

3.3.19 The haul road to the site is wetted down daily (unless the weather conditions are raining). Road sweepers will be used during dry periods on the site haul road and entrance/access road as a dust suppression solution, they will be hired in. Manual sweeping will also be carried out when dust from haul roads appears airborne during daily inspections. This sweeping will keep the site roadways clear of dust, mud and debris. If there are any build-up of deposits on site, then manual scraping will be carried out to remove them prior to sweeping. Any sweeping will be recorded in the site diary.

3.3.20 The site has been designed so no haulage vehicles will be in contact with mud from operational surfaces, vehicles will avoid all areas where wastes are stockpiled by following a designated haul road. This will keep the site haul road clear of any dust, mud or debris and manual

sweeping will be used to maintain clearance on the site haul road. The nature of the waste on site is also not dusty/muddy so haul roads are unlikely to become dusty.

3.3.21 The site has a wheel wash facility consisting of a high-pressure hose and brush which will be used manually when vehicles leave the site if any visible mud/dust/debris is present during inspection. The facility is well situated at the access so it can be used on the way in or out of the site. Vehicles will then be re-inspected to ensure the wheel wash has been effective and that there is no visible dust/debris/mud present. If there is any dirt/debris still visible then the wheels will be hosed again until no dirt can be seen upon inspection by appropriately trained site staff. If the hose is not capable of clearing the dirt/debris then the vehicle will be stopped from leaving site and a more powerful jet wash hired in to clean the vehicle.

3.3.22 The same procedures will be in place during autumn and winter as the haul road will be kept clean and no vehicle can leave the site before it has been inspected for dust/mud/debris (see 3.3.18). Therefore, mud tracking and staining off site will not occur. If any mud/debris is deposited off site, then a road sweeper would be hired in, as necessary.

3.3.23 The site access road is concrete which will provide easy access for HGVs to prevent a backlog of vehicles building up and blocking the A372. The site surface of hardstanding will also reduce unsettling of dust.

3.3.24 There will be a speed limit of 5mph on site to prevent dust generation from surfaces.

3.3.25 The company has an informal 'Anti-Idling Policy' to ensure that any stationary vehicles switch off their engines which will be enforced on site.

Water based dust suppression system

3.3.26 Dust suppression in the form of spray bars will be used on the crushing and screening plant. These will always be used during processing. No other processing will be undertaken on site.

3.3.27 The mobile water bowser will be used with a pole mounted spray bar to dampen down stored materials and stockpiles to reduce dust production. It can cover the entire external site as it is mobile. Wastes accepted on site do not have a dusty nature and minimal processing is undertaken on site, so a fixed suppression system is not required.

3.3.28 The mobile water bowser will be used during operating hours by trained site staff to ensure that materials stockpiled are sufficiently dampened down so that they do not produce any dust during non-operating hours. A spray system attached to the bowser has been chosen over water cannons or sprinklers which use more water and are often less effective as the water droplets are bigger so are less likely to suppress the smaller dust particles. This makes the system water efficient.

3.3.29 A sufficient supply of water for the dust suppression system will be provided through the neighbouring Towens site which benefits from a borehole extraction so this will be used for dust suppression and provides a contingency plan for water supply. If there is still not sufficient water for dust suppression, then any tipping will be ceased on site until the water bowser is full and operational again.

3.3.30 In the event of a drought or if the borehole fails and there is not water stored in the bowser, if any operations cause or are likely to cause excessive dust emissions beyond the site boundary, or if abnormal dust emissions are observed, site operations may be temporarily suspended to avoid further dust emissions. This will be decided by the Site Manager. If restrictions are enforced to restrict the amount of water available for use on site, this may lead to the suspension of operations that require a high-water usage.

Table 5 - Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Dust and particulate raising from operational surfaces through vehicle movements;	Falling off lorries and atmospheric dispersion	Residential properties, businesses, SSSIs, habitats and rhynes	Visual soiling, also consequent resuspension as PM10	Outlined in 3.3.19-3.3.25
Dust and particulate raising from the mechanical loading/ unloading of wastes	Atmospheric dispersion	Residential properties, businesses, SSSIs, habitats and rhynes	Visual soiling and airborne particulates	Outlined in 3.3.7, 3.3.13 and 3.3.18
Dust and particulate raising from treatment/processing operations such as screening and crushing	Atmospheric dispersion	Residential properties, businesses, SSSIs, habitats and rhynes	Visual soiling and airborne particulates	Outlined in 3.3.11-3.3.18, and 3.3.26 – 3.3.30
Dust and particulate raising from stockpiles	Escape from stockpiles and subsequent atmospheric dispersion	Residential properties, businesses, SSSIs, habitats and rhynes	Airborne particulates	Outlined in 3.3.6-3.3.10
Mud	Mud dropping off vehicles and wheels when dry	A372	Visual soiling	Outlined in 3.3.19-3.3.25
Debris	Falling off lorries and escape from stockpiles	A372	Visual soiling, also consequent resuspension as airborne particulates	Outlined in 3.3.6-3.3.10 and 3.3.19-3.3.25

3.4 Enclosure of Waste Processing & Storage Areas

3.4.1 The site is enclosed within a perimeter fence along the southern and eastern boundary which acts as a windbreak against any prevailing winds that may disrupt dust and cause it to escape off

site.

3.4.2 Around the outer perimeter of the fence, there is some established vegetation and new planting zones which will contribute to keeping any fugitive dust on site.

3.4.3 A detailed site layout plan is in Appendix B. All materials are stored in stockpiles ready for processing or removal from site. Once they have been processed, they are transferred into their appropriate segregated outgoing stockpiles to await collection. The stockpiles are limited to 3m high to prevent wind whipping. Enclosure of stockpiles is not necessary as the wastes are not dusty in nature and minimal processing will be conducted on site.

3.4.4 Micro-netting and screening will not be installed due to the visual impacts these will have on the surrounding receptors and because they will not provide further mitigation against dust in comparison with the dust mitigation measures on site.

3.4.5 Drop heights will be minimised.

3.5 Visual Dust Monitoring

3.5.1 The Operator shall monitor emissions and make visual inspections of the site, Table 6 sets out the measures for visual dust.

Table 6 - Mitigation measures for visual dust emissions

Appropriate Measures for Reducing Emissions of Dust – Visual Monitoring	
Daily visual monitoring of aerial emissions at site boundaries shall be carried out by staff supervising all waste handling operations.	TCM /NCP to monitor operations throughout day (at least twice daily) at and outside the site boundary that is downwind of operations in the north eastern corner of the site and north of the building.
	The inspection focusses on the following areas: -Monitoring for conditions likely to increase the risk of dust release - Visual assessment of any dust release - Monitoring of any visible surface soiling
	Observations and weather conditions including wind direction will be recorded on the dust monitoring sheet.
	Complaints to be recorded in the site diary and complaint form.

3.5.2 Visual inspections should be carried out during daily operational hours, especially when carrying out activities that are dusty (i.e. point 1.1.3). The visual monitoring locations are shown on the Site Layout Plan in Appendix B. Visual dust inspections will be completed at least twice daily:

- On arrival at the site and before sorting and / or agitation of the waste occurs

- After the designated lunch break, before afternoon sorting and / or agitation of the waste occurs

3.5.3 Additional routine monitoring at and outside the site boundary downwind of operations will be carried out when processing. If necessary, flags shall be placed on site to help observe the wind direction and prevailing wind.

3.5.4 The Operator shall record any abnormal observations in the site diary and report to the on-site TCM/NCP at the time of recognition who will review the visual monitoring. The records must include the time, location, and result of the visual assessment. The records must be kept by the Operator for at least two years and be made available to the regulator for examination, on request. A visual monitoring check sheet provided to staff and explained during dust training via a toolbox talk is provided in Appendix E.

3.5.5 In an event that mitigation measures are not effective, and dust escapes out of the site boundaries, all dusty activities should be suspended until investigation takes place to identify cause(s) and appropriate mitigation measures.

3.5.6 The TCM/NCP shall suspend the operations if the weather is likely to trigger significant dust emissions that mitigation measures cannot prevent, for example high winds or drought.

3.5.7 Any historical records kept off-site should be made available to the regulator for inspection within one working week of a request.

3.5.8 All site operations and processing will only be carried out during operational hours in the day. Therefore, no dust is expected to be produced out of hours. The design of the site and covering of stored material, will mitigate any dust emissions from stored materials.

3.6 Site Housekeeping Routine

3.6.1 The Operator will adhere to a strict housekeeping routine which will contribute to reducing dust production from the site. The details of the housekeeping routine can be seen in Table 7 below.

Table 7 – General Site Housekeeping Regime

Issue	Frequency	Action
General site and road cleanliness (presence of mud/debris)	Daily	Sweep road and impermeable surfacing if mud/ debris present. Dampen down haul road and access. Record Inspections /actions in diary.
Inspect tanks, containers, drums, drip trays and secondary containment for leaks	Daily	Any leaks to be stopped and cleaned up, containers to be replaced/ repaired immediately. Record inspections/ defects, damage and repairs in diary.
Visual inspection of boundary fences for breaks/damage	Daily	Any defects shall be made secure by temporary repair before the start of operations/end of working day and shall be repaired within 24 hours of the damage being detected. Record Inspections/ defects, damage and repairs in site diary.
Check mobile water bowser	Daily	Any defects shall be repaired before the start of operations/end of the day within 24 hours of the

Issue	Frequency	Action
		damage being detected. Record Inspections/ defects, damage and repairs in Site Diary.
Visual monitoring for aerial emissions-monitor dust at random times throughout the day	Daily	Check outside site boundaries and at visual monitoring locations for visual dust emissions at least twice daily. Record inspections / results / weather conditions / cause and actions in Site Diary.
General site cleanliness (presence of litter and dust deposits inside/outside site boundary)	Daily	Site walkover and inspection. Collection from inside and outside site (including boundary hedging) twice daily. Investigate the cause. Record Inspections/defects, damage and repairs in Site Diary.
Odour	Daily	Monitoring, through sniff tests, and record keeping.
Site Signage	Weekly	Check that signs are in good condition and arrange to repair/replace if damaged. Record Inspections /defects, damage and repairs in site diary.
Pest infestation check containers and stockpiles to monitor for vermin, scavengers and flies	Daily	Check for the presence of vermin, scavengers and/or flies. Record daily inspections and result in Site Diary.
Ensure waste is stored in appropriate segregated containers and areas in accordance with Good Practice Guidance	Daily	Check quantities are in accordance with EMS and Permit. Segregate as and when necessary. Record actions in Site Diary.
Check condition of fixed storage facilities – drainage, containers etc	Weekly	Remove silt upon build up in the settlement channel. Check and record levels within containers. Take action to prevent spillage/remove via vacuum tanker, etc. Record actions in site diary.
Inspection of plant	Weekly	Maintenance/repair/regular servicing. Record actions in diary and plant maintenance log sheets.
Building / roofing /surfacing	Monthly	Any defects affecting the integrity shall be repaired within one week.

3.7 Contingency Planning

3.7.1 Mitigation measures will be constantly in place on site, however contingency measures, like ceasing operations, will only be used when there is potential for dust to be carried off site. After subsequent assessments, if conditions return to being low risk, then contingency measures can be removed. Contingency measures will be recorded in the site diary.

3.7.2 In the event of power failure or mechanical breakdown on site, operations will be ceased. If storage containers are full then the site will not accept any more material until power returns, all drivers will be notified to not deliver to site. The event will be recorded in the site diary.

3.7.3 In the event that the dust suppression system fails then operations will be ceased, and materials stored outside will be damped down to prevent dust escape. The site will not accept any deliveries or tip material on site until the system is repaired successfully.

3.7.4 All plant and machinery will be maintained and calibrated in accordance with the manufacturer guidelines. If any plant fails or malfunctions then the manufacturer guidance will be consulted, and the manufacturer will be contacted if necessary.

3.7.5 Any identified damage to the building, gate and the perimeter fence that could compromise the site security will be recorded and reported to the landowner. A temporary repair will be made as necessary before the end of the working day. Permanent repair or replacement will be undertaken as soon as practicable.

3.7.6 In the event of a fire or flood, procedures detailed in the Environmental Management System (Appendix A) would be followed. Operations will be ceased. The site will not accept any materials and deliveries will be sent back to their source or an alternative site if an acceptable site is found. All drivers of expected loads for that day will be notified not to deliver wastes and deliveries will be rescheduled.

3.7.7 In the event of an accident, all operations will be ceased, and the appropriate emergency services will be contacted if necessary. The event will be recorded in the site diary and an investigation into the cause and future mitigation will be completed.

3.7.8 In the absence of key staff members, the next Nominated Competent Person (NCP) will manage the site. If all NCPs are absent then the site will be forced to close, all drivers for any expected waste deliveries will be contacted and deliveries rescheduled.

4.0 PM_{10} Monitoring

The UK Air Quality Standards seek to control the health implications of respirable PM_{10}. However, the majority of particles released from construction and related activities will be greater than this in size.
The Towens of Weston Ltd Westonzoyland depot may have the potential to elevate dust levels in the surrounding area, however, due to the size and location of the site and with mitigation measures, emissions should not affect PM_{10} concentrations. The PM_{10} impacts are classed as negligible. Further to this, nuisance dust deposition will be prevented by visual monitoring/mitigation measures identified in this plan.

The Yeovil AQMA

The Yeovil AQMA was originally declared for NO_2, the designated AQMA incorporates an area comprising the whole of the built-up area of Yeovil, including the airfield, areas identified in the emerging local plan as potentially subject to development and the main road network in and around the town. It was declared on the 01/09/2002 by South Somerset District Council. The latest Air Quality Annual Status Report (2021) from South Somerset District Council states that all monitoring sites showed a decrease in NO_2 concentrations in 2020 in comparison to 2019 data and none were above the objective of 40 $\mu g/m^3$. There has been a 21.2$\mu g/m^3$ decrease for annual NO_2 concentrations in

2020 compared to 2002 at declaration[1].

Table 8 – Air Quality Objectives and Standards

Pollutant	Annual Mean Objective of South Somerset District Council	The Air Quality Standards Regulations 2010 Annual Mean	Level of Exceedance	
			At Declaration (2002)	Current Year (2020)
Nitrogen dioxide	40µg/m^3	40µg/m^3	54.6µg/m^3	33.4µg/m^3

The Towens of Weston Ltd Westonzoyland depot is situated approximately 22.3 km north west of the AQMA and PM_{10} was not considered sensitive, external PM_{10} monitoring will not be carried out on site.
The health impacts associated with long term background PM_{10} exposure is covered under Section 5.2 of the IAQM Guidance on the Assessment of Mineral Dust Impacts for Planning. It states, 'If the long term background PM_{10} concentration is less than 17µg/m^3 there is little risk that the Process Contribution (PC) would lead to an exceedance of the annual-mean objective and such a finding can be put forward qualitatively, without the need for further consideration.' The UK is required to comply with the annual-mean objective for PM_{10}. Defra have their own background monitoring for the UK for PM_{10}. Areas of the country are divided into sections. The Defra Background Maps show that this locations' PM_{10} background concentration is ≤13 µg/m^3 for 2021. This is below the 17 µg/m^3 stated in the guidance. The NO_2 background concentration is ≤10 µg/m^3 for 2021, this is below the 40 µg/m^3 statutory limit value. Therefore, activities at this site would unlikely give rise to an exceedance that would require monitoring.

4.1 Monitoring Location

N/A

4.2 Operation of Dust Monitoring Equipment

N/A

4.3 QA/QC and Record Keeping

N/A

4.4 Equipment and Data Management

N/A

4.5 Reporting of Data

N/A

4.6 Additional Detailed Reporting

N/A

5 Reporting and Complaints Response

5.1 Engagement with the Community

5.1.1 A complaint form will be available for those who are affected by the operations. If necessary, a meeting shall be carried out with candidates if dust is causing a serious impact. A complaint form is

[1] 2020 Air Quality Annual Status Report (ASR) – South Somerset District Council

included in Appendix E.

5.1.2 The site will have a publicly visible sign at the entrance with contact details for the Operator so neighbouring businesses or local residents can contact Towens if they have any complaints/issues at any time.

5.1.3 Towens already own and run the site so have an existing presence within the community and have built good existing relationships with neighbours.

5.1.4 This has been achieved through having an open-door approach so that any neighbours can visit the site and talk to site staff, any issues can be discussed and Towens will change procedures if appropriate to address the issue. This approach will be continued on the proposed site.

5.1.5 If required, Towens of Weston will hold a meeting with neighbouring businesses and local residents to discuss the proposed changes on site and hear any concerns. Towens will be able to reassure the community that the site will not cause them any adverse issues as they will be following strict management systems (including measures set out in this document) to prevent any negative impacts.

5.1.6 In the event of an incident on site, all businesses and residents within 250m will be informed by a member of Towens staff by door-to-door visits.

5.2 Reporting of Complaints

5.2.1 In the event of a complaint, the TCM/NCP/site manager will immediately investigate the source of dust and whether it is originating from the site. Appropriate measures should be made, and action will be taken to prevent any further emissions leaving the site. Such actions may include suspending operations at site and applying water to the dust source.

5.2.2 The TCM should respond to a complaint within 2 working days.

5.2.3 A Corrective Action Report will be completed describing the incident and should include details as specified above. A record shall be made in the site diary.

5.2.4 The TCM or the designated responsible person will ensure that the Environment Agency (EA) is informed of these within 24 hours, ideally as soon as possible and as appropriate.

5.2.5 TCM will escalate investigations if successive complaints are received, operations will be suspended if 2 or more complaints are received within the same week. If complaints are found to be unsubstantiated, operations will continue at the discretion of the TCM.

5.3 Management Responsibilities

5.3.1 The TCM/NCP/designated responsible person/site manager shall take responsibility for any complaints. In the event of a complaint, the Site Manager should carry out procedures set out in Section 5.2.

5.3.2 The TCM or NCP is responsible for the implementation of this DMP.

5.3.3 The TCM/NCP will review this DMP during annual audits to make sure it complies with the Environment Agency (EA) guidance. The DMP will also be reviewed if any odour complaint is received.

5.3.4 Any historical records kept off site should be made available to the regulator for inspection within one working week of a request.

5.3.5 Any person having duties that are or may be affected by the matters set out in this OMP shall have convenient access to a copy of this document and the permit. These documents will be available electronically via the Towens of Weston Management System and issued as hard copy.

6.0 Summary

6.1 Treatment carried out at the Towens Kleen Kutt yard may produce dust, but it will be limited by the nature of the operations, waste types accepted and mitigation measures. In any event, dust can be controlled to prevent its escape and to minimise airborne dispersal.

6.2 The main causes of dust will be related to processing activities, transportation, and stockpiling.

6.3 Dust from treatment activities will be controlled by effective site management with appropriate mitigation measures, this will include:

- Daily review of prevailing weather conditions and site operations
- Dust suppression spray covering outdoor storage area
- Use of spray on crushing plant
- Damping down of stockpiles and site haul roads
- Appropriate location of stockpiles and processing areas to prevent windblown dust escaping
- Storage of hazardous waste inside a covered, weatherproof building
- Regular maintenance of all plant
- Keeping vehicles and roadways clean and dust free
- Careful transfer of material on site
- Postponing operations if significant wind-blown dust is likely to occur

6.4 Daily monitoring of dust levels and an annual review of the DMP will be carried out to prevent any adverse dust impacts from the site.

6.5 The procedures outlined in this DMP apply to all activities carried out at the Towens Kleen Kutt yard for both wastes and non-waste materials stored at the facility.

Environmental Management System (EMS)

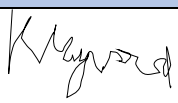
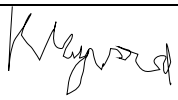
Inert Storage Facility

Towens of Weston Ltd

Towens Kleen Kutt Yard
Land off Springway Lane,
Westonzoyland,
TA7 0JS

Document Title	Environmental Management System
Revision	2.0
Date	16/06/2023
Document Reference	Towens Kleen Kutt EMS 16-6-23
Prepared For	Towens of Weston Ltd
Authored By	MTS Environmental Ltd

Quality Control

Revision No.	Date Revised	Amendments	Authored By	Sign Off	Approved By	Sign Off
1.0	25/01/23	Original Draft for permit application	Kasia Haywood		Luke Bridges	
2.0	16/06/23	Amendments based on duly making information request	Kasia Haywood		Luke Bridges	

Contents

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Appendix G – Flood Risk Assessment and Drainage Strategy

Reference Documents

1. Introduction

1.1 General

1.1.1 This document comprising an Environmental Management System (EMS) has been written for 'The Operator' who will undertake the physical treatment of non-hazardous waste in accordance with a bespoke environmental permit (permit reference: TBC).

1.1.2 This document has been prepared by MTS Environmental Ltd on behalf of the Operator: Towens of Weston Ltd, Plot 2 Warne Road, Weston Super Mare, North Somerset, BS23 3UU. The permit is referenced in Appendix A.

1.1.3 Condition 1.1.1 of the environmental permit requires that the Operator manages and operates the activity:

a) in accordance with a written Management System that identifies and minimises risks of pollution including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention as a result of complaints.
b) and using sufficient competent persons and resources.

1.1.4 Additionally, the Environment Agency (EA) has published Environmental Permitting Guidance to help Operators understand the conditions or rules of the Permit. It describes the standards and measures that must be used to control the most common risks of pollution from the activity. The EA stipulate that an Operator must read, understand and keep a copy of the following guidance notes with the Permit.

- Develop a management system and control and monitor emissions for your environmental permit.[1]

- WRAP Quality Protocol – Aggregates from inert waste (Appendix E)[2] (as the site processes soils, soil substitutes to be used for the production of aggregates)

1.2 Permits

1.2.1 The operator will work in accordance with its management systems and permit conditions where required and instructed. Under all other circumstances the Operator will work under the permits detailed in 1.3.

1.3 Environmental Permits

1.3.1 The environmental permit (permit number: TBC) authorises the Operator to operate, receive and process waste in accordance with the criteria outlined in the permit. The permit is a bespoke

[1] Develop a management system: environmental permits, https://www.gov.uk/guidance/develop-a-management-system-environmental-permits

[2] WRAP Quality Protocol – Aggregates from inert waste (October 2013)

permit for a non-hazardous waste site undertaking physical treatment of soils to produce products for re-use. This site is to be used as a CL:AIRE hub site on a temporary basis to store naturally occurring materials to be used in flood defence schemes managed by the EA. It is intended to be a temporary site whilst the CL:AIRE project is being completed.

1.4 Part B Mobile Plant Permit

1.4.1 The operator will carry out crushing and screening activities using mobile plant on a campaign basis, it is expected to be infrequently. Towens will use their Part B permit to manage crushing and screening, they will work in accordance with it and its own Part B mobile plant permit requirements. The Part B permit will control noise impacts from the plant.

2. Site Location

2.1 General

2.1.1 The site is located at Land off Springway Lane, Westonzoyland, TA7 0JS as shown on the Site Location Plan in Appendix B and Figure 1 below. The approximate national grid reference for the site is ST 36554 33904. The site layout can be found in Figure 2.

Figure 1 – Site Location Plan

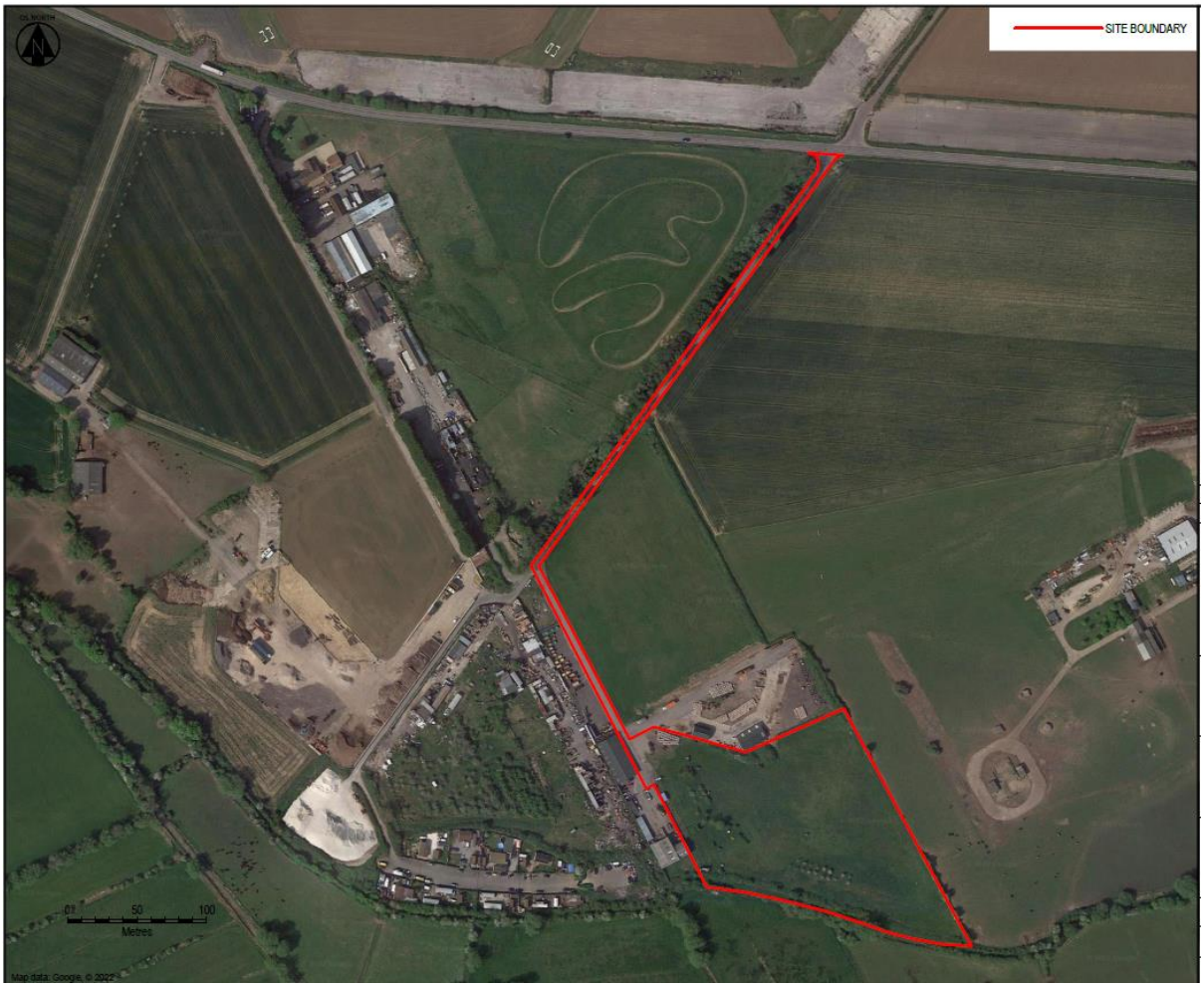
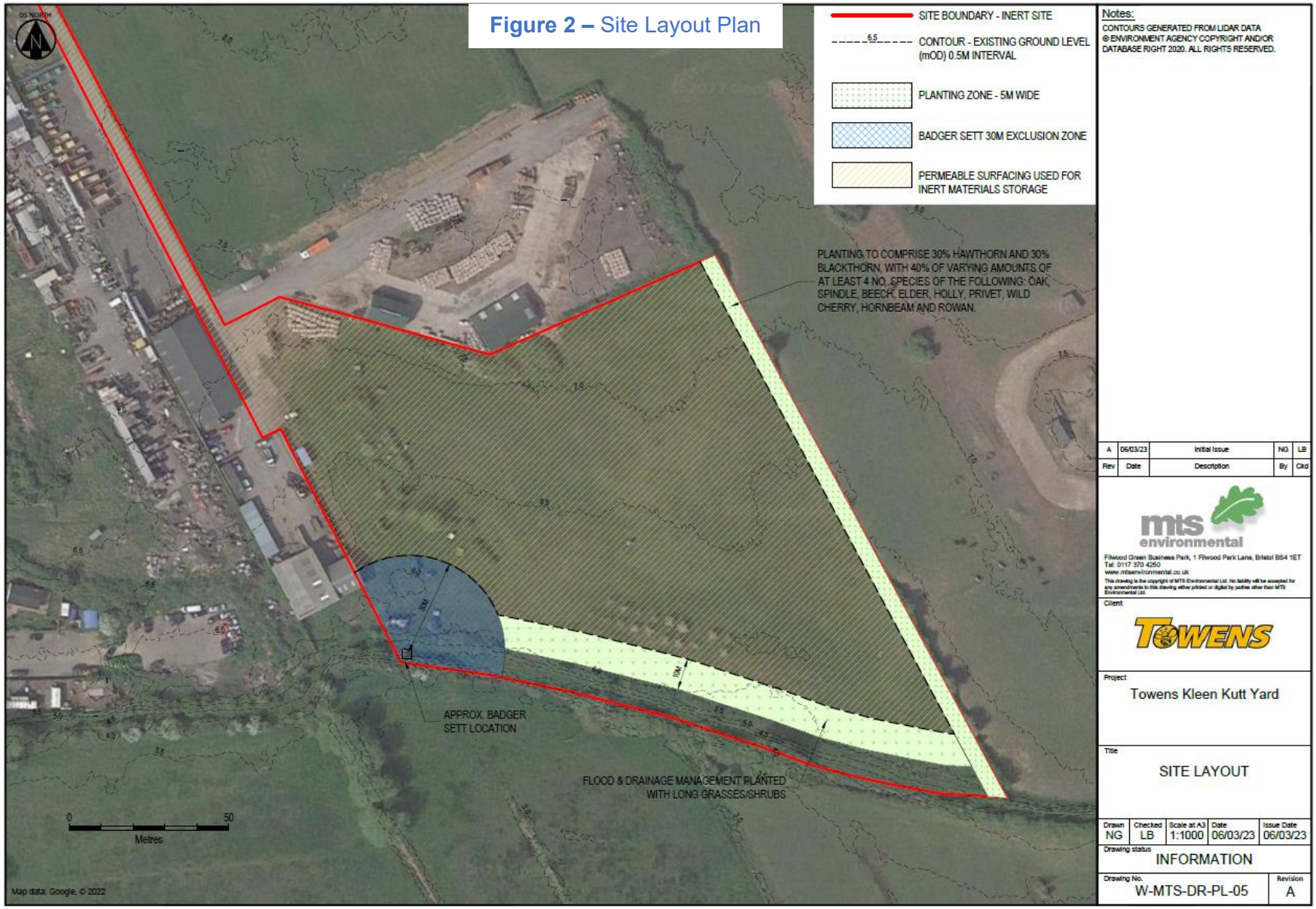


Figure 2 – Site Layout Plan



2.2 Site Infrastructure Plan

2.2.1 The site does not have gas or electricity availability.

2.2.2 The site does not have a mains or borehole water access point. A mobile water bowser will be made available on site when required for damping down or washing down the haul road.

3. Management

3.1 General Management

3.1.1 The Operator shall manage and operate the activities in accordance with this EMS and the Permit, using sufficient competent persons and resources.

3.1.2 Operating Techniques refer to the technical standards cited within EA guidance notes found on the gov.uk website. The site will operate in accordance with the EA appropriate measures for permitted facilities for non-hazardous and inert waste.[3] Annual reviews of the guidance will be undertaken to ensure this EMS is maintained in line with current legislation and guidance.

3.1.3 Records demonstrating compliance with the permit shall be maintained in accordance with Section 6 of this document.

3.1.4 Any person having duties that are or may be affected by the matters set out in this EMS shall have convenient access to a copy of this document and the permit. These documents will be available electronically via the electronic systems and issued as hard copy in the depot**.**

3.2 Contingency Planning

3.2.1 The Operator will ensure that there are contingency plans in place to manage storage and treatment operations in the event of:

- Machinery / Plant breakdown
- Accidents that may result in pollution to the environment
- Delivery problems
- Adverse weather conditions
- Staff shortages

3.2.2 The Operator will ensure that there are:

- Repair/servicing contracts in place for all plant and machinery

[3] Non-hazardous and inert waste: appropriate measures for permitted facilities, Environment Agency, Dec 2022, https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities

- That repair /replacement can be achieved rapidly
- That there is sufficient storage provision in the case of interruptions to the operation
- Available staff to cover absence

3.2.3 In the event of an accident the Operator will follow the procedures in the Accident and Medical Incident Process.

3.2.4 In the event of an emergency, operations will be suspended where necessary to allow action to be taken safely. If necessary, all staff and others on site will be evacuated.

3.2.5 The Site Manager will be contacted in the event of any operational failure. The Operator will decide if operations are to be suspended before corrective action is taken. Any failures will be recorded in the site diary.

3.3 Sufficient Competent Persons

3.3.1 The Operator shall comply with the requirements of an approved competence scheme. The Technically Competent Manager/s (TCM) holds the Level 4 Certificate in Waste and Resource Management WAMITAB qualification. The TCM on site initially will be Matt Hollow and Paul Webber. Copies of the Certificates of Technical Competences (COTC) are included in Appendix C.

3.3.2 The site will be supervised by the TCM for at least 20% every week during the hours of operation. The TCM will make his presence known to the NCP, a Nominated Competent Person/s, when attending the site.

3.3.3 Where it is necessary to utilise NCP's, the Operator will ensure that the NCP's have a direct line and report to the TCM on a daily basis. The TCM will ensure that all NCP's are provided with copies of and be familiar with the following:

- The relevant permit rules
- The EMS
- The planning permission
- Site-specific management plans

3.3.4 During operational hours the site will be supervised by the NCP/s who will be suitably trained and conversant with the requirements of the EMS and the Permit to ensure that:

- All storage and treatment is carried out in accordance with the documents cited in point 3.3.3 above
- They have sufficient authority to give or withdraw approval for treatment to go ahead at a particular time using specific risk assessments (e.g. with reference to weather conditions)

- They can be at site within 24hrs when treatment is occurring and 4 hours at any other time
- The person/s operating the equipment delivering the waste to the site have been briefed on where and how the waste must be stored prior to treatment
- They raise any issues with the TCM to prevent permit breaches
- They are the first responder to any incidents including dust, noise or odour issues if the TCM is unavailable
- They record any incidents or non-conformances to the TCM

3.3.5 An NCP can be a direct employee of the company, a contractor or consultant or the TCM. The Operator will ensure that the roles and responsibilities of the NCP are clearly stated.

3.3.6 The Operator will ensure that the NCP is sufficiently trained to understand the following aspects:

- Waste management legislation and its requirements
- Environmental risk assessment
- Environmental protection measures
- The Operator's management procedures.

3.3.7 The Operator will maintain training records to demonstrate competence. These will be made available for inspection by the regulator.

3.3.8 The Operator will ensure that the management structure is regularly reviewed and kept updated to reflect any changes in management and staffing within the organisation, and/or as regards external contractors and consultants. Roles and responsibilities will be defined, and a written record will be maintained for inspection.

3.4 Staff Training

3.4.1 All new and existing staff will follow a specific training regime based on their role and responsibilities on site. This will improve the operation on site and reduce the likelihood of accidents and incidents which may harm the environment or site staff.

3.4.2 All staff will complete an orientation at the site and will maintain an up-to-date training record.

3.4.3 All staff are required to be aware of the controls outlined in this document and other relevant Management Plans.

3.4.4 All staff will receive appropriate health and safety and fire safety training relevant to their role.

3.4.5 Relevant staff will be trained in waste acceptance, identification of waste types and management of storage areas to ensure that operations comply with the requirements set out in the permit for the site.

3.4.6 Plant operators will have the necessary qualifications and will be trained to regularly check plant and machinery and identify any defects to prevent incidents that could have a negative impact on the environment or safety.

3.4.7 Contractors working on the site on a temporary basis will receive general site training.

3.5 Avoidance, Recovery and Disposal of Wastes Produced by the Activities

3.5.1 The operator shall take appropriate measures to ensure that:

(a) The waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) Any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) Where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

3.5.2 The Operator will ensure that each waste stream arising from the regulated facility will be characterised and quantified.

3.5.3 The Operator will use government guidance to decide how each waste stream is to be recovered or disposed of and be capable of justifying decisions that deviate from best practice.

3.5.4 Records will be maintained in order to explain why any waste may be subject to disposal. These will explain:

- Why recovery is technically and economically impossible; and
- Describe the measures planned to avoid or reduce any impact on the environment.

3.5.5 The Operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

4. Operations

4.1 Permitted Activities

4.1.1 The permit boundary is outlined in red on the Site Location Plan in Appendix B. Any references to ‘the site’ made in this or other site documents refer to this area and associated infrastructure.

4.1.2 The activities on site are 1.16.12 Physical treatment of non-hazardous waste.

4.1.3 The site allows inert and non-hazardous soils and aggregates treatment and recovery (mainly in the form of screening). Activities will include the storage, treatment and recovery of wastes. The material accepted consists of as-dug naturally occurring non-contaminated soils intended for re-use

within CL:AIRE projects for developing flood defence schemes. The site operates as a CL:AIRE Hub site. The waste will be removed off site for re-use.

4.1.4 The operating hours of the site are as follows. Outside of these hours, onsite maintenance work, emergency deliveries and general office use will be the only activities on site, no waste processing operations shall occur.

07:00 to 17:00 Monday to Friday

07:00 to 13:00 Saturday

Closed on Sundays and Bank/Public Holidays

4.1.5 The annual throughput tonnage will not exceed 75,000 tonnes.

4.1.6 The Operator shall not undertake any waste management treatment activity unless it specifically complies with Table 1.

Table 1 - Waste Operating Techniques

Waste Activities	Limits of Activities
R13: Storage of wastes pending the operations numbered R3 and R5. **R3:** Recycling/reclamation of organic substances which are not used as solvents. **R5:** Recycling/reclamation of other inorganic materials.	Treatment of wastes listed in Table 2 consisting only of sorting, separation, screening, crushing and blending of waste for recovery as a soil, soil substitute or aggregate. Secure storage of wastes listed in Table 2 pending treatment. Storage of wastes listed in Table 2 shall not exceed 85,000 tonnes in total at any one time. No more than 75,000 tonnes of waste shall be treated per year. Treatment for recovery shall not exceed 2,500 tonnes per day.

4.2 Permitted Wastes

4.2.1 No wastes other than those with the European Waste Codes (EWC) listed in Table 2 below shall be accepted onto site.

Table 2 – Waste codes and descriptions permitted on site.

Waste Code	Description	Processing Activity
01 01 02	wastes from mineral non-metalliferous excavation	Sorting, separation, screening, crushing and blending
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07	
01 04 09	Waste sand and clays	
17 01 01	Concrete	
17 01 02	Bricks	
17 01 03	Tiles and ceramics	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01	
17 05 04	Soil and stones other than those mentioned in 17 05 03	
17 05 06	Dredging spoil other than those mentioned in 17 05 05	
17 05 08	Track ballast other than those mentioned in 17 05 07	
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02, 17 09 03	
19 02 06	Sludges from physico/chemical treatment other than those mentioned in 19 02 05	
19 03 05	Stabilised wastes other than those mentioned in 19 03 04	
19 03 07	Solidified wastes other than those mentioned in 19 03 06	
19 05 03	Off-specification compost	
19 12 09	Minerals (for example sand, stones)	
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	

19 12 12	Aggregates only
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	Sludges from soil remediation other than those mentioned in 19 13 03
20 02 02	Soil and stones

4.3 Operating Techniques

4.3.1 The site is located outside a groundwater Source Protection Zone, so all permitted wastes shall be stored and treated on hardstanding, of which the whole site is surfaced with.

4.3.2 The site benefits from a fence around the southern and eastern perimeter which aids to protect the site and mitigate impacts from dust, noise and odour.

4.3.3 Run off from the site drains naturally into ground which is covered in permeable hardstanding, there is very low risk of contamination due to the nature of operations and waste accepted on site.

4.3.4 The site will operate following the techniques listed in Table 3 below.

Table 3 – Operating Techniques

Operating Techniques
1. The Operator will follow the Environmental Management System, Dust Management Plan and Noise Management Plans approved by the Environment Agency.
2. The site will be operated in accordance with all the relevant parts of the EA guidance – Non-hazardous and inert waste: appropriate measures for permitted facilities.
3. Treatment: a) All treatment shall be carried out on hardstanding.
4. Storage: a) All non-hazardous and inert wastes shall be stored on hardstanding with provision of spillage collection facilities and, where appropriate, decanters and cleanser degreasers.

4.3.5 Any non-conforming materials will be stored in quarantine and removed from site as soon as possible to be taken to an appropriately permitted site.

4.3.6 Materials will be treated following Best Available Techniques (BAT).

4.4 Site layout and general principles of operation

4.4.1 Details of the site layout are shown on the site layout plan in Appendix B and Figure 2. The site is separated into safe working areas with dedicated boundaries for specific activities.

4.4.2 Waste will be stored securely in segregated stockpiles. The Operator will take all precautions to prevent the waste from escaping and ensure that members of the public are unable to gain access to the waste.

4.4.3 Solid waste will be stored and managed in accordance with the appropriate measures specified. These include:

- External segregated stockpiles and storage bays (limited to 4m high)
- Locate temporary stockpiles in areas to prevent mixing of different waste streams
- Grade stockpiles to promote rainwater run off rather than infiltration through the stockpile
- Manage all run–off or leachate which may be produced by the waste appropriately
- Be aware of slumping
- Consider location of sensitive receptors such as residential properties /workplaces in relation to stockpiles that might be affected by loss of amenity, dust, noise or odour.

4.4.4 The Operator will follow Best Practice for the storage of materials as listed below:

- Not on land likely to become waterlogged, frozen or snow covered
- No dusty or odorous waste within 250m of residential or workplaces
- Not on land likely to flood
- Not on steeply sloping ground where there is risk of run off
- Not over land drains or land drained in the last 12 months
- Storage on hardstanding

4.4.5 The following plant and machinery will be operated in the Towens Westonzoyland Inert Facility:

- Grading and Screening Plant
- Mobile Water Bowser
- Crusher
- 360 Material Handlers
- Wheeled Loading Shovels
- Excavator

4.4.6 Waste will only be stored at the site of treatment for a maximum of 1 year prior to disposal and 3 years prior to recovery.

4.4.7 No hazardous wastes will be stored or treated on site.

4.4.8 The site is surrounded by a fence on the southern and eastern boundaries. The southern fence also provides a 30m buffer zone for a badger sett that has been identified in the southwest corner of the site. The fence ensures that no disturbing works are completed in this buffer area around the sett. The southern fence protects a 10m planting area which also acts as a protective barrier against water runoff and sedimentation. There is an additional 5m planting area along the eastern boundary to provide an ecological enhancement.

4.5 Control of Mud and Debris

4.5.1 To control the release of mud and debris onto the public highway the following methods will be employed:

- Road sweeping
- Dampening down
- Containment, storage and treatment of waste is in segregated areas within stockpiles
- Designated one-way haul road

4.5.2 In the event of any mud/debris found to be on the public highway resulting from lorry movements from the site, the affected public areas outside the site shall be cleaned. Measures will be taken to clear any such sources from the highway as soon as is practicable.

4.5.3 Additionally, all loaded vehicles will be sheeted to avoid the escape of any waste.

4.5.4 The site will operate in accordance with a site-specific Dust Management Plan outlining the mitigation measures in place on site.

4.6 Potentially Polluting Leaks and Spillages of Waste

4.6.1 Adherence to the monitoring regime set out in Table 4, in conjunction with the site engineering for pollution prevention and the acceptance of permitted wastes only, will ensure that the risk of potentially polluting leaks and spillages of waste from the site is minimised.

4.6.2 Any minor spillages of liquid waste or oil shall be cleaned up immediately, using sand or proprietary absorbent to clean up liquids. In the unlikely event of a major spillage, immediate action shall be taken to prevent contamination entering surface drains, watercourses and un-surfaced ground. Temporary bunds using sand, soil or similar, or absorbents will be placed around the area affected until the spill is cleared up.

4.6.3 Once the spillage has been contained any materials that may be subject to contamination shall be cleared immediately and placed in sealed, labelled containers. These will be taken to a suitably permitted site for disposal. The Environment Agency shall be informed immediately, and the details

of the event recorded in the site diary in accordance with the Towens of Weston Management System.

4.6.4 In the event that a spillage has contaminated the surface water drainage system, the operator will arrange for the drainage system to be cleaned and emptied and the contents disposed of to a suitably permitted site.

4.6.5 Fuel and oil is not intended to be stored on site. In the event that it must be stored there temporarily then it will be contained in compliance with oil storage regulations. The fuel tanks will be contained within a bund capable of containing 110% of the maximum volume of the tank. This bund will enclose all the pipework and infrastructure associated with the tank. The fuel store will be locked to prevent unauthorised access to prevent leaks and theft.

4.6.6 All potentially contaminating wastes/non-conforming wastes will be stored within a quarantine area and removed off site within 7 days.

4.6.7 All site surfaces will be inspected during daily checks for any litter or spillages. Any litter will be swept as necessary and contained for disposal to a suitably permitted site.

4.7 Surface Water Management

4.7.1 Surface water from the site will naturally drain into ground as the site is surfaced in permeable hardstanding and only accepts inert as-dug naturally occurring material for CL:AIRE projects there is a very low risk of contaminated surface water runoff.

4.7.2 The rhyne that borders the southern boundary of the site will be protected by the perimeter fence and 10m buffer zone of planting which prevents run-off from discharging directly into the water course. The water will slowly percolate into ground to reduce the chance of flooding and decrease the volume of runoff entering the watercourse.

4.7.3 Maintenance procedures will involve regular inspections, sediment removal and cleaning every six months in accordance with Environment Agency guidance.

4.7.4 In the event of a fuel spill or contaminating material escaping onto site, the contaminated run-off will be contained on site using booms and sand, the material will be emptied and sent to an appropriately permitted site with the relevant HWCN documentation.

4.8 Fires on Site

4.8.1 No combustible wastes are permitted on site.

4.8.2 No wastes shall be burnt on site. The use of welding/cutting tools (i.e., with naked flame) must be sanctioned first by the Depot Supervisor/competent person and a hot works permit issued. There is no intention of conducting such activities on site.

4.8.3 Special care will be taken with respect to potentially explosive/volatile material during handling, e.g., aerosol cans, oxidising agents, corrosive substances. These shall be removed from the waste load prior to further handling. These wastes are not permitted under the permit and, the quantities and occurrence of these waste types entering the site is predicted to be very small as long as the waste acceptance procedures are strictly adhered to. These will be separated and stored in sealed containers in the quarantine area before removal from site to an appropriately permitted site as soon as is practicably possible.

4.8.5 Appropriate fire extinguishers shall be made available and easily accessible.

4.8.6 Fuel is not intended to be stored on site.

4.8.7 Regular fire drills will be conducted on site to ensure that staff follow the proper procedures.

4.9 Site Security

4.9.1 The site boundary is surrounded by fencing, as shown on the site layout plan, and secure lockable 2.5m high gates at the main entrance. The fencing consists of new posts and wire fencing.

4.9.2 24-hour CCTV is in operation on site.

4.9.3 In the event of a bomb scare, the site will be immediately evacuated, operations suspended, and the police contacted. The police will then take control of the site until the threat is removed. The EA will be informed of the event.

4.10 Recording and Reporting Procedures

4.10.1 Records will be kept of all significant events (including fire, accidents, waste refusal) in the Site Diary. Information should include the nature and extent of the incident, and the actions and remediation measures taken. The site diary must be in a form where it can be audited.

4.10.2 Where site personnel have dealt with a fire successfully, it should be reported to the Fire Service as well as the Environment Agency.

4.11 Waste Acceptance and Control Procedures

4.11.1 Waste shall only be accepted if:

- It is of a type listed in Table 2 above
- It conforms to the description in the documentation supplied by the producer and holder

4.11.2 The Operator will ensure that all wastes accepted at the site for storage, treatment and recovery are fully characterised and acceptable by implementing the following procedures;

- Visual inspection of incoming materials in accordance with the appropriate documentation
- Waste transfer note
- Chemical analyses

4.11.3 The Operator will ensure that all Duty of Care Waste Transfer Notes (WTNs) include the following information and written legibly:

- Delivery date and time
- Origin of the waste
- Waste description including type, quantity and EWC code
- Container type
- Carriers' details
- Identity of the waste producer

4.11.4 The Operator will refer to the supporting information and WTN to identify and understand the beneficial and harmful properties of the waste to identify any potential problems that may arise from storage, transport and re-use.

4.11.5 The Operator will confirm the physical state; liquid, sludge or solid by reference to the definitions found within EA Guidance for waste acceptance at landfills [4]

4.11.6 Upon arrival on site, all vehicle drivers must report to the site office for inspection and weighing.

4.11.7 All waste received at the site shall be visually inspected to confirm that the description and composition conform to:

a) the written description and the European Waste Code on the relevant Duty of Care WTN, and
b) the description as detailed in the permit, and
c) any other accompanying documentation.

4.11.8 Once confirmed the load will be discharged to the appropriate storage area / stockpile. The waste shall be discharged and visually checked for a second time to ensure that there are no non-permitted wastes within the load.

4.11.9 All wastes received shall be kept separate from, and shall not be covered by or mixed with, other wastes until they have been confirmed and recorded for acceptance at the site.

4.11.10 Records will be maintained in accordance with Section 6 of this EMS.

[4] Guidance for waste acceptance at landfills, Environment Agency

4.12 Waste Refusal

4.12.1 In the event that a vehicle load, upon inspection, is non-compliant with the Environmental Permit the following steps will be implemented:

- Refusal of the container/load will result in refused entry
- Enter the event in the site diary, including the relevant information contained on a WTN
- Contact waste producer to advise

4.12.2 Any items of non-permitted waste which are detected after acceptance at the site shall be placed immediately in the designated quarantine storage area, comprising a skip or similar container and segregated from the other wastes. The details shall be entered into the site diary.

4.12.3 Quarantined waste shall be removed from site within 7 days. A record shall be kept of all rejected wastes in the Site Diary.

4.12.4 Waste will be refused if maximum storage capacity has been reached on site, no further waste will be accepted until other waste has been removed off site to an appropriately permitted or exempt site.

4.13 Waste Quantity Measurement Systems

4.13.1 Incoming waste shall be recorded in cubic metres based on the container volume. This shall be recorded by adding load information onto Towens electronic system.

4.13.2 A summary of waste outputs and inputs onto site will be submitted to the EA using the standard Generic Operator Returns electronic spreadsheet every quarter.

4.14 Site Inspections

4.14.1 The site inspections shall be undertaken by the TCM or NCP in their absence. Table 4 represents the issues that may need to be covered and gives the suggested time intervals.

4.14.2 The suggested inspection criteria are included in Table 4.

Table 4 - Site Inspection Checklist

Issue	Frequency	Action
General site and road cleanliness (presence of mud/debris)	Daily	Sweep road, impermeable surfacing if mud/ debris present. Record Inspections /actions in diary.

Issue	Frequency	Action
Inspect tanks, settlement tanks, interceptors, containers, drums, drip trays and secondary containment for leaks or accumulation of sediment.	Daily	Any leaks to be stopped and cleaned up, containers to be cleaned / replaced / repaired immediately. Record inspections/ defects, damage and repairs in diary.
Visual inspection of boundary fences and gates for breaks / damage where applicable.	Daily	Any defects shall be made secure by temporary repair before the start of operations/end of working day and shall be repaired within 24 hours of the damage being detected. Record Inspections/ defects, damage and repairs in site diary.
Check mobile bowser	Daily	Any defects shall be repaired before the start of operations / end of the day within 24 hours of the damage being detected. Record Inspections/ defects, damage and repairs in Diary.
Visual monitoring for aerial emissions-monitor dust at random times throughout the day and in accordance with the Dust Management Plan (DMP)	Daily	Check site boundaries for visual dust emissions at least twice daily. Record inspections / results / weather conditions / cause and actions in site diary.
General site cleanliness (presence of litter and dust deposits inside /outside site boundary)	Daily	Site walkover and inspection. Collection from inside and outside site (including boundary hedging) twice daily. Investigate the cause. Record inspections/ defects, damage and repairs in site diary.
Olfactory Monitoring for odour	Daily	Olfactory testing and record keeping in accordance with the OMP.
Olfactory Monitoring for noise in accordance with the Noise Management Plan (NMP)	Daily	Olfactory testing and record keeping in accordance with the NMP.
Site Signage.	Daily	Check that signs are in good condition and arrange to repair /replace if damaged. Record inspections/ defects, damage and repairs in site diary.
Pest infestation check. Check containers and stockpiles to monitor for vermin, scavengers and flies	Daily	Implement Pest Management Plan if presence of vermin, scavengers and /or flies are noted. Record daily inspections and results in site diary.
Ensure waste is stored in appropriate segregated containers	Daily	Check quantities are in accordance with EMS and Permit. Segregate as and when necessary. Record actions in site diary.

Issue	Frequency	Action
and areas in accordance with Good Practice Guidance		
Check condition of fixed storage facilities – drainage, lagoons/containers etc.	Weekly	Remove silt upon build up. Check and record levels within containers/lagoons. Take action to prevent spillage/ remove via vacuum tanker, etc. Record actions in site diary.
Inspection of plant	Weekly	Maintenance/repair/regular servicing. Record actions in diary and plant maintenance log sheets.
Surfacing	Monthly	Any defects affecting the integrity shall be repaired within one week.

4.14.3 Any necessary repairs will be made within 5 working days of discovery, unless agreed otherwise with the EA.

4.14.4 Any major defects which have the potential to cause a breach in permit if not repaired will be repaired by the end of the same working day. If this is not possible then contact with the EA will be made to agree alternative options.

4.15 Site Closure Plan

4.15.1 In the event that the Operator wishes to cease the permitted waste operations on the site, the Operator will contact the EA to inform them of the closure.

4.15.2 Any waste remaining on site will be inspected by the TCM, who will produce plans for its quick and safe removal off site.

4.15.3 All waste, plant and machinery will be removed from site.

4.15.4 A site investigation will be conducted to determine the quality of the ground condition on site following all operations.

4.15.5 The Operator will submit a surrender of the permit application to the EA for duly making.

5. Pollution Control, Monitoring and Reporting

5.1 Pollution Risk Management

5.1.1 The operator will ensure that a site-specific risk assessment and management plans are used throughout all treatment activities.

5.1.2 See Section 4.7 for surface water management.

5.2 Contact Information for the public

5.2.1 The site will have a publicly visible sign at the entrance with contact details for the Operator so neighbouring businesses or local residents can contact Towens if they have any complaints/issues at any time.

5.2.2 The site sign will have a contact telephone number for the site manager who is available 24 hours.

6. Emissions and Monitoring

6.1 Introduction – Emissions to air, land and water

6.1.1 Emissions from waste to land during operations can lead to pollution of surface and groundwater, and the air. Waste storage and treatment operations can lead to the production of emissions of dust, aerosols, odour and noise.

6.1.2 The EA requires that the Operator take appropriate measures to control potential emissions to or from the waste operation. The following sections therefore set out the measures that will be taken to prevent or minimise the risk to potentially sensitive receptors.

6.1.3 All sensitive receptors to the site and their respective locations are shown on the sensitive receptor plan in Appendix C. This EMS has been produced in consideration of these receptors and their protection.

6.2 Monitoring and Control of Dust Emissions

6.2.1 The key sources for the generation of dust on site are:

- Dust raising from public, haul roads and operational surfaces through vehicle movements
- Dust raising from the mechanical loading/unloading of wastes
- Dust raising from the treatment operation
- Dust raising from stockpiles

6.2.2 The Operator shall take all appropriate measures to reduce and prevent dust emissions generated by the site. Table 5 below sets out the measures that shall be undertaken to control and monitor the release of dust, fibres and particulates.

Table 5 - Measures to Control and Monitor Emissions of Dust

Appropriate Measures for Reducing Emissions of Dust	
▪ Undertake operations within suitable weather windows wherever possible ▪ All incoming loads to be tipped in such a way as to minimise dust generation. ▪ All loading /unloading activities to be undertaken carefully to prevent waste materials being dropped from a height. ▪ Manage loading operations from stockpiles to mixing plant as above. ▪ Keep stockpiles with the potential to give dust as small as possible ▪ Locate potentially dusty material in sheltered areas if possible and consider covering with a suitable material or cover ▪ No storage of waste outside designated containers or stockpile areas. ▪ Limit vehicle speeds during treatment to reduce dust raising ▪ Maintain records of all actions	
Monitoring of aerial emissions	
▪ Daily visual monitoring of aerial emissions at site boundaries shall be carried out by staff supervising all waste handling operations.	▪ TCM /NCP to monitor operations throughout day at and outside the site boundary that is downwind of operations. ▪ Observations and weather conditions including wind direction will be recorded on the dust monitoring sheet. ▪ Complaints to be recorded in the Site Diary

6.2.3 The Operator will take account of the weather conditions and ensure that all waste operations are undertaken in accordance with this information.

6.2.4 The TCM will nominate a person, or persons to be responsible in the absence of the TCM to undertake and record daily random visual monitoring events. Additionally, all operational staff will be made aware of the importance of preventing dust emissions from leaving the boundary of the site which would breach the permit.

6.2.5 In the event of a complaint, the Operator will immediately investigate the source of the dust and whether it is originating from the site. Action will be taken to prevent any further emissions leaving the site. A Corrective Action Report will be completed describing the incident and should include details as specified above. A record will be made in the site diary.

6.2.6 A site-specific Dust Management Plan has been produced, outlining the mitigation measures in place at the site.

6.3 Monitoring and Control of Noise

6.3.1 Noise and vibration will be maintained at levels associated with normal civil engineering activities. Where the site-specific Environmental Risk Assessment identifies sensitive receptors in close proximity to the operation, the Operator will take all measures to minimise noise impacts to those receptors.

6.3.2 The Operator will ensure that all plant is maintained in accordance with the manufacturer's guidelines. Maintenance records will be maintained.

6.3.3 The proposed activities on site are unlikely to greatly increase the noise level in the surrounding industrial area.

6.4 Monitoring and Control of Litter

6.4.1 The risk of litter becoming a nuisance is considered to be very low because wastes will have been segregated and should not contain litter. However, the potential for litter nuisance will be further minimised with the implementation of the following provisions:

- Sheeting of all incoming loads
- All incoming loads to remain sheeted until ready to be tipped
- Daily inspection of the site boundaries at least once per day, corrective action to be recorded in the site diary
- Litter picking when required

6.4.2 On the detection of litter, the operator shall take action to review the waste management processes at the site and modify or cease handling the waste if necessary, in order to minimise the production of litter.

6.4.3 The incident, actions and results shall be recorded in the site diary.

6.5 Monitoring and Control of Pests (including Scavengers and Gulls)

6.5.1 The Operator will take appropriate measures to prevent and reduce nuisance from scavengers, vermin and files. These are listed below in Table 6.

6.5.2 An inspection of stored wastes for pest infestations shall be carried out at least at weekly intervals and more often, if necessary, by the site supervisor and shall be recorded in the site diary.

6.5.3 On detection or notification of pest infestations, immediate action shall be taken to secure the attendance of a professional pest control contractor, to eliminate the pest infestation. The incident and remedial action shall be recorded in the site diary.

Table 6 - Measures to reduce nuisance from scavengers, vermin and flies

Appropriate Measures for Reducing Nuisance from Scavengers, Vermin and Flies	
▪ Reduce the potential for scavenging, attracting vermin and fly breeding in stockpiles by identifying waste likely to attract flies. ▪ Locate loading/ unloading areas, stockpiles as far from human receptors as is possible ▪ Keep machinery clean ▪ Conclude operations as quickly as possible	
Monitoring of aerial emissions	
▪ Daily visual monitoring of stockpiles by staff supervising waste handling operations.	▪ TCM /NCP to monitor waste types for infestations ▪ Observations and weather conditions including wind direction will be recorded on the site diary

6.6 Monitoring and Control of Mud and Debris

6.6.1 Vehicles will be inspected, both the vehicles and bodies, upon entry and exit of the site for exterior mud and debris. Any excess mud and debris will be removed, and vehicles will be washed down to ensure that no mud is carried out onto access roads or public highways.

6.6.2 Any mud or debris detected on the site roads will be reported to the site manager.

6.6.3 Any mud or debris detected on the local public highways due to operations on site will be cleared immediately by the Operator, manually using a brush or using s road sweeper if necessary.

6.7 Monitoring and Control of Odour

6.7.1 The waste accepted on site is not putrescible so odour should not cause any complications or breach of the permit on site.

6.7.2 On the detection of litter, the operator shall take action to review the waste management processes at the site and modify or cease handling the waste, if necessary, in order to minimise the production of litter.

6.7.3 The incident, actions and results shall be recorded in the site diary.

6.7.4 Any putrescible waste will be contained in quarantine and sent to a suitably permitted site for disposal.

6.8 Climate Change

6.8.1 Planning for the changing climate at the Towens Kleen Kutt yard is organised into six stages: preparation, potential impacts, risk assessment, control measures, adaptation plan and monitor, record and review plan.

6.8.2 Climate change is considered in Table A5 in the environmental risk assessment included in Appendix F to minimise impacts on the environment and adapt to a changing climate appropriately.

7. Site Records

7.1 Security and Availability of Records

7.1.1 All Duty of Care Transfer Notes will be kept for a minimum of 2 years.

7.1.2 Records of any hazardous wastes accepted by the site, wastes rejected by the site and/or despatched from the site shall be kept in the site office for a minimum of 6 years. These will be available for inspection by an authorised person by accessing the electronic records management system.

7.2 Records of Waste Movements (Waste Returns)

7.2.1 Records of all waste movements shall be kept in accordance with the relevant condition in the permit. Additionally, a summary record of the waste types accepted and removed from the site shall be made on the Environment Agency form every quarter. This information will be submitted to the Agency within 1 month following the end of the quarter.

7.3 Records of off-site Environmental effects

7.3.1 Records of any off-site environmental effects including pollution incidents that caused or were alleged to have caused, harm or health effects will be retained.

7.4 Records of on-site Environmental effects

7.4.1 Records that relate to the condition of the land and groundwater will be retained. The initial state of the site is described within the Application Site Condition Report. This is a live document and will be maintained throughout the life of the site. Records will include details on:

- Design, construction, inspection, monitoring & maintenance
- Failure of pollution prevention control measures
- Spills and incidents

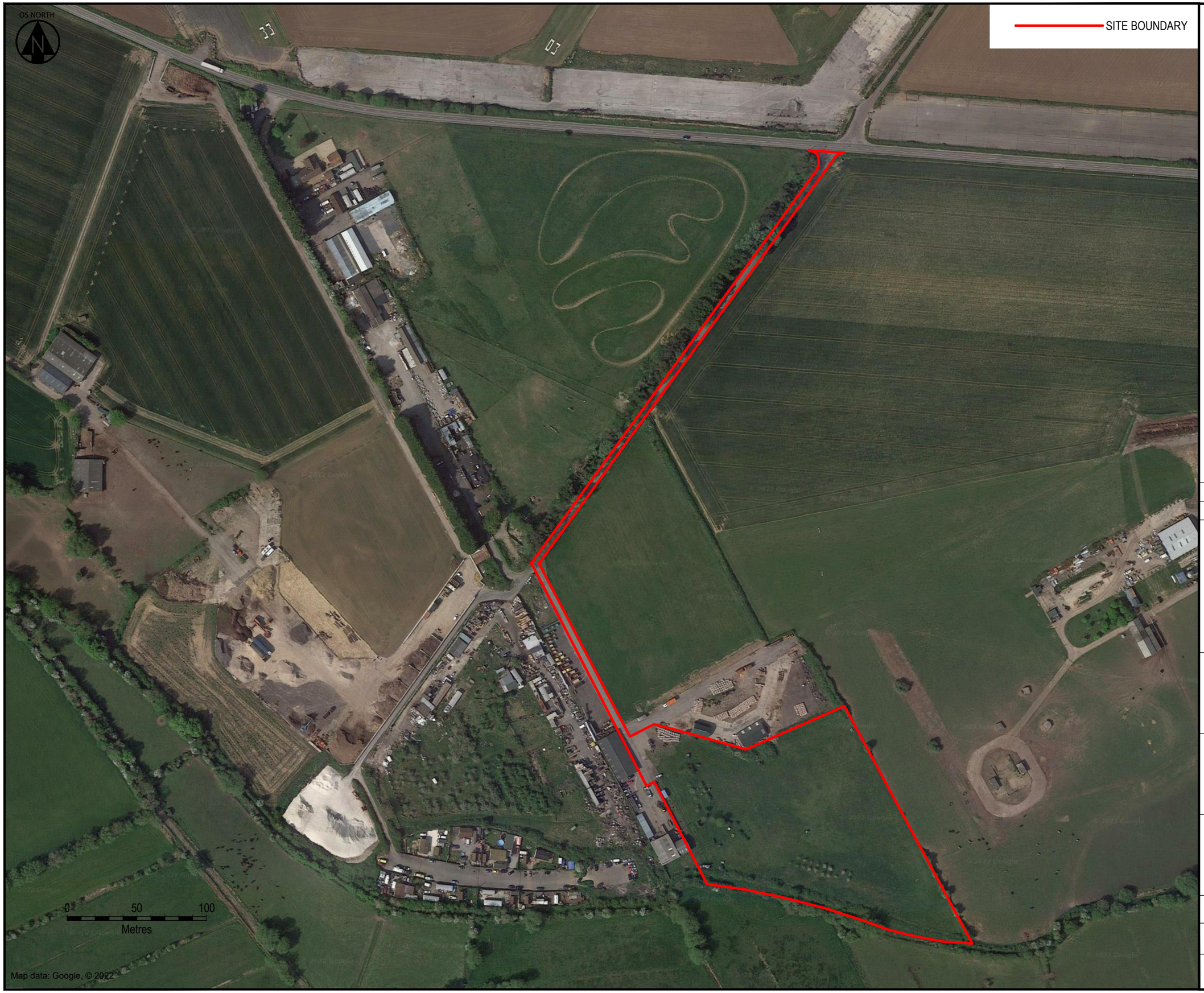
- Records of investigations and remedial actions
- Records of remedial action in response to non-conformances as noted by an EA Officer

7.5 Site Diaries

7.5.1 A site diary will be kept secure within the site office and made available for inspection by the Environment Agency as and when required. The diary will contain the following information and be maintained in a form in which it can be audited:

- Start and finish of any construction works
- Maintenance
- Plant and machinery breakdowns
- Emergencies
- Problems with waste received and action taken
- Site inspections and consequent actions carried out by the operator
- TCM attendance - the date and the time on site and the time left site
- Dispatch of any records to the Environment Agency
- Severe weather conditions
- Any environmental problems and remedial actions taken
- Any complaints related to operational activities
- Records of site monitoring – odour / dust / litter / pests / surface water
- Records of inspection of the silt trap/interceptor

7.5.2 All records shall be completed within 24 hours of the event.



Notes:

Rev	Date	Description	By	Ckd
A	10/03/23	Initial issue	NG	LB

mts environmental
Filwood Green Business Park, 1 Filwood Park Lane, Bristol BS4 1ET
Tel: 0117 370 4250
www.mtsenvironmental.co.uk

Client

TOWENS

Project

Towens Kleen Kutt Yard

Title

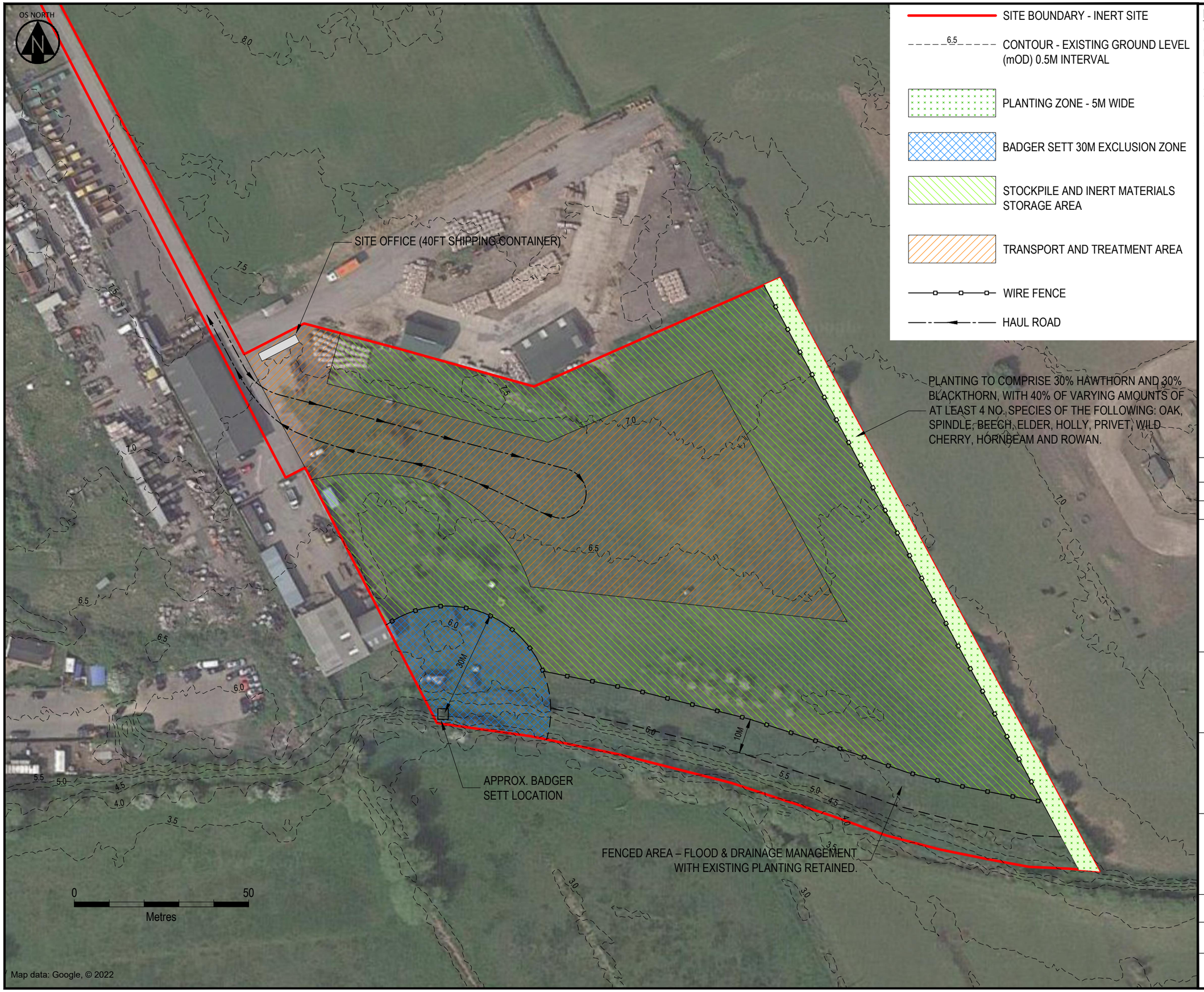
SITE LOCATION PLAN

Drawn	Checked	Scale at A3	Date	Issue Date
NG	LB	1:2500	10/03/23	10/03/23

Drawing status

INFORMATION

Drawing No.	Revision
W-MTS-DR-PL-03	A



Notes:

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TREATMENT CONSISTS OF BLENDING, CRUSHING, SORTING, SEPARATING AND SCREENING IN THE TREATMENT AREA.

ALL ACTIVITIES ON SITE WILL OCCUR OUTSIDE.

ALL SITE HAS A PERMEABLE SURFACE.

Rev	Date	Description	By	Ckd
B	23/06/23	Updates to site layout. Issued for information.	NG	LB
A	10/03/23	Initial issue	NG	LB

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Filwood Green Business Park, 1 Filwood Park Lane, Bristol BS4 1ET
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Client: TOWENS

Project: Towens Kleen Kutt Yard

Title: SITE LAYOUT

Drawn	Checked	Scale at A3	Date	Issue Date
NG	LB	1:1000	10/03/23	10/03/23

Drawing status: INFORMATION

Drawing No.	Revision
W-MTS-DR-PL-05	B

Environmental Risk Assessment

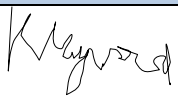
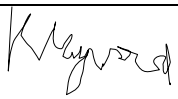
Inert Storage Facility

Towens of Weston Ltd

Towens Kleen Kutt Yard
Land off Springway Lane,
Westonzoyland,
TA7 0JS

Document Title	Environmental Risk Assessment
Revision	2.0
Date	19/06/2023
Document Reference	Towens Kleen Kutt ERA 19-6-23
Prepared For	Towens of Weston Ltd
Authored By	MTS Environmental Ltd

Quality Control

Revision No.	Date Revised	Amendments	Authored By	Sign Off	Approved By	Sign Off
1.0	31/01/23	Original Draft for permit application	Kasia Haywood		Luke Bridges	
2.0	19/06/23	Amendments based on duly making information request	Kasia Haywood		Luke Bridges	

Contents

1. Introduction

Towens of Weston Ltd is applying for a new bespoke environmental permit (permit number: TBC) for its Westonzoyland inert storage depot site at Land off Springway Lane, Westonzoyland, TA7 0JS. The permit is for a physical treatment of non-hazardous waste site (Activity 1.16.12). The main activities on site will consist of soils and aggregate storage and treatment through screening to be used in recovery CL:AIRE projects. The site will be used as a CL:AIRE Hub site.

This Environmental Risk Assessment (ERA) is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the activities, including the proposed activities, undertaken at the Towens of Weston Ltd Westonzoyland site. This report will identify any significant risks and detail the measures that Towens of Weston Ltd will adopt to appropriately manage any risk of pollution.

2. Environmental Risk Assessment

2.1. Methodology

This report has been prepared following the Environment Agency's Risk Assessment guidance. It specifically relates to the potential risks associated with odour; noise and vibration; fugitive emissions and accidents and incidents.

This risk assessment addresses the above risks and is based on the following methodology:

- Identification of potential risks
- Identification of all potential receptors to these risks
- An assessment of each risk type.

The environmental risk assessment (Appendix A) assesses the risks to the environment and human health from activities carried out at the Towens of Weston Ltd Westonzoyland depot and identifies the pollutant linkage i.e. source – pathway – receptor for each risk type.

2.2. Potential Hazards

The potential hazards resulting from the activities carried out at the Towens of Weston Ltd Westonzoyland depot have been considered, as provided in Appendix A, and are summarised below:

- Odour:
  - Waste materials
- Noise and vibration:
  - Engine noise from vehicles
  - Use of reverse vehicle warnings
  - Use of plant and machinery
- Fugitive emissions:
  - Particulate matter i.e. dust
  - Scavenging birds, pests, and vermin
  - Mud and litter
- Accidents:
  - Fire

- Leaks and spillages
- Flooding
- Unauthorised access

2.3. Pathways

The pathways identified for each risk type are shown in Table 1:

Table 1: Potential Pathways

Risk Type	Pathway
Odour	Air
Noise and vibration	Air
Fugitive emissions	Air
Accidents	Air
	Surface water run-off
	Infiltration
	Percolation

2.4. Receptors

Receptors within 1000m of the application site have been identified and are shown in Table 2 below, with high sensitivity receptors highlighted in bold, and in the Sensitive Receptor Plan (Appendix B). The main pathway for the identified sources is the air and as such, atmospheric conditions can affect dispersion rates and the potential risk. Therefore, the location of each receptor in relation to the site may influence the potential impact of the risk, as summarised in Table 2.

Table 2: Location of potential receptors in relation to waste operations

Receptor	Distance from site (m)	Direction
Residential		
Caravan Park	160m	West
Springway Farm	550m	North West
Property on Knowleyards Road	860m	South East
The Old Ambulance House	755m	East
Designated Land and Waterways		
Site of Special Scientific Interest (SSSI) – Langmead and Weston Level	60m and 350m	South and West
Priority Habitat Inventory (PHI) – Lowland Meadows	155m	South
PHI – Lowland Dry Acid Grassland	635m	South East
PHI – Coastal and Floodplain Grazing Marsh	60m	South and West
PHI – Deciduous Woodland	535m	East
PHI – Traditional Orchards	1000m	South East
Important Plant Areas Plantlife (GB)	60m	South and West
Somerset Levels and Moors	0m	All directions
Pigditch Rhyne Network	60m	South and West
Sensitive Land Uses		
Middlezoy Aerodrome	230m	East
Farm	545m	North West
Westonzoyland Allotments	1000m	North West
Westonzoyland Airfield	700m	North West

Sedgemoor RC Flying Club	950m	North East
Industrial/Commercial		
JWF Engineering	250m	East
Kleen Kutt	70m	East
Bridgwater Motorcycle Training	930m	North West
Grandfields Westonzoyland Motor Track and Learner Driver Area	600m	East
T&K Motorcycle Training	800m	East
Burnham Coal Supplies	345m	North West
Regency	320m	North West
Slabs R Us	400m	North West
Seven Acres Industrial Estate	970m	East
Towens Westonzoyland Depot	280m	West
Public Rights of Way		
Restricted Byway	60m	South
Public Footpath	430m	South
Infrastructure/utilities		
A372	470m	North
Protected species		
Priority Species - Curlew	620m	West
Priority Species - Lapwing	0m	All directions
Priority Species - Redshank	135m	North and West
Protected Species-European Water Vole	Up to 500m	All directions
Badger Sett	60m	South West
Groundwater		
The site is not within a source protection zone or drinking water safeguard zone		

2.4. Risk Assessment

The Environmental Risk Assessment (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on nearby receptors. This is achieved by fulfilling the following objectives:

- Identify the location and nature of each hazard
- Identify the specific receptors potentially at risk and assess the sensitivity of each receptor
- Provide an assessment of the risk posed to each sensitive receptor
- Identify management and monitoring techniques to remove or mitigate the risk
- Provide recommendations for more detailed assessments where necessary.

3. Summary

The Environmental Risk Assessment indicates that if the appropriate outlined management techniques are implemented at the site to protect nearby sensitive receptors, the proposed activities as part of the permit variation will have no significant impacts in terms of odour, noise and fugitive emissions, and the likelihood of accidents is minimal.

Appendix A – Environmental Risk Assessment

Table A1: Odour Risk Assessment and Management Plan

What is the risk?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Odorous Waste Types	Local population in residential dwellings and businesses listed in Table 2 SSSI Priority and Protected Species Site Staff	Air transport then inhalation	Permitted waste types stored onsite are not putrescible and so have a low odour potential. No hazardous wastes are accepted on site. There will be strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the Environmental Management System (EMS). All loads will be inspected upon arrival and refused if offensively odourous. Any odourous wastes will be transferred to the quarantine area and removed from site within 7 days. All site operatives will be vigilant regarding identifying non-compliant wastes and any non-conformances or odour issues will be reported to the Site Manager.	Very unlikely as the waste types accepted on site do not give off odour unless heated and the material will be stored at ambient temperature	Odour annoyance and complaints	Low

Table A2: Noise and Vibration Risk Assessment and Management Plan

What is the risk?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Noise and vibrations from loading and unloading of waste	Local population in residential dwellings, and businesses listed in Table 2 SSSI and priority habitats Priority and protected species Site Staff	Air and vibration	All noise generating activities will be undertaken between the hours of 07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturday, except for emergency repairs. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the risk of mechanical failure which could result in increased noise emissions. The loading/unloading of wastes will be undertaken in a controlled manner to keep noise/vibration to a minimum. Vehicles will be directed by site operatives to minimise the drop height when depositing loads at the site. All noise and vibration generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. The site boundary has a fence and planting to reduce potential noise levels and contain noise within the site boundary.	Intermittent noise disturbance The site is surrounded by other industrial noise generating sites so it is unlikely the site operations will create excess noise above the existing	Noise annoyance and complaints	Low
Vehicle movements on site	Local population in residential dwellings, and businesses listed in Table 2 SSSI and	Air	Loads will only be delivered to the site during working hours (07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturday). The delivery of waste will take place in a controlled manner by limiting drop heights to keep noise to a minimum. Designated one-way haul road for vehicles on site to avoid contact with materials.	Intermittent during operating hours The site is surrounded by other industrial noise generating sites so it is unlikely the site operations	Intermittent noise and vibration disturbance	Low

	priority habitats Priority and protected species Site Staff		Speed limit of 5 mph on site. The site boundary has a southern and eastern fence to reduce potential noise levels and contain noise within the site boundary. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the risk of mechanical failure which could result in increased noise emissions. An anti-idling policy ensures that all equipment and vehicles when not in regular use shall be switched off. The Site Manager will be responsible for ensuring the above measures are implemented. Anti-beeping policy in place on site to prevent unnecessary vehicle noise. All noise generated by vehicle movements will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.	will create excess noise above the existing		
Use of plant and machinery.	Local population in residential dwellings, and businesses listed in Table 2 SSSI and priority habitats Priority and protected species Site Staff	Air	All noise generating activities will take place during working hours (07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturday), except for emergency repairs. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements. Only screeners are intended to be used on site which do not ordinarily create significant adverse noise impacts. All equipment and vehicles, when not in regular use, shall be switched off. The Site Manager will be responsible for ensuring the above measures are implemented. Processing activities will be done on a campaign basis to avoid continuous on/off use and noise nuisance. The site is a temporary site for CL:AIRE projects so will not cause continued noise impacts.	Intermittent during operating hours The site is surrounded by other industrial noise generating sites so it is unlikely the site operations will create excess noise above the existing	Intermittent noise and vibration disturbance.	Low

			Minimal plant and machinery is on site, consisting only of a screener, telehandler, crusher (on a campaign basis), grab and mobile water bowser. Locations have been considered to minimise noise production: all processing is done within the fenced site area. The site boundary has planted and vegetated areas to reduce potential noise levels and contain noise within the site boundary. All noise generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. Noise to be managed in accordance with the Part B permits of the crusher and screener.			
Noise from reversing vehicle warnings.	Local population in residential dwellings, and businesses listed in Table 2 SSSI and priority habitats Priority and protected species Site Staff	Air	All noise generating activities will take place during working hours (07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturday) except for emergency repairs. All noise and vibration generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. Designated one-way haul road for vehicles on site to minimise the need for reversing except when tipping into the tipping area or collecting materials. The site boundary has planting and a fence to reduce potential noise levels and contain noise within the site boundary.	Intermittent during operating hours.	Intermitten t noise disturbance	Low
Noise from processing of waste materials (crushing and	Local population in residential dwellings, and businesses listed in Table 2 SSSI and	Air	All noise generating activities will take place during working hours (07:00 to 17:00 Monday to Friday and 07:00 to 13:00 on Saturday) except for emergency repairs. Processing activities will not generate levels of noise above that originating from the surrounding roads and industrial sites.	Intermittent during operating hours	Intermitten t noise disturbance	Low

screening)	priority habitats Priority and protected species Site Staff		All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the generation of noise. All plant and equipment will be switched off when not in regular use. Processing activities will be done on a campaign basis to avoid continuous on/off use and noise nuisance. The site is a temporary site for CL:AIRE projects so will not cause continued noise impacts. Minimal plant and machinery is on site, consisting only of a wash plant, telehandler, excavator, crusher (on a campaign basis), grab and mobile water bowser. Locations have been considered to minimise noise production: all activities are contained within the perimeter fence and planting. All noise and vibration generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. Noise to be managed in accordance with the Part B permits of the crusher and screener.			

Table A3: Fugitive emissions risk assessment and management plan

What is the risk?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
To Air						
Dust emissions from vehicle movements	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 Site Staff Users of roads - A372 SSSI and priority habitats Priority and protected species	Air transport then deposition	Wastes being delivered to the site will be covered or sheeted to prevent the generation of dust while the waste is in transit. Vehicle speeds will be limited onsite and the access road to 5mph to prevent re-suspension and movement of dust. All equipment and vehicles when not in regular use shall be switched off to minimise the risk of dust emissions that may arise from idling. Designated one-way haul road for vehicles on site to avoid contact with materials. The implementation of dust suppression systems including the use of spray on crushing plant, mobile water bowser for damping down, and regular maintenance of haul roads and site surface with water bowser and road sweeper. The site perimeter is surrounded by a planting and a fence which will act as a screen for dust so no dust escapes from the site boundary. Dust will be managed in accordance with the Dust Management Plan prepared for the site. The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.	Unlikely due to measures in place and the nature of materials accepted on site	Local nuisance i.e. dust on cars, clothing, and vegetation. Nutrient enrichment.	Low

Dust emissions generated during unloading of waste from HGVs.	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 Site staff Users of roads - A372 SSSI and priority habitats Priority and protected species	Air transport then deposition	A water bowser will be used to dampen site haul roads, site surface and stockpiles if necessary. The loading/unloading of wastes will be undertaken in a controlled manner by limiting drop heights to keep dust emissions to a minimum. Wastes will be stored in height limited stockpiles to prevent wind whipping. Designated one-way haul roads and paths for HGVs to avoid contact with waste. Drop heights will be minimised to reduce the generation of dust whilst the waste is being handled. The site is enclosed within planting and a fence surrounding the site perimeter will act as a screen for dust so no dust escapes from the site boundary. Dust will be managed in accordance with the Dust Management Plan prepared for the site. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Operations will temporarily cease when winds are likely to generate dust emissions from wastes and materials.	Dust could potentially reach nearby properties when a strong wind blows in their direction. Management actions should prevent this happening. Minimal processing activities undertaken on site	Local nuisance i.e. dust on cars, clothing, and vegetation. Nutrient enrichment.	Low
Dust from haul road	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2	Air transport then deposition	The use of modern plant and regular maintenance shall be practiced to reduce emissions. The implementation of dust suppression systems including the use of spray on crushing plant, mobile water bowser for damping down, and regular maintenance of haul roads and site surface with water bowser and road sweeper.	Unlikely due to measures in place	Local nuisance i.e. dust on cars, clothing, and vegetation.	Low

	Site staff Users of roads - A372 SSSI and priority habitats Priority and protected species		The haul road on the site will be wetted down daily. Designated one-way haul roads and paths for HGVs to avoid contact with waste. Dust will be managed in accordance with the Dust Management Plan prepared for the site. The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.			
Dust emissions from the processing of waste materials (crushing and screening)	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 Site staff Users of roads - A372 SSSI and priority habitats Priority and protected species	Air transport than deposition	All plant is regularly maintained to reduce emissions. The implementation of dust suppression systems including the use of spray on crushing plant, mobile water bowser for damping down, and regular maintenance of haul roads and site surface with water bowser and road sweeper. The site benefits from its own plant so operations can be done on smaller volumes more frequently to ensure that stockpiles are kept to a smaller size. This reduces dust/litter from stockpiles and protects the surrounding receptors. Minimal crushing will take place and no crushing takes place in very dry or windy conditions. The site is mainly used for storage of materials for CL:AIRE projects so minimal processing activities are undertaken on site therefore minimising dust production. All plant and equipment will be switched off when not in regular use. All processing activities conducted within the fenced site to prevent dust escaping and increase the number of dust barriers between receptors.	Unlikely due to measures in place	Local nuisance i.e. dust on cars, clothing, and vegetation. Nutrient enrichment.	Low

			Processing activities will be done on a campaign basis to avoid continuous on/off use and dust nuisance. Minimal processing will take place on site so it is highly unlikely that dust will be produced. Minimal plant and machinery is on site, consisting only of a screener, telehandler, excavator, crusher, grab and mobile water bowser. The site is enclosed within a fence to prevent dust escaping from the site. Dust will be managed in accordance with the Dust Management Plan prepared for the site. The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager			
Release of particulate matter (dusts), vapours and polluting gases	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 Site staff Users of roads - A372 SSSI and priority habitats Priority and protected species	Air transport then inhalation	Permitted waste types do not include dusts, powders or loose fibres and waste is not typically dusty unless it is stored during prolonged dry periods when damping down is carried out where required. Asbestos containing waste is not accepted on site, so the release of asbestos fibres is extremely low. Hazardous waste is not accepted on site. Any non-conforming quarantine material is removed from site within 7 days. The potential sources of fugitive emissions to air have been identified and a Dust Management Plan has been prepared to prevent any potential dust emissions from reaching any nearby	Unlikely due to measures in place and the nature of waste accepted on site	Respiratory illness including. lung cancer and mesothelioma.	Low

			receptors. The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager			

To Water						
Contaminated rainwater run-off.	Surface water and groundwater SSSI and priority habitats Rhyne network Somerset Levels and Moors	Water	Only non-hazardous and inert wastes are accepted on site consisting of as-dug naturally occurring non-contaminated material to be used for CL:AIRE projects. Therefore, run-off from site will not be contaminated. The site surface is permeable hardstanding with run off naturally draining into ground. Run off directly into local rhynes will be slowed or prevented by the perimeter planting. In the event of a spill, emergency procedures as outlined in the EMS will be followed. The southern planting acts as a protective barrier to run off escaping the site and draining into the ditch to the south. Booms and sand will be used to contain any surface run-off water following a leak, spill or fire event. Fuel and oil is not intended to be stored on site. In the event that it is then it will be stored in a fully bunded bowser. The site is secure through secure lockable gates and fences so theft or damage which may cause spills is minimal. Also, no fuel is intended to be stored on site. There are strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types. Details of the waste acceptance procedures are provided in the EMS. Any non-conforming material will be stored in the quarantine area and removed from site within 7 days.	Very unlikely due to the nature of wastes accepted on site	Contamination of groundwater surface water bodies	Low
Pest/Scavenging Birds						

Birds and pests	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 SSSI and priority habitats Priority and protected species	Air transport and over ground	Permitted wastes stored onsite are not putrescible (as dug naturally occurring non-contaminated soils) and will therefore not be attractive to pests or scavenging birds. Green waste is not accepted on site so there will be no useable nesting sites available. No hazardous wastes are accepted on site. There are strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types. Details of the waste acceptance procedures are provided in the EMS. The site is enclosed within secure animal proof fencing and gates to deny the access of pests. The potential badger sett in the southwest corner of the site is protected by a 30m exclusion zone segregated by an animal proof fence. Materials are stored in segregated stockpiles to prevent cross-contamination and encouraging odour that may attract birds and pests. The Site Manager will undertake regular reviews of pests and scavenging birds at the site. All site operatives will be vigilant and report any problems to the Site Manager.	Very unlikely due to the nature of the waste material	Nuisance to local receptors within 1km of the environmental permit boundary.	Low

Mud						
Mud from vehicle movements	Users of roads - A372	Tracked on vehicle wheels.	The implementation of dust suppression systems including the use of spray on crushing plant, damping down and regular maintenance of haul roads and site surface with a water bowser and road sweeper. If mud is deposited on the access road and/or highway then a road sweeper will be employed if necessary. All vehicles exiting the site would be checked for exterior mud or debris before leaving the site. The site benefits from a wheel wash station consisting of a jet wash hose and brush. Designated one-way haul road for HGVs on site to minimise contact with materials and tracking of mud. The amount of mud on local roads will be monitored daily by site operatives.	Unlikely due to measures in place.	Local nuisance. Mud on roads is unsightly and can increase the likelihood of road traffic accidents.	Low
Litter						
Litter	All receptors listed in Table 2.	Air transport then deposition	Waste types received by the site generally do not contain litter that could become windblown. Operatives will be vigilant, and any litter reported will be removed immediately. All incoming loads will be sheeted and remain sheeted until they are ready to be tipped. The site perimeter is enclosed by planting and a fence to prevent any litter being blown from the site. Designated one-way haul road for HGVs to avoid contact with waste.	Unlikely due to measures in place.	Local nuisance	Low

			There are strict waste acceptance procedures in place to prevent the acceptance of non-conforming waste types. Details of the waste acceptance procedures are provided in the EMS. Working areas will be regularly cleared and inspected to minimise litter. Housekeeping measures are in place during operating hours.			

Table A4: Accident and Incident Risk Assessment and Management Plan

What is the risk?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Fire or failure to contain firewater	Groundwater and surface water. Local residents listed in Table 2 SSSI and priority habitats Rhyne network	Infiltration and contamination of surface water	No combustible or hazardous waste is accepted on site. If any incidental combustible waste is brought to site, then it will be transferred and stored in the quarantine area in containers made of fire-resistant materials to prevent fires spreading. All waste stored on permeable hardstanding. No waste shall be burnt on site and the use of welding/cutting tools (tools with a naked flame) are sanctioned first by the site manager/competent person. The southern planting acts as a protective barrier to run off escaping the site and draining into the ditch to the south. All site operatives are required to recognise signs of smouldering waste at the point of reception. Such wastes shall remain in the container and removed to the quarantine area. The site manager shall be informed. There will be strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types. Details of the waste acceptance procedures are provided in the EMS. The operator will undertake routine maintenance of equipment in accordance with manufacturer's guidance. This will minimise the risk of mechanical failure which may result in an increased risk of combustion.	Unlikely	Contamination of local groundwater and/or surface water.	Low

			Site notices and training will be undertaken regarding fire hazards. Site Manager will be responsible for actions in the event of a fire. Fire booms, spill kits, fire blankets and extinguishers, sand and buckets available on site and will be used to contain any firewater.			
Leaks and spillages of oil or fuel.	Groundwater and surface water. SSSI and priority habitats Rhyne network	Infiltration	The operator will undertake regular maintenance of plant equipment in accordance with manufacturer's guidance. This will minimise the risk of mechanical failure which may result in leaks. Fuel is not intended to be stored on site. In the event that it is then all fuel, oil and lubricants stored on site will be double-bunded and stored in a secure container. The storage will be maintained and inspected in accordance with the manufacturer's recommendations. Daily vehicle / plant checks to ensure any fuel/oil leaks etc. are repaired as soon as possible. No hazardous or combustible wastes accepted on site. Booms and sand will be used to contain any spills and prevent it from entering the local watercourse. The southern planting acts as a protective barrier to run off escaping the site and draining into the ditch to the south. Spill kits are also readily available on site in case of a spill, these use absorbent mats which soak up any contaminating hydrocarbons.	Unlikely due to measures in place and intention not to store fuel on site	Contamination of land and watercourses.	Low

			The emergency response outlined in the EMS will be followed. The Site Manager will be responsible for ensuring effective remediation and documenting any incident.			
Flooding	Groundwater SSSI and priority habitats Rhyne network	Infiltration and Percolation	The site is in an area at a low risk of flooding from rivers or seas, and at a very low risk of flooding from surface water. The whole site is surfaced in permeable hardstanding to allow natural percolation on site and not increase runoff rates which encourages flooding. No hazardous wastes accepted on site. Waste types stored in open stockpiles are inert or non-hazardous as-dug naturally occurring material so in the event that surface water comes into contact with these wastes, significant pollution or contamination of groundwater or surface water is considered highly unlikely. Booms and sand will be used to contain any spills and prevent it from entering the local watercourse.	Unlikely due to measures in place in the nature of the proposed development.	Disruption to works operations Contamination of local groundwater and/or surface water	Low
Vandalism	Local population in residential dwellings, sensitive land uses, and businesses listed in Table 2 Site staff	Unauthorised entry to the site	The site is gated and surrounded by fencing and vegetation. Access to the waste area will be restricted to trained depot staff. No hazardous wastes are accepted on site. No fuel or oil is intended to be stored on site.	Unlikely due to measures in place.	Release of polluting materials to air, water or land.	Low

			Any identified damage to the site security will be recorded and temporarily repaired as necessary before the end of the working day. Permanent repair or replacement will be undertaken as soon as practicable. Procedures are in place which require all visitors to the site to sign in on arrival and sign out on departure.			
All on-site hazards from wastes; machinery and vehicles	Local human population gaining unauthorised entry to the site, site staff and contractors	Direct physical contact	Activities will be managed and operated in accordance with an EMS which will include measures to prevent unauthorised access. No hazardous wastes or fuel stored on site.	There is always a risk of accidents, but measures have been put in place to reduce the risk associated with site activities.	Injury or health effects	Low

Table A5: Climate change risk assessment and management plan

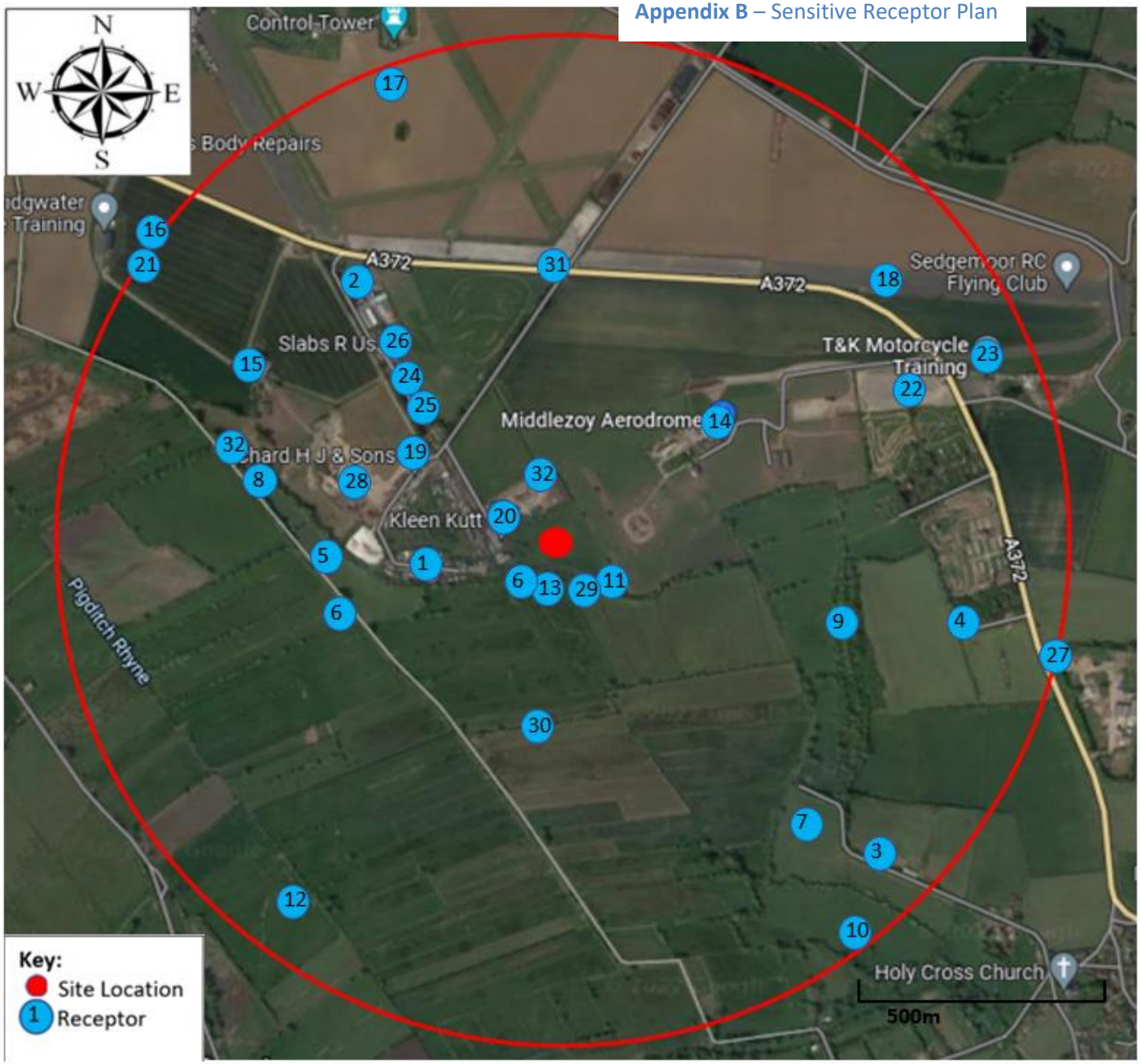
What is the risk?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Access issues due to flooding or sea level rise	Groundwater and surface water Local residents listed in Table 2 SSSI and priority habitats Rhyne network Site staff	Surface water	The ground level on site and the access road is higher than the level of the nearest watercourse. The site has a permeable surface so water can naturally percolate into ground to prevent flooding. The southern site boundary by the watercourse is protected by a planted barrier to slow flooding. The site is located in Flood Zone 3 but assessed as low risk of flooding from rivers or seas and at a very low risk of flooding from surface water. Towens of Weston are signed up to the EA's flood warning service and have specific actions to take in the event of a flood alert and/or flood warning.	Unlikely	Inability to access site	Low
Wildfires	Site staff Site infrastructure Local residents listed in Table 2 SSSI and priority habitats Rhyne network	Spread of fire	No large areas of woodland for fires to start within 1km of the site. The site is surrounded by moors where wildfires are very unlikely. The rhyne network surrounding the site acts as a barrier for wildfires to prevent spread of wildfires. The site benefits from access to a borehole extraction point at the neighbouring site to provide firewater to fight fires and prevent spread. Fuel is not intended to be stored on site. In the event that it is then all fuel, oil and lubricants stored on site will be	Unlikely due to site location	Site infrastructure damage and risk to staff	Low

			double-bunded and stored in a secure container. The storage will be maintained and inspected in accordance with the manufacturer's recommendations. No combustible wastes accepted on site. The boundary planting on site will be regularly maintained and cleared of weeds. It will be monitored during hot and dry weather. The emergency response outlined in the EMS will be followed. The Site Manager will be responsible for ensuring effective remediation and documenting any incident.			
Failure of essential site services	Site staff Local residents listed in Table 2 SSSI and priority habitats Rhyne network	Water Electricity supply Drainage systems	No constructed drainage system on site, the drainage follows natural processes to allow water to naturally percolate into ground. The site benefits from access to a borehole extraction point at the neighbouring site to provide firewater to fight fires and prevent spread. No electricity supply or requirement on site. A mobile water bowser is accessible to the site 24 hours a day to provide water.	Unlikely due to minimal site service requirements	Disruption to works operations	Low

Changing weather patterns	Groundwater and surface water Site staff Local residents listed in Table 2 SSSI and priority habitats Rhyne network	High temperatures (7° higher compared to average summer temperatures) and reduced rainfall Intense rainfall	No hazardous wastes are accepted on site. No fuel or oil is intended to be stored on site. The site benefits from a site office consisting of a 40ft shipping container for site staff to take breaks sheltered from any weather conditions. No constructed drainage system on site, the drainage follows natural processes to allow water to naturally percolate into ground. The site benefits from access to a borehole extraction point at the neighbouring site and a mobile water bowser to provide water for the site for dust suppression during high temperatures/reduced rainfall. Water use will be monitored and baseline requirements calculated. All site staff are trained to identify smouldering waste and waste stockpiles are regularly monitored. Shading electrical equipment if it is subject to direct sunlight for prolonged periods of time. Regular inspection and preventative maintenance of site, plant and equipment. The Site Manager will be responsible for ensuring effective remediation and documenting any incident. The site operations will cease in extreme or adverse weather conditions. No treatment will take place during dry or windy conditions.	Unlikely due to site location and requirements on site.	Site infrastructure damage. Release of polluting materials to air, water or land. Flooding	Low

			The site follows a flood risk assessment and drainage strategy which will be annually reviewed.			
Changes in flow in rhyne network	Rhyne network Groundwater and surface water	Changes in maximum and minimum flow	No constructed drainage system on site, the drainage follows natural processes to allow water to naturally percolate into ground. No hazardous wastes or fuel stored on site. The site follows a flood risk assessment and drainage strategy which will be annually reviewed. The southern site boundary by the watercourse is protected by a planted barrier to slow flooding.	Unlikely	Flooding Damage to site infrastructure	Low

Appendix B – Sensitive Receptor Plan



ID	Receptor
Residential	
1	Caravan Park
2	Springway Farm
3	Property on Knowleyards Road
4	The Old Ambulance House
Designated Land and Waterways	
5	Site of Special Scientific Interest (SSSI) – Langmead and Weston Level
6	Priority Habitat Inventory (PHI) – Lowland Meadows
7	PHI–Lowland Dry Acid Grassland
8	PHI – Coastal and Floodplain Grazing Marsh
9	PHI – Deciduous Woodland
10	PHI – Traditional Orchards
11	Important Plant Areas Plantlife
12	Somerset Level and Moor
13	Pigditch Rhyne Network
Sensitive Land Uses	
14	Middlezoy Aerodrome
15	Farm
16	Westonzoyland Allotments
17	Westonzoyland Airfield
18	Sedgemoor RC Flying Club
Industrial/Commercial	
19	JWF Engineering
20	Kleen Kutt
21	Bridgwater Motorcycle Training
22	Grandfields Motor Track
23	T&K Motorcycle Training
24	Burnham Coal Supplies
25	Regency
26	Slabs R Us
27	Seven Acres Industrial Estate
28	Towens Westonzoyland Depot
Public Rights of Way	
29	Restricted Byway
30	Public Footpath
Infrastructure/utilities	
31	A372
Priority species	
32	Priority Species – Curlew/Lapwing/Redshank/Water Vole

Towens of Weston Ltd – Westonzoyland Inert
Dust and Emissions Monitoring Check Sheet

Site: **TASK/OPERATION:**

Day	Dust Levels at visual monitoring locations		Weather Conditions			Control Measures in Place/Required
	10.00	16.00	10.00	13.00	16.00	
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						

Operator……

Signature……

Date……

Towens of Weston Ltd
Kleen Kutt Yard
TA7 0JS

Towens of Weston Ltd
Kleen Kutt Yard
TA7 0JS

Towens of Weston Ltd – Westonzoyland Inert Dust Complaint Form

Customer Details	
Customer Name -	
Address – **Postcode -**	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	

Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	

Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	