



Dust Management Plan

Kingpin Recycling Limited

Unit C8
Wem Industrial Estate
Soulton Road
Wem
Shropshire
SY4 5SD



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



Document Control Table

Project Reference	19/013k
Project Title	Environmental Permit Application
Document Title	Dust Management Plan: Version 2
Document Issue Date	22 January 2024
Client	Kingpin Recycling Limited
Status	Issued

Change log

Version	Comment	Produced by	Checked by	Date
1	Original Dust Management Plan.	Bethany Stott	Tracey Westbury	19 July 2022
2	<p>Updates to account for infrastructure changes on the site and addition of waste codes.</p> <p>Updates to- <u>Section 1</u> 1.1-1.3,</p> <p><u>Section 4</u> 4.3, 4.5, 4.7, 4.8, 4.10,</p> <p><u>Section 5</u> Table 5.2 and</p> <p>Addition of Section 6, Section 7.</p>	Lauren Raby	Tracey Westbury	22 January 2024



Contents

1. Introduction	2
2. Relevant legislation	3
3. Site location and sensitive receptors	4
4. Operations at the Site	7
5. Dust management and mitigation	9
6. Cessation of Operations for Dust Mitigation	17
7. Monitoring	19
8. Actions when an alarm is triggered.....	20
9. Reporting and complaints response	21

Figures

Figure 3.1 Wind rose from Shawbury RAF Weather Station. Arrow indicates predominant wind direction.....	4
---	---

Tables

Table 3.1: Sensitive Receptors within 1km of the Site boundary	5
Table 5.1: Source-pathway-receptor routes	10
Table 5.2: Mitigation Measures	12
Table 6.1 Estimating the magnitude of risk	17
Table 6.2 Temperature	17
Table 6.3 Risk matrix for warm weather	17
Table 6.4 Risk matrix for cool weather	18
Table 6.5: Action required for each level of risk	18

Drawings

Drawing No. 19/013k 001	Extended Permit Boundary Plan
Drawing No. 19/013m 001 V4	Fire Prevention Layout Plan
Drawing No. 19/013f 001 V3	Sensitive Receptors Plan

Appendices

Appendix 1	Inspection Checklists
Appendix 2	Complaints Form



1. Introduction

- 1.1. Westbury Environmental Limited has prepared this Dust Management Plan on behalf of Kingpin Recycling Limited (Operator) to support an application to:
 - Extend the Permit boundary,
 - Add waste codes,
 - Increase the amount of waste stored on Site at any one time,
 - Add the treatment operations below;
 - shaving,
 - baling,
 - sidewall cutting,
 - shearing,
 - rim-removal and
 - pressure testing.
- 1.2. The Permit currently allows for the storage, sorting/separation, shredding, chipping, and granulating of tyres at Unit C8, Wem Industrial Estate, Soulton Road, Wem, Shropshire, SY4 5SD (Site).
- 1.3. The location and extent of the permitted area is shown in the Permit Boundary Plan, Drawing No. 19/013k 001.
- 1.4. This Dust Management Plan provides information on the sources, risks and mitigation measures related to the potential for dust emissions from the waste operations carried out on the Site.

Content of the Dust Management Plan

- 1.5. This Dust Management Plan will form part of the Environmental Management System (EMS) for the Site. Procedures and Forms referenced within this Dust Management Plan will be included within the EMS. Completed forms (records) will be kept, as required by conditions included in an Environmental Permit.
- 1.6. This Dust Management Plan is structured as follows:
 - Section 2 provides a summary of the relevant legislation and guidelines.
 - Section 3 provides information relating to the Site setting, including the location of the Site and nearby sensitive receptors.
 - Section 4 provides a summary of the operations carried out on the Site and the delivery of material to the Site.
 - Section 5 provides information on the site management and the mitigation measures employed at the Site.
 - Section 6 provides a risk matrix for the cessation of dust generating activities.
 - Section 7 provides information on how dust emissions are monitored at the Site.
 - Section 8 provides a summary of what happens when an alarm is triggered.
 - Section 9 provides a description of how complaints can be made and how they are addressed by the site management.



2. Relevant legislation

- 2.1. The Air Quality Strategy (AQS) for England, Scotland, Wales, and Northern Ireland fulfils the requirement under Part IV of the Environment Act 1995 for a national air quality strategy which sets out policies for improving ambient air quality and keeping these under review. The first strategy, the National Air Quality Strategy (NAQS), was published in March 1997. In January 1999, proposals to amend the strategy were put out for consultation and a consultation document was produced. Following consultation, a revised version of the strategy was published in January 2000. This was further revised in 2007 and has not been revised since this date.
- 2.2. The AQS provides a framework for air quality control through air quality management and air quality standards and objectives for different pollutants (including particulate matter). These air quality standards and objectives were transposed into English Law by the Air Quality (Standards) Regulations 2010.

Air Quality Management Area (AQMA)

- 2.3. The system of local air quality management (LAQM) was introduced under the Environment Act 1995. LAQM requires local authorities to periodically review and assess the current and future quality of air in their areas. Where it is determined that an air quality objective is not likely to be met within the relevant time period, the authority must designate an AQMA.
- 2.4. The Site is located within a local authority with AQMAs however, the closest AQMA boundary is 16.2km south of the site boundary. The closest AQMA was reported by Shropshire council in 2006 for NO_x, most likely as a result of traffic emissions from Shrewsbury town centre. The waste operations on site will not be releasing significant quantities of NO_x and therefore will not contribute to this AQMA.

Low Emission Zone (LEZ)

- 2.5. A LEZ is an area that has restrictions on the type and age of vehicles permitted in it, therefore, vehicles emitting high levels of pollution can be prevented from entering and operating within the zone.
- 2.6. The Site is not located within a LEZ.



3. Site location and sensitive receptors

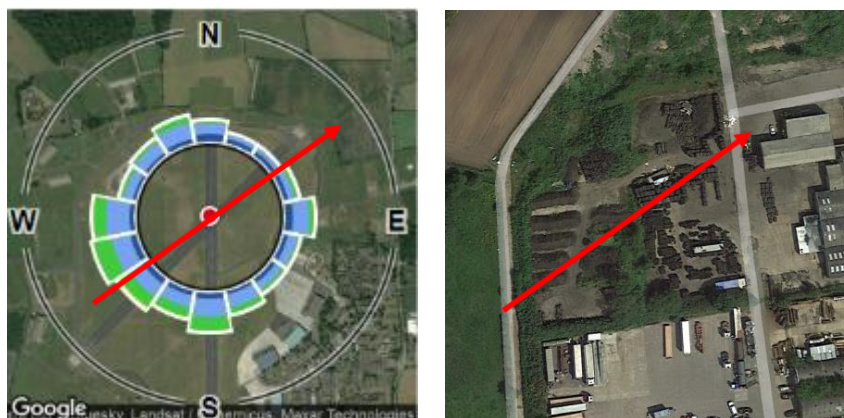
Site Location

- 3.1. The waste treatment facility is located at Unit C8, Wem Industrial Estate, Soulton Road, Wem, Shropshire, SY4 5SD (the Site).
- 3.2. The Site is located at National Grid Reference (SJ 52357 29873)
- 3.3. The Site extends to an area of approximately 0.9 hectares.
- 3.4. The Site is not located within any areas of special environmental designations, with the closest SSSI's being between 4-5km to the north-west.
- 3.5. The Site is located on the north-western edge of an industrial estate.
- 3.6. There are other industrial businesses along the southern and eastern Site boundary, there is agricultural land along the northern and western boundary.
- 3.7. The Site is located within a Secondary A superficial designated aquifer.
- 3.8. The Site is not located within a Source Protection Zone (SPZ).

Meteorology

- 3.9. Unlike many other atmospheric pollutants, the generation of dust is particularly dependent upon weather conditions.
- 3.10. The prevailing meteorological conditions at any site will be dependent upon many factors, including its location in relation to macroclimatic conditions as well as more site specific, microclimatic conditions.
- 3.11. The most significant meteorological factor is the predominant wind direction and wind speeds, and consequently data has been collected regarding the predominant wind speeds and directions appropriate to the Site.
- 3.12. Wind speed and direction data have been obtained from the Shawbury RAF weather station located approximately 11.5km south-east of the Site. This observing station is the closest wind station to the Site according to "Windfinder.com" and has wind speed and direction data appropriate for characterisation of the wind climate at the Site, see Figure 3.1 Wind rose from Shawbury RAF Weather Station. Arrow indicates predominant wind direction. **Error! Not a valid bookmark self-reference.**

Figure 3.1 Wind rose from Shawbury RAF Weather Station. Arrow indicates predominant wind direction.





Sensitive Receptors

- 3.13. This Dust Management Plan identifies all types of receptors within 1km of the Site that may be sensitive to dust emissions.
- 3.14. Locations with a high sensitivity to dust for this Dust Management Plan include local businesses and residential properties.
- 3.15. The distance from the Site boundary to the sensitive receptor plays an important role in the potential impact experienced from airborne dust. Concentrations of airborne dust reduce significantly further away from the source.
- 3.16. Due to the nature of the materials being handled on this Site the particle size of the dust emitted is of intermediate to large particles. Therefore, it can be concluded that these particles are highly likely to be deposited within 250m of the source.
- 3.17. The direction and distances from the boundary of the Site to the boundary of sensitive receptors are provided in Table 3.1, see Sensitive Receptors Plan, Drawing No. 19/013f 001 V3.

Table 3.1: Sensitive Receptors within 1km of the Site boundary

Ref	Receptor	Description	Direction from Site	Approximate Distance from Site Boundary to receptor boundary (m)
1	Deciduous Woodland	Woodland	North	0
2	Towor Escort	Local business	South	10
3	Railway Line	Public transport link	NW	60
4	CRF	Local business	South	75
5	Housing	Residential properties	West	130
6	Motorcast	Car parts supplier.	South	160
7	Malkin Motors	Vehicle repairs shop.	South	190
8	Timber frame services	Timber Manufacturer.	Northeast	190
9	Lynx Truss Rafters	Timber manufacturer.	Northeast	190
10	Pond	Surface water feature	North	200
11	Abco Tyres Ltd	Used tyre shop.	East	265
12	Deciduous woodland	Woodland	South	285
13	Forest Oak Products	Construction equipment supplier.	Northeast	330
14	Border Hardwood Ltd	Local business.	Northeast	340
15	Deciduous Woodland	Woodland	East	355
16	Lower Lacon Caravan Park	Public leisure facility	East	400
17	Small Park	Public green space	South-west	415
18	B506 Soulton Road	Public transport link	Runs from the South to the east of the boundary.	500-760

- 3.18. The Site is located on an industrial estate within a larger mainly agricultural setting. The land use for this area has remained the same for the past 20 years with the exception for the expansion of some nearby residential areas.



- 3.19. There are no identified Special habitat designations however, deciduous woodland has been identified within the area and on the Site itself, (receptors 1, 12 and 15).
- 3.20. In the low likelihood that dust is emitted from the Site, it is considered that this is likely to be deposited, within 250m due to the particle size.
- 3.21. However, the risk of dust being emitted from the Site is low because; firstly, the site isn't accepting any fine powdery waste types, and secondly treatment activities that are likely to emit dust emissions will be undertaken within a building, containing any dust generated and preventing it from leaving the Site boundary.
- 3.22. Due to the predominant wind direction from the south-southwest, it is considered that receptors located north-northeast of the Site are at greater risk of experiencing adverse impacts of dust emissions from the Site. Receptors to the north-northeast of the Site include:
- Deciduous woodland (receptor 1 and 15), which covers areas in between the industrial business from the North to the East of the site
 - Lower Lacon Caravan Park (receptor 16) which extends the length of the industrial estate to the East of the Site. The Northern section of this receptor will be impacted more than the southern due to the predominant wind Direction.
 - Other nearby industrial businesses including; Timber Frames Services (receptor 8) lynx Truss Rafters (receptor 9), Abco Tyres Ltd (receptor 11), Forest Oak Products (receptor 13) and Border Hardwood Ltd (receptor 14).
- 3.23. Towor Escort (receptor 2) is the neighbouring business and operates to the south of the Site. As they are only 10m away from the permit boundary it is possible that dust emission could be transported onto their site, however due to the predominant wind direction coming from the south-east it is considered unlikely that this would cause a nuisance.
- 3.24. The residential areas of Wem are located approximately 130m west of the Site. Within this residential area there are housing (receptor 5), schools and local park areas (receptor 17). The distance of these receptors from the Site and their location down wind, mean they are unlikely to be impacted by dust emissions resulting from activities on the site.

Other Dust Sources

- 3.25. The Site is surrounded by agricultural land to the north, west and south, which could be a potential source of dust emissions at certain times of the year when work is being carried out on the fields.



4. Operations at the Site

- 4.1. Waste will be delivered onto the Site by Heavy Good Vehicles (HGV's). The movement of vehicles visiting the Site has the potential to cause dust emissions, particularly in dry and windy conditions. A 5mph speed limit and the minimisation of vehicle movements will be enforced on the Site to help reduce the amount of dust generated by vehicle wheels.
- 4.2. All vehicles entering / exiting the Site will be sheeted to minimise the likelihood of dust emissions. Loaded vehicles arriving onto the Site that are not sheeted will be rejected in accordance with the Waste Rejection Procedure within the EMS.
- 4.3. Vehicles entering the Site will be visually inspected prior to unloading to ensure that excessively dusty loads are not accepted. Excessively dusty loads will be rejected from the Site in accordance with the Waste Rejection Procedure in the EMS.
- 4.4. Mud could be tracked out of the Site by vehicles, potentially causing dust emissions from the road surface.

Overview of Waste Operations

- 4.5. Specific operations to be carried out on the Site are listed below with further information regarding the potential for these activities to cause dust emissions:
 - Vehicle Movements
 - The movement of vehicles within the Site has the potential to cause dust emissions, particularly in dry and windy conditions.
 - Mud could be tracked out of the Site by vehicles potentially causing dust emissions from the road surface.
 - Waste Treatment Activities
 - Shredding,
 - Chipping,
 - Granulating and
 - Shaving.
 - Waste Storage
 - Waste materials will be stored in bays and stockpiles within the Site.
 - Stockpiles and waste within bays will be stored with a 1m freeboard from the concrete walls. Therefore, the maximum height of the waste stored in stockpiles and bays will be 3m.
 - Waste stockpiles have the potential to cause dust emissions from wind whipping.

Site Layout

- 4.6. The proposed layout of the Site is shown on, Drawing No. 19/013m 001 V4 Fire Prevention Layout Plan.
- 4.7. Waste treatment activities that have the potential to produce dust emissions will be undertaken in a dedicated location, within the building on Site, see 19/013m 001 V4 Fire Prevention Layout Plan.
- 4.8. Visual dust monitoring will be undertaken by Site staff continuously when the Site is operational. Dust monitoring will take place on the western, northern, and southern site boundaries as shown on Drawing No. 19/013m 001 V4 Fire Prevention Layout Plan.
- 4.9. These areas were chosen as they are adjacent to the areas where dust generation is most likely to occur and provide a full view of the site boundary to identify any dust being emitted past the site boundary. Additional monitoring will occur at any location on Site where dust can be seen to be building up. Monitoring is undertaken by all Site operatives.



Plant and Equipment

- 4.10. The following equipment will be used on the Site for the waste operations:
- Loading shovel
 - Shredder
 - Mechanical telescopic loader
 - Baler
 - Rim removal machine
 - Shaver
 - Chipper
 - Granulator
 - Cutter
 - Shearer
 - Pressure tester
- 4.11. All the plant and equipment used on the Site will be subject to maintenance checks in accordance with the procedures within the EMS.
- 4.12. All plant will be operated in a proper manner with respect to minimising emissions, for example, switching off plant when not in use and no-revving of engines etc. The Operator will implement a policy of replacing older machinery with new, lower emission machinery as it becomes available and as the business development allows.



5. Dust management and mitigation

Responsibility for Implementation of the Dust Management Plan

- 5.1. The Site Manager is responsible for the implementation of the Dust Management Plan and for ensuring that the mitigation strategies in place are adhered to. Where the Site Manager is unavailable to oversee the implementation of dust suppression measures, a suitably experienced Site Operative is delegated responsibility from the Site Manager.
- 5.2. This Dust Management Plan will be reviewed every four years or when a change in operations is deemed to have a potential effect on increasing dust emissions. The review process will amend any mitigation measures that have been identified as areas for improvement in reducing dust emissions on Site.
- 5.3. All staff members have received the necessary training to deliver dust suppression measures detailed within this Dust Management Plan. All staff will be given training on the EMS for the Site, which includes a Dust Procedure. All staff on the Site will be trained on the Dust Procedure which includes details regarding mitigation measure and monitoring/recording visual inspections. Site procedures will be communicated between staff via EMS training and weekly toolbox talks. Where new dust suppression measures are to be implemented refresher training will be provided to ensure staff remain competent. This training will be delivered by the Site Manager.

Sources and Control of Fugitive Dust Emissions

- 5.4. Table 5.1 details the potential sources of dust on the Site and which mitigation measures are implemented in order to break the source-pathway-receptor routes for dust emissions.
- 5.5. Table 5.2 lists the mitigation measures to control dust emissions at the Site.

**Table 5.1: Source-pathway-receptor routes**

Source	Pathway	Receptor	Type of Impact	Where relationship can be interrupted
Mud	Transportation of dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry.	Surrounding industrial units. Surrounding agricultural land to the north and west of the Site.	Mud on surrounding highways. Resuspension of mud as airborne particulates.	Site is dampened down by hoses when overly dry or dusty conditions present. The site is subject to checks in accordance with the Inspection Checklists. If it is observed that mud is building up on the surface of the site, then this will be cleared using a front shovel loader, or similar equipment. The local highways are subject to regular inspections in accordance with the inspection Checklists. If mud is observed to have been tracked off site on to the local highways, then a road sweeper will be deployed to clean the affected road. A road sweeping vehicle is hired and deployed when necessary to ensure no build-up of mud on the public highways and minimise the generation of dust. The wheel wash will be used by all vehicles exiting the Site to avoid mud being tracked out of the site.
Operation of plant	Atmospheric dispersion	Residential properties to the west.	Nuisance from visual soiling and dust clouds.	Dampening materials as its processed. Use of mobile dust suppression system. Operations (deemed to be creating dust emissions beyond the site boundary) will cease until such time as the emissions can be controlled or the conditions causing the emission (e.g., high wind) stop.
Vehicle / Plant movements	Atmospheric dispersion		Airborne particulates and build-up of dust on surfaces of site and local roads.	The Site is subject to regular housekeeping, see Appendix 1 Inspection Checklist. The wheel wash will be used by all vehicles exiting the Site. Access roads will be regularly checked and cleared. Water sprays will be used on Site to minimise dust emissions.
Tipping, treatment, and storage of wastes.	Atmospheric dispersion		Airborne particulates and build of dust.	When moving materials, drop heights from equipment and vehicles will be kept to a minimum at all times to



<p>Stored waste (outside of operational hours)</p>				<p>reduce the risk of wind entrapment causing dust emissions.</p> <p>Operations may be temporarily ceased in accordance with the Risk Matrix presented in Section 6.</p> <p>To minimise the risk of wind whipping of waste stockpiles causing dust emissions outside of operational hours the weather conditions will be assessed at the end of the day to identify if stockpiles need to be sprayed down before the end of the day.</p>
--	--	--	--	--

**Table 5.2: Mitigation Measures**

Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
Preventative Measures					
Site speed limit, 'no idling' policy and minimisation of vehicle movements on Site.	Reducing vehicle movements reduces dust emissions from the Site. Enforcement of the speed limit and limiting movements will reduce the chance and amount of re-suspension of dust by vehicle wheels.	There is a no-idling policy in place on the site for vehicles. Vehicle movements will be minimised by ensuring that the double handling of materials is avoided where possible. A 5mph speed limit is enforced on the entire Site.	5mph speed limit signage. Enforcement of speed limit by Site Manager and constant observation and reminders by Site operatives.	These measures will be implemented by staff training on the EMS and speed limit signs on the Site.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation measure(s) will be triggered. If there is mud on the public highway, then a road sweeper will be hired in and deployed to clean the surface. If excessive dust emissions from vehicle movements continue after these measures, then operations shall cease.
Minimising drop heights for waste.	Minimising the height at which waste is dropped should reduce the distance over which dust could be blown and dispersed by winds and reduces the chance of dust cloud generation from the depositing material.	The EMS will require that the handling of waste material on Site should be minimised at all times. Staff will be trained with regard to minimising drop heights.	This measure will be implemented whenever the Site is operational i.e. whenever material is being moved.	By plant operators lowering the grabs, shovels, conveyors etc. on the equipment being used to move potentially dusty materials.	Hoses will also be available to dampen surfaces and stockpiles to reduce dust generation. If excessive dust emissions continue after these measures, then operations shall cease.
Good housekeeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure the Site is regularly checked and issues	The EMS implemented on the Site will have a specific procedure for enforcing good housekeeping. On-site litter will be collected and disposed of daily by a Site Operative to keep the Site tidy.	These measures will be implemented whenever the Site is operational.	Good housekeeping is implemented by following the housekeeping procedure within the EMS and by carrying out site inspections.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation



Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
	remedied to prevent and remove dust build up.	Waste will be stored in designated areas and will not be allowed to escape from the Site boundary due to the presence of concrete walls.		Details of housekeeping checks are included in the Inspection Checklists, see Appendix 1 Inspection Checklists. Completed Maintenance Checklists are reviewed by the Site Manager on the day that they are completed.	measure(s) will be triggered e.g., water suppression.
Wheel washing	Vehicles exiting the site will use the wheel wash to minimise the tracking of mud out on to local highway.	All vehicles exiting the site will go through the wheel wash. The wheel wash is located on the road owned by the Operator, just outside the entrance and exit to the Site, so can be safely accessed by all vehicles.	All vehicles will go through the wheel wash on exiting the site.	All exiting vehicles will be directed to the wheel wash	A reason that the wheel wash may not be effective is if it was not operational e.g. insufficient water in it. Additional water would be added (Wheel wash is subject to regular Inspection checks) If the wheel wash is being used and mud is found to be tracked out onto the local highway, then a road sweeper will be employed to clean the affected road.
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	The EMS will state that all vehicles entering / exiting the Site must be sheeted to minimise the likelihood of dust emissions. Excessively dusty loads will not be accepted onto the Site.	Loading of potentially dusty materials on to a vehicle will be followed by closing of the sheet covers on that vehicle. Visual observation of incoming vehicles will take place. All vehicles carrying waste to the site will be sheeted at all times unless being loaded or unloaded.	The sheeting equipment will be activated and checked to ensure proper coverage before the vehicle is allowed to leave the site. Incoming vehicles that are not sheeted will be rejected from the site or sheeted immediately.	If excessive dust emissions are continued to be observed leaving the Site boundary, then the further mitigation measure(s) will be triggered. Materials may be dampened.



Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
Screening features	The Site is enclosed by 4m high concrete walls on the eastern boundaries of the site. This is where the treatment activities take place. Waste is stored in bays with 4m high concrete walls. These features prevent dust emissions across the boundary and screen nearby receptors. Storage bay walls, and offices or other buildings around the site also interrupt the transport of dust that has been entrained in the wind.	4m high storage bay walls around all stockpiles of shredded material.	No trigger for implementation.	Permanently in place. The condition of buildings and the bunding will be maintained – Inspection Checklists.	Operations shall cease temporarily and only resume once the dust source has been identified and mitigation measures have suppressed emissions or repairs have been made to structures, this will be determined by the Site manager.
Ceasing operations during high winds and/or exceptionally dry conditions.	Mobilisation of dust and particulates is likely to be greater during periods of strong winds or exceptionally dry conditions and hence ceasing operation at these times may reduce peak pollution events.	<p>During exceptionally dry and/or windy conditions, if any operations / Site movements cause or are likely to cause visible dust emissions beyond the Site boundary, or if abnormal dust emissions are observed within the Site, site waste operations may be suspended to avoid further dust emissions.</p> <p>The Site Manager will decide whether to cease operations as a result of weather conditions.</p> <p>This decision is based on a combination of factors, including those mentioned above. The conditions are recorded on the Inspection Checklists. The record includes an overall description of the weather conditions including, but not limited to, wind strength (e.g. windy, not windy), wind direction (e.g. towards northern boundary) and rain.</p>	<p>If excessive dust is being generated by the operations, then the Site Manager will notify staff and operations may be temporarily ceased.</p> <p>Operations commence once the wind has subsided and/or the area is dampened down.</p> <p>Prevailing weather condition monitoring (Visual observation) including wind strength, wind direction and rainfall. This monitoring will be recorded on the Inspection Checklists.</p>	The Site Manager makes the decision to cease activities that are causing the dust emissions.	N/A



Mitigation Measure	Description / Effect	Use on Site	Trigger for implementation	How is it implemented?	Further mitigation if not effective
Remedial Measures					
Road sweeper	Removes dust from the access road which otherwise could be entrained by vehicles entering and leaving the site.	<p>A road sweeping vehicle is hired to control the amount of mud on the Site access road and minimise the generation of dust when appropriate.</p> <p>The cleanliness of roads in the vicinity of the Site entrance are checked as part of the Inspection Checklists.</p>	Carried out as part of sites regular housekeeping, see Inspection Checklists. Following dust generation from Site surfaces which leads to dust emissions.	Site management will instruct the relevant trained operative to carry out the road sweeping. The Site will be swept as required.	Waste mist sprays. Cease vehicle movements.
Water suppression	Using mains water and hoses. This measure can remove particles from the air and dampen down dry / dusty materials.	Hoses will be in use at the Site to dampen surfaces and material to prevent dust emissions. The condition and integrity of the sprays will be checked as part of the Inspection Checklists in Appendix 1.	When dust generation is occurring which may lead to dust emission. When dust emissions are observed to be leaving the Site boundary.	When dust is being generated site operatives will connect the hose to the mains water supply and use it to dampen stockpiles, surfaces or processes that are generating dust.	If dust emissions still cross the boundary, then activities that generate dust. shall temporarily cease. Operations will resume once dust emissions have been suppressed, this will be determined by the site manager.



Other considerations:

Water availability

- 5.6. A mains water supply is available on the Site.
- 5.7. To prevent dust generation, site surfacing and material may be dampened down using water from hoses attached to the mains water supply.

In the event of a drought

- 5.8. During exceptionally dry and/or windy conditions if shredding operations or waste transportation cause or are likely to cause significant dust emissions within and beyond the Site boundary, activities may be temporarily suspended to avoid further dust emissions. This is decided by the Site Manager and will only happen after all mitigation methods have been implemented and dust emissions are still crossing the Site boundary.
- 5.9. Depending on the severity of the drought conditions, restrictions may be imposed on the amount of water available for use on Site from the water supplier (mains water supply).



6. Cessation of Operations for Dust Mitigation

- 6.1. The following section details the assessment process to be taken when determining if activities on Site should stop to prevent significant dust emissions.
- 6.2. Weather conditions are monitored each working day as part of the daily inspection checklist, see Appendix 1 Inspection checklists.

Estimating Magnitude of Risk

- 6.3. Table 6.1 provides a matrix for estimating the magnitude of risk from a potential hazard, considering both the probability and consequences of the hazard occurring.
- 6.4. The magnitude of risk determines the level of management required to reduce the probability of the hazard occurring.
- 6.5. In this management plan, the hazard is considered to be the significant emission of dust from the Site such that it could cause nuisance to local sensitive receptors. Table 6.1 describes this Risk Matrix applied to this assessment of risk.

Table 6.1 Estimating the magnitude of risk

	Magnitude of Risk	Consequence			
		High	Medium	Low	Negligible
Probability	High	Very high	High	Medium/Low	Very low
	Medium	High	Medium	Low	Very low
	Low	High/Medium	Medium/Low	Low	Very low
	Negligible	High/Medium/Low	Medium/Low	Low	Negligible

- 6.6. An assessment of the most common weather conditions and their potential to generate significant nuisance dust emissions from the activities on Site has been undertaken and is presented in Table 6.2 to Table 6.4.
- 6.7. The risk assessment is separated into 2 sections. In table 6.2 the operator must record the temperature and then proceed to the corresponding table. Tables 6.2 and 6.4 contain all common weather conditions and their risk magnitude. Actions required for each risk category are detailed in table 6.5.

Table 6.2 Temperature

Temperature	Action
Warm (Above 18°C)	Go to table 6.3
Cool (Below 18°C)	Go to table 6.4

Table 6.3 Risk matrix for warm weather

Conditions	Probability	Consequence	Risk magnitude
Wet, low wind (<3 Beaufort)	Medium	Negligible	Very Low
Wet, medium wind (>4 Beaufort)	Medium	Low	Low
Wet, high wind (>8 Beaufort)	Low	Medium	Medium/low
Dry, low wind (<3 Beaufort)	Medium	Low	Low
Dry, medium wind (>4 Beaufort)	Medium	Medium	Medium
Dry, high wind (>8 Beaufort)	Low	High	High



Table 6.4 Risk matrix for cool weather

Conditions	Probability	Consequence	Risk magnitude
Wet, low wind (<3 Beaufort)	Medium	Low	Low
Wet, medium wind (>4 Beaufort)	Medium	Low	Low
Wet, high wind (>8 Beaufort)	Low	Medium	Medium/low
Dry, low wind(<3 Beaufort)	Medium	Low	Low
Dry, medium wind (>4 Beaufort)	Medium	Low	Low
Dry, high wind (>8 Beaufort)	Low	Medium	Medium

6.8. The action required for each level is risk is provided in Table 6.5: Action required for each level of risk.

Table 6.5: Action required for each level of risk

Risk Magnitude	Action
Low	Continued implementation of preventative mitigation measures.
Medium	Continued implementation of preventative mitigation measures. Dust emissions are likely therefore remedial measures to be employed. Relevant activities* temporarily cease if preventative and remedial measures are not proving effective in controlling the dust emission. Relevant waste activity can resume upon implementation of additional mitigation if measures are effective. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is implemented and there are no significant dust emissions.
High	Continued implementation of preventative mitigation measures. Dust emissions are likely therefore remedial measures to be employed. Relevant waste activity may not be undertaken or will be temporarily ceased. Relevant waste activity can resume when the conditions no longer apply / additional remedial mitigation is effectively implemented and there are no significant dust emissions.

**Relevant activities: Activities identified as generating significant dust emissions or having the potential to generate significant dust emissions in such conditions.*



7. Monitoring

Visual Dust Monitoring

- 7.1. Dust emissions at the Site will be monitored by visual observation. This monitoring will take place on the northern, southern, and western Site boundaries.
- 7.2. The duration of visual monitoring will be during operational hours. It is expected that staff members will also check for dust emissions as they approach and leave the Site.
- 7.3. It will be the responsibility of every member of staff to monitor the dust emissions on the Site as they undertake their daily tasks.
- 7.4. Reports will be made to the Site Manager regarding dust emissions when dust is observed leaving, or about to leave, the Site boundary.
- 7.5. If excessive dust emissions (dust clouds) are observed, then the Site Manager will establish what is causing the excessive dust emission to be generated and take remedial action. The results of the investigation and what action was taken will be recorded and retained.
- 7.6. Dust monitoring will take place on the western, northern, and southern site boundaries as shown on Drawing No. 19/013m 001 V4 Fire Prevention Layout Plan . These areas were chosen as they are adjacent to the areas where dust generation is most likely to occur and provide a full view of the site boundary to identify any dust being emitted past the site boundary. Additional monitoring will occur at any location on Site where dust can be seen to be building up. Monitoring is undertaken by all Site operatives.
- 7.7. The recorded visual monitoring checks will be carried out by a Site Operative, who will have been trained in accordance with the procedures within the EMS. Remedial actions required will be specified and identified on the Inspection Checklists.
- 7.8. Recorded visual monitoring will be undertaken at least twice a day, for a minimum of five minutes each time. They will take place at the beginning of the working day and when operations with the highest potential to produce dust are taking place. At the time when the Site is considered to have the highest potential for dust emissions, visual monitoring recorded checks will be completed. This is considered to be the most beneficial methods to ensure that mitigation measures on Site are effective.



8. Actions when an alarm is triggered

- 8.1. Monitoring will be carried by visual observation and assessing whether dust emissions are excessive i.e. leaving the Site boundary.
- 8.2. The staff member who identified the dust generation/ emission will raise the alarm by notifying the Site Manager.
- 8.3. If the Site Manager confirms that dust is being generated and causing dust emissions from the Site, they will take remedial action.
- 8.4. Remedial measures are stated in Table 5.2: Mitigation Measures.



9. Reporting and complaints response

- 9.1. The EMS on the Site will have a procedure for responding and dealing with complaints. A complaints form will be available on Site and must be filled in and kept on file whenever a complaint is received in accordance with the EMS complaints procedure, see Appendix 2 Complaints Form.

Engagement with the Community

- 9.2. The Site Notice Board will be placed at the entrance of the Site with the following information:
- The Permit holder's name (Kingpin Recycling Limited).
 - An emergency contact name and telephone number.
 - A statement that the Site is permitted by the Environment Agency
 - The Environmental Permit reference.
 - The Environment Agency national numbers, 03708 506506 and 0800 807060 (incident hotline).
- 9.3. The provision of the above information will ensure that members of the community can contact the Operator should they be concerned by dust emissions or wish to make a complaint. This also applies to any events that may happen when the Site is unmanned / not operational.

Reporting of Complaints

- 9.4. Should a complaint regarding dust be received by the Site, the complaint will be recorded on the Complaints Form in the EMS and investigated in accordance with the Complaints Procedure within the EMS. The Complaints Form will record who made the complaint, what the complaint was about and what has been done to resolve the issue and make sure this does not happen again. A copy of the Complaints Form is included, see Appendix 2 Complaints Form.
- 9.5. The Site Manager will identify what caused the excessive dust emission to be generated. This generation may have been caused by failure of site machinery or dust procedures. If the excessive dust emission has been caused by a procedure not being carried out properly, then staff will receive further training on the dust procedures and site management. If the excessive dust emission has been caused by plant failure, then the plant will be repaired as soon as possible.
- 9.6. All complaints will be acknowledged and investigated, with resultant actions reported to the complaint. Any complaints received by the Environment Agency relating to dust emissions from the site are dealt with on the same day.

Out of Hours Arrangements

- 9.7. In the event of an out-of-hours complaint or incident occurring at the Site related to dust emissions, then a Director can be contacted via phone call.
- 9.8. The Director can attend the Site or instruct a relevantly trained Site Operative to attend the Site in their absence. On arrival at the Site, the cause of the dust emission will be identified, and the most suitable corrective measure will be instigated.
- 9.9. At the end of each working day weather conditions are to be assessed to determine if additional spraying of stockpiles is required. These conditions include prolonged hot, dry weather (>20 degrees) and windy conditions (Beaufort scale >4). If these weather conditions present a significant risk, then waste stockpiles will be dampened prior to the site closing.

Management Responsibilities

- 9.10. Site staff will be responsible for dust management issues and detecting/reporting dust emissions. All members of staff will be given training on the EMS for the Site, which will include a Dust Procedure. All staff on the Site will be trained on the Dust Procedure which will include details regarding mitigation measures and monitoring/recording visual inspections.

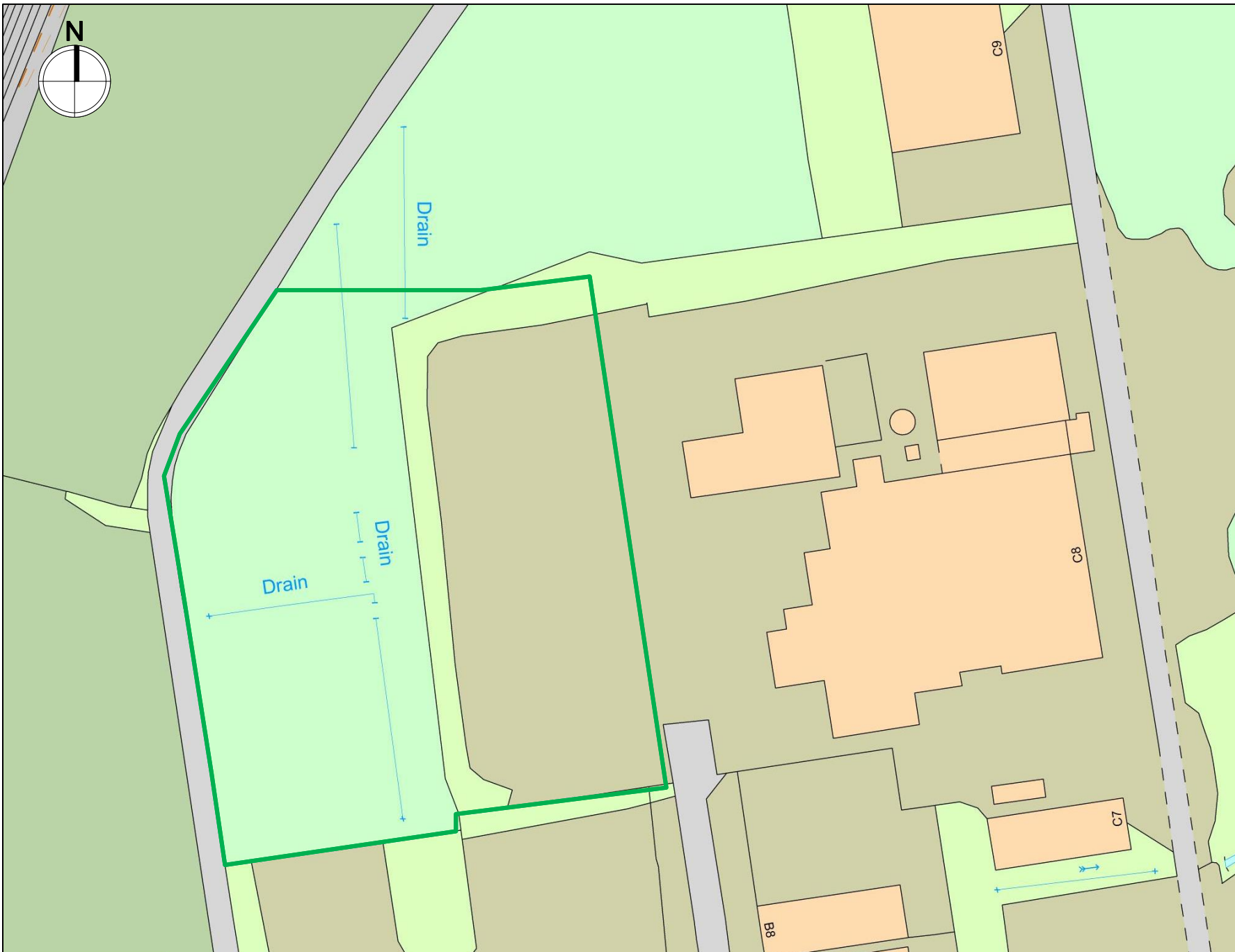


- 9.11. On receipt of a complaint the Site Manager will investigate and establish the cause. The most effective corrective or preventative action must then be determined to prevent future emissions occurring. Where additional time is required in order to implement the appropriate corrective or preventative action the complainant will be contacted with details of the actions to be implemented and the estimated timescales for completion. The maximum response time for investigating the cause of the complaint and contacting a complainant will be two working days.
- 9.12. Should numerous complaints be received at the Site regarding the same issue, the cause of the complaint(s) will be investigated in accordance with the Accidents, Incidents & Complaints Procedure within the EMS. Operations on the Site will cease, should excessive dust emissions be seen leaving the boundary following the implementation of additional mitigation measures or when instruction from the Environment Agency to cease operations has been received.



Drawings

Drawing No. 19/013k 001	Extended Permit Boundary Plan
Drawing No. 19/013m 001 V4	Fire Prevention Layout Plan
Drawing No. 19/013f 001 V3	Sensitive Receptors Plan



Kingpin Recycling Limited

Client Kingpin Recycling Limited

Title Extended Permit Boundary Plan

Drawing No. 19/013k 001

Site Unit C8,
Wem Industrial Estate,
Soulton Road,
Wem,
Shropshire,
SY4 5SD.

Date 19/07/2022

Scale 1:1750

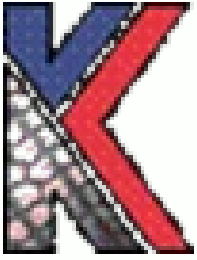
Key
 Permit Boundary



T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



Kingpin Recycling Limited

Fire Prevention Layout Plan

19/013m 001 V4

Kingpin Recycling Limited,
Wem Industrial Estate, Soulton
Road, SY4 5SD

Scale: 1:900

22/01/2024

Created by: LR
Checked by: TW



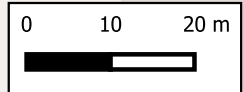
T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



- - - 3m high fencing / kerbing
- ▲ Electricity cut-off
- ▲ Water cut-off
- Noise bund
- Exit or Entrance to Site
- 3m Concrete Wall
- Fuel Storage
- ◆ Fire extinguisher
- Quarantine Area
- Spill kit
- Weighbridge
- Site Office
- Mobile Plant Storage
- Waste Reception Area
- Road on Site
- Bays
- Baling and shredding
- - - Proposed Extension Area
- - - Permit Boundary



(C) OS Maps

Kingpin Recycling Limited

Client	Kingpin Recycling Limited
Title	Sensitive Receptors Plan
Drawing No.	19/013f 001 V3
Site	Unit 8, Wem Industrial Estate, Soulton Road, Wem, Shropshire, SY4 5SD.
Date	27/05/2022
Scale	1:14,000

Predominant Wind Direction

(Data from nearest weather station – Shawbury)



WESTBURY ENVIRONMENTAL

T 01952 879705 E info@westburyenv.co.uk

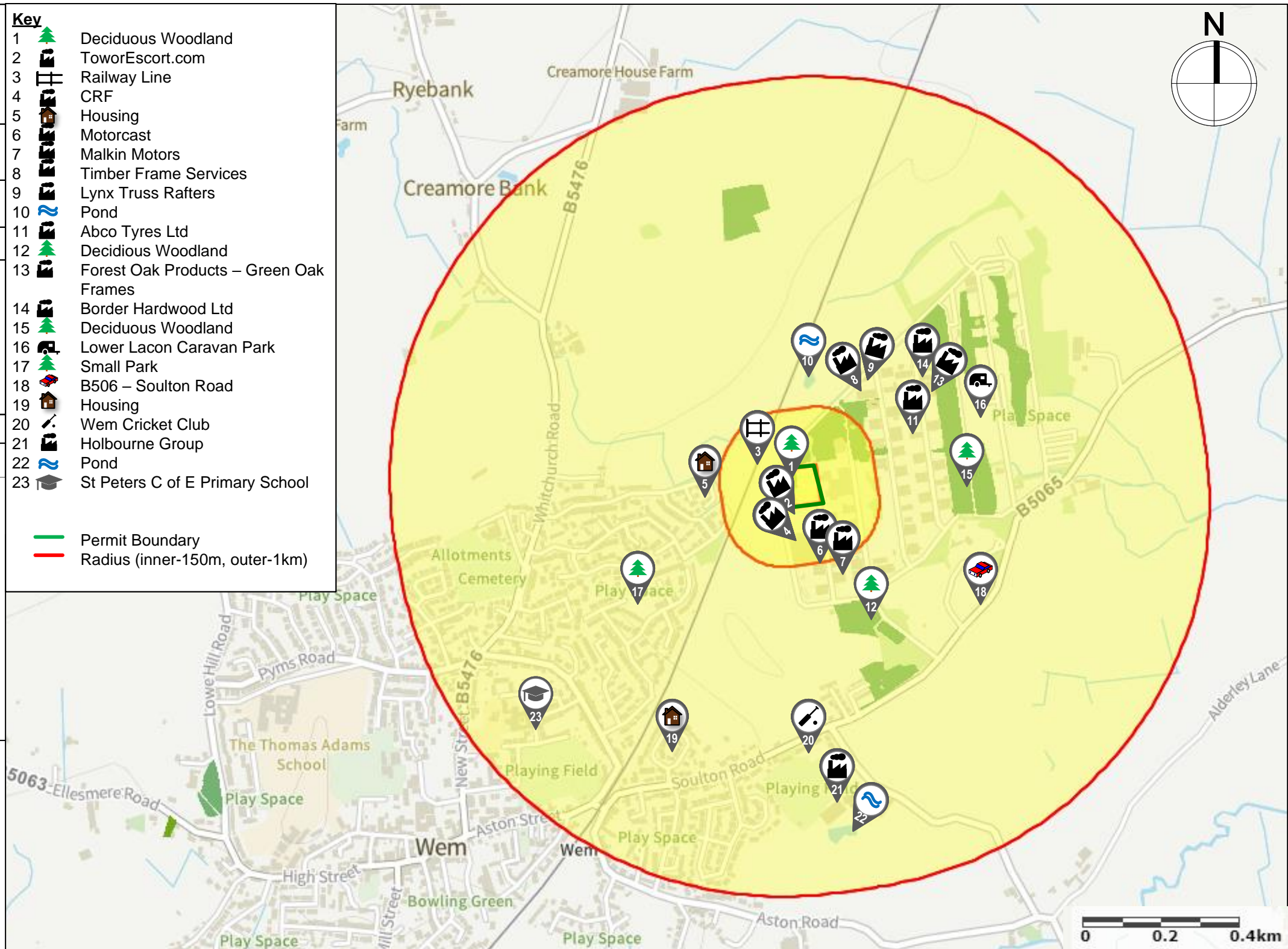
A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk

Key

- 1 Deciduous Woodland
- 2 TowerEscort.com
- 3 Railway Line
- 4 CRF
- 5 Housing
- 6 Motorcast
- 7 Malkin Motors
- 8 Timber Frame Services
- 9 Lynx Truss Rafter
- 10 Pond
- 11 Abco Tyres Ltd
- 12 Deciduous Woodland
- 13 Forest Oak Products – Green Oak Frames
- 14 Border Hardwood Ltd
- 15 Deciduous Woodland
- 16 Lower Lacon Caravan Park
- 17 Small Park
- 18 B506 – Soulton Road
- 19 Housing
- 20 Wem Cricket Club
- 21 Holbourne Group
- 22 Pond
- 23 St Peters C of E Primary School

- Permit Boundary
- Radius (inner-150m, outer-1km)





Appendix 1

Inspection Checklists



Inspection Checklists

Daily Inspection Checklists			
Item for Visual Inspection	Aspects for Inspection	Checked?	Remedial Action Required?
Litter	None present within yard area.		
	None present within waste storage areas.		
	None present within treatment building.		
	None present along site boundaries (concrete walls etc.).		
Fire	Fire watch daily at the end of the working day to inspect for signs of self-heating, smoke and fire, and ensure exhausts are cool etc.		
	Plant and equipment will be shut down 1-hour before the Site closes.		
Dust emissions	<p>No dust emissions should be escaping the boundary of the site.</p> <p>Recorded visual monitoring will be undertaken at least twice a day, for a minimum of five minutes each time.</p>		
Mobile plant	Mobile plant should not have defects.		

Date: _____

Completed by: _____

Signature: _____



Weekly Inspection Checklists			
Item for Visual Inspection	Aspects for Inspection	Checked?	Remedial Action Required?
Site Security	Gates for the entrance to Site must be working and lockable.		
	Concrete walls, fencing, kerbing and bund along the permit boundary of the Site in good condition.		
Waste Storage	Pile heights should be no more than 3m in height in the bays.		
	Pile are not exceeding the dimensions included in the Fire Prevention Plan.		
Fire Quarantine Area	Fire Quarantine area is clear <i>(There should be an available space on site measuring 8m x 8m, that is at least 6m away from combustible waste.)</i>		

Date: _____

Completed by: _____

Signature: _____



Monthly Inspection Checklists			
Item for Visual Inspection	Aspects for Inspection	Checked?	Remedial Action Required?
Hoses	Hoses should be in good condition and free from holes.		
Drains	Drains should be free from blockages.		
Electrics	Wires should not be frayed / damaged.		
	Sockets should not be overloaded.		

Date: _____

Completed by: _____

Signature: _____



Annual Inspection Checklists			
Item for Visual Inspection	Aspects for Inspection	Checked?	Remedial Action Required?
Fire extinguishers	Fire extinguishers should function properly.		

Date: _____

Completed by: _____

Signature: _____



Appendix 2

Complaints Form



Form No. 6.1c Complaints Form

Who made the complaint?	Name:	
	Address:	
	Phone No.:	
Date and time they made the complaint:		
What happened? What was it about?		
Was anyone else aware of this – other neighbours or your staff? If so, who?		
Did the complaint relate to your site? If so, what happened? What went wrong?		
What have you done to make sure that it does not happen again?		
Was there any significant pollution – for example: dust, odour or noise outside the Site or spillage of polluting liquids onto the ground, into a drain or a watercourse?		
If there was, then you must notify the Environment Agency on 0800 807060 and any other relevant regulators. Have you done so? Yes <input type="checkbox"/> No <input type="checkbox"/>		At what time did you phone?
You must also write or send an email to confirm this to your local Environment Agency office. Have you done so? Yes <input type="checkbox"/> No <input type="checkbox"/>		What date did you contact?
Please print and sign your name:		