Emissions Management Plan

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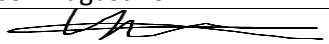
Customer:	Martin Vaughan	Tazrock Ltd
Requirement:	Emissions Management Plan	Bespoke application
Date of Submission:	05th August 2022	
Signature:		Gareth Danter-Hill
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Contents

1. INTRODUCTION

1.1 BACKGROUND AND CONTEXT

1.1.1 Environmental Focus Ltd has been commissioned by Tazrock Ltd. (`***the Operator***`) to prepare an Emission Management Plan (EMP) that focusses mainly on Dust generation to support an application for a bespoke permit at Unit 3, Hirwaun Industrial Estate, Fifth Avenue, Hirwaun, Aberdare, CF44 9UP (`***the Site***`).

1.1.2 The requirement for a EMP is due to the Site being located within proximity to several SSSI designations, a SAC and non-statutory SINC designations and that the specified activities could give rise to dust outside of the per the boundary. Reference should be made to ***Diagram 1*** for location and context.

1.1.3 Currently, the facility is non-operational. The Operator intends to accept non-hazardous bituminous materials that will be processed on site to allow the material to be re-used at third party sites. The activities and quantities of waste would be permitted under a Standard Operation but for the proximity of the environmentally significant designations.

1.1.4 This EMP has been prepared in accordance with H5 Dust and Particulate Emission Management Plan Template and Gov.uk Guidance documents `Control and monitor emissions for your environmental permit` (published 1st February 2016). It provides an assessment of the production of fugitive emissions relating to waste handling operations on the Site and aims to identify potential sources of dust emissions, the associated potential impacts along with detailed measures to be implemented at the Site to mitigate dust and particulate matter.

1.2 THE SITE

1.2.1 Located on the perimeter of a well-known and established industrial estate, the Site lies c.2km north west of the town of Hirwaun, c.1.5km south west of Pontbren Llwyd and c.1.5km north east of Rhigos. In closer proximity, the site is bordered (largely to the south) by other heavy industry and manufacturing areas. Beyond this, in the wider landscape, the land-use is dominated by rural pastures, agricultural land, intermittent villages and a large open cast mine.

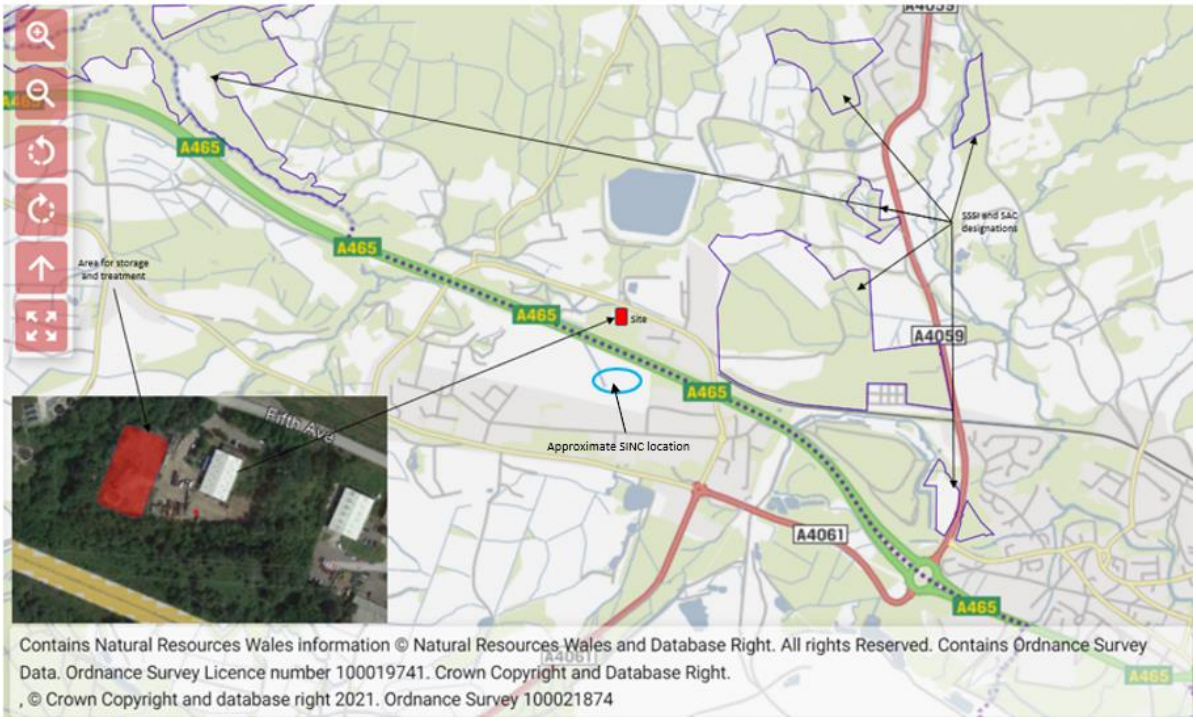
1.2.2 Along the southern boundary and orientated parallel to the Site is the A465 Heads of the Valleys Road.

1.2.3 The entire surface of the Site comprises of hardstanding across all areas of treatment and storage. The impermeable surface is limited to where the vehicles are parked and stored. Encompassing the entire boundary of the Site are a belt of trees and hedgerows along with fencing at 2m height in the front road facing aspect. Additionally, there are to be 3m high bunding located around the edges of the treatment and storage area within the site to help reduce dust emissions. For the site layout see the attached site plan.

1.2.4 The Site is not located in a designated Air Quality Management Area (AQMA) Maps | Air

Quality In Wales (gov.wales). At its closest extent, an AQMA boundary declared by Rhondda Cynon Taff Council, the Aberdare Town Centre AQMA, is located c. 7.5km to the southeast (designated for NO2).

Diagram 1 Location of Environmental Receptors



2 METEOROLOGICAL CONDITIONS

2.1.1 Statistics based on observations taken from the nearest weather station at Ebbw Vale/Rassau (c. 20 km east of the Site) between April 2013 and June 2022 indicate that although the prevailing winds are variable, they originate predominantly from the south-west with an average speed of 6-7 knots. The rose diagram in ***Diagram 2*** is conducive of this showing the wind strength distribution and direction is also chiefly from the south west and south-south west (see ***Diagram 3***). Data obtained from Wind & weather statistics Ebbw Vale/Rassau - Windfinder

Diagram 2 Average Prevailing Wind Direction and Speed

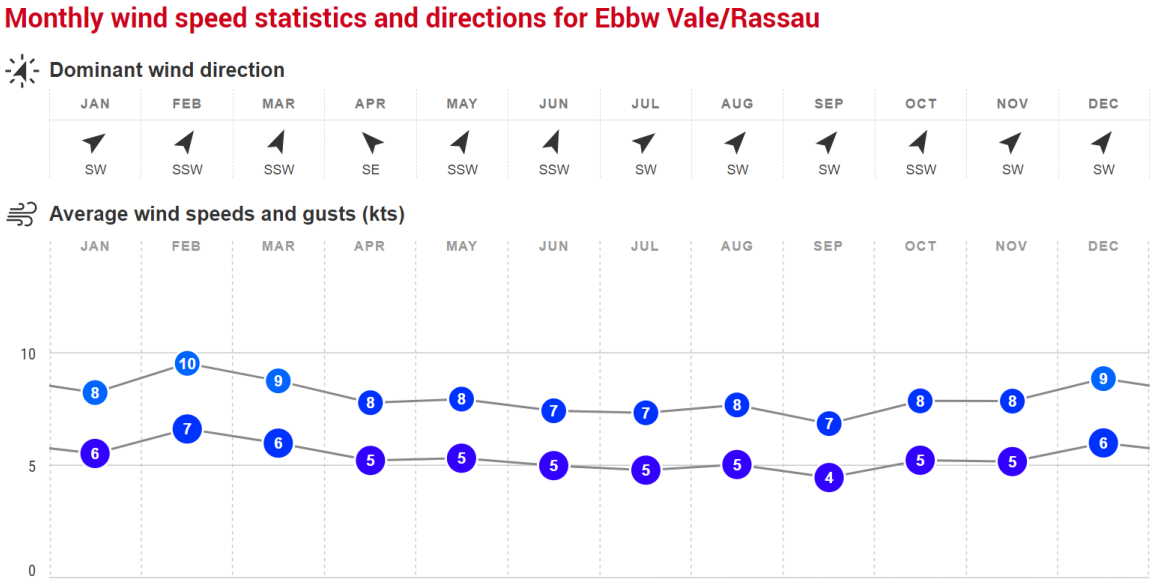
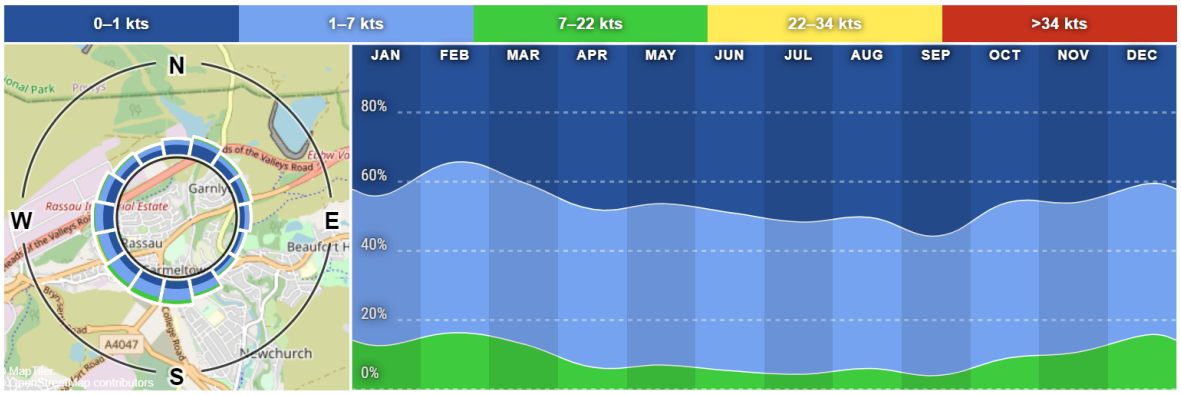


Diagram 3 Rose Diagram showing Wind Strength Distribution and Direction



2.2 SENSITIVE RECEPTORS

2.2.1 A review of potentially sensitive receptors within a 1km radius of the Site has been undertaken using the hierarchy of hospitals, schools, childcare facilities, elderly housing and convalescent facilities i.e. areas where inhabitants are more vulnerable to the adverse effects of exposure. Food manufacturers, major infrastructure and protected sites such as SSSIs, SPAs and SCAs are also considered, see ***Table 1*** and ***Diagram 4***. Residential properties are considered separately, and their locations are detailed in ***Table 2*** and ***Diagram 5***.

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

2.2.3 A summary of the identified potentially sensitive receptors along with the overall exposure levels and principal receptor features has been tabulated below. For each receptor within the categories the determination of the overall risk classification has been based on the dominant risk level. Receptors are denoted by the numbered location points in ***Diagrams 4*** and ***5*** for reference.

2.2.4 Institute of Air Quality Management (IAQM) Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016) states that *"it is commonly accepted that the greatest impacts will be within 100m of a source and this can include both large (>30 µm) and small dust particles. The greatest potential for high rates of dust deposition and elevated PM10 concentrations occurs within this distance. Intermediate-sized particles (10 to 30 µm) may travel up to 400m, with occasional elevated levels of dust deposition and PM10 possible. Particles less than 10 µm have the potential to persist beyond 400m but with minimal significance due to dispersion."*

2.2.5 Within a 1km radius of the Site, there is only one protected site such as SSSI`s, SAC, SPA or RAMSAR identified. The Cors Bryn y Gaer designation (and local authority SINC) is located 450m to the east. There is however a non-statutory site, a SINC, designated by Rhondda Cynon Taff County Borough to the South of the site (135m). Please note that this is not included in the sensitive receptor details provided in Tables 1 and 2 or the Diagrams 4 and 5 as these deal with anthropogenic receptors. The location in relation to the Site is depicted in Diagram 1; as such, reference should be made to this in Section 1 and the attached risk assessment. However, the mitigation measures detailed within this plan will be used to reduce the risk to the environmental designations.

Table 1: Representative Sensitive Receptors (excluding residential properties). (Reference Point refers to locations on Diagram 4)

Receptor Hierarchy	Facility and Reference Point	Distance and Direction from Site (m)	Overall exposure level	Comments
Medical Facilities				No medical facilities in the 1km radius of site
Schools				No schools within 1km radius of the site
Childcare				No childcare facilities within 1km radius of the site
Elderly Housing				No elderly housing or facilities within 1km radius of the site
Recreational Areas				No recreational facilities within 1km radius of the site

Places of Worship				No Places of Worship within the 1km radius of the site
Other	A465 Heads of the Valley Road (1)	70 S	Low	Directly South of the Site and within near proximity. The prevailing wind is towards the opposite direction so any dust impacting in this direction would be minimal. However, when the wind comes from the North or Northeast, this area could be the most impacted.
	Penderyn Reservoir (2)	400 N	Medium	Relatively distal from the Site for PM10 fallout. However, the prevailing wind will take particulate towards the reservoir.
	Authentic Curry (3)	700 SE	Low	Not downwind of prevailing conditions and distal from the Site.
	Coffee House & Sandwich bar (4)	750 SE	Low	Not downwind of prevailing conditions and distal from the Site.
	Lindy's Diner (5)	600 SW	Low	Not downwind of prevailing conditions and distal from the Site.
	Fifth Avenue Hotel (6)	400 W	Low	Not downwind of prevailing conditions and distal from the Site.

Diagram 4: Sensitive Receptors within a 1km radius of the Site

Table 2 Distances to Selected, Representative Residential Properties/ Industrial Locations (reference point refers to location numbered on diagram 5).

Location in relation to the Site	Reference Point	Min/Max Distance(m) from Site Boundary	Overall Exposure Levels
W/ NW	Industrial Estate North of A465 (7)	150-500	Medium
SW	Industrial Estate South of A465 (8)	350-900	Low
SW	Residential Housing Estate adjacent to the highway, Halt Road (9)	800-1000	Low
W	Farmstead (10)	750	Low
NW	Farmstead cluster (11)	380-850	Low
NE	Farmstead (12)	860	Low
SE	Industrial Estate South West of A465 (13)	350-900	Low
E	Residential property next to hotel (14)	350	Medium

Diagram 5: Residential/Industrial Sensitive Receptors within a 1km radius of the Site

2.2.6 Other sources of aerial emissions, details of which can be seen in **Table 3**, have been identified in this review and are considered in context within the local industrial estates. Contributing factors include any industry or transportation type that may generate dust and particulate matter from operational processes within a 1km radius of the Site. Also included is Tower Opencast Mine, this is just over 1km but a significant source of potential

emissions in the area.

Table 3 Other Potential Emission Creating Operators

Company	Address	Type of Business	Distance from site boundary (m)
Scott Parnell—Building Supplies	Hirwaun Industrial Estate	Industrial	350
Welsh Tyre Recycling—Waste site	Hirwaun Industrial Estate	Industrial	400
Lift and Shift--Haulage	Hirwaun Industrial Estate	Vehicle Hire	600
Wyetech Recycling—Waste site	Hirwaun Industrial Estate	Industrial	450
Walters—Civil Engineering	Hiwaun Industrial Estate	Industrial	530
Bryngolwg Farm—Inert site	Bryngolwg farm, CF44 9UH	Industrial	780
Tower Regeneration--Mine	Hirwaun Industrial Estate	Industrial	1040

3 MANAGEMENT AND STORAGE OF WASTE

3.1 WASTE DELIVERIES

3.1.1 All vehicles delivering wastes to the Site stop at the gate and are visually checked. All site staff are suitably trained and follow documented EMS procedures. The receiving member of staff examines waste descriptions at the point of reception and the information is checked against the six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note or Season Ticket and against the waste types permitted by the Environmental Permit.

3.1.2 A banksman instructs the drivers to reverse into the appropriate area within the waste storage area as appropriate, for off-loading to ensure materials are stored and processed separately. This helps to ensure the cleanliness of recyclable materials is maintained and materials are correctly stored and handled.

3.1.3 A visual inspection of the contents of all waste loads, including any received in enclosed containers, is made during deposit.

3.1.4 Any discrepancies found as a result of the checks detailed above results in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:

- Referral to a senior member of staff on site;

- Referral to the waste producer to confirm the nature of the waste load;
- Referral to the waste carrier's base;
- Referral to National Resources Wales;
- Redirection of delivery vehicle off Site, to a suitably authorised facility; and
- If the waste has been discharged on the floor, removal of the waste to a secure area, prior to off-Site removal either to the waste producer or suitably authorised facility.

3.1.5 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.

3.1.6 All outgoing wastes for disposal have the relevant Waste Transfer Notes.

3.1.7 Records of all incoming waste loads are kept on Site or in a secure off-Site location in accordance with Duty of Care and requirements of the Environmental Permit.

3.1.8 As part of the Waste Acceptance Procedures for the Site, waste producers are required to provide details of any precautions that should be taken at the Site to control emissions. A review has been carried out for each waste type with regards to the risk of generating emissions and is categorised in **Table 4** below as either a low, medium or high risk.

3.1.9 Wastes comprising solely of dust are not accepted at the Site. If upon receipt at the Site and on inspection a waste stream is incorporated with a lot of dust, it will not be accepted at the Site. It is recognised however that within the waste delivered to the Site there is the potential for it to contain quantities of dust. On deposit, if large amounts of dust are identified within a load, it will be dampened down with the water bowser or a hose.

3.1.10 **Table 5** identifies all the treatment processes that are to be undertaken at the site. Each stage of the process has been identified and a subsequent risk rating has been applied for each stage. An overall rating has been given for the waste treatment sector of the site. For all medium and high rated processes, the mitigation measures detailed in this plan will be initiated to lessen the risk of dust emissions leaving site or being created in the first instance. There will be different levels of mitigation required depending on the level of potential (or actual) dust release.

3.1.11 Waste reception/export factor in the loading and unloading of transport vehicles, the treatment processes take account the internal movements of waste, to get to the area of plant required for treatment if required (for example, the movement of waste from the reception area to the screening bay).

3.1.12 Permitted wastes are shown in **Table 4** below.

Table 4 Waste Streams Accepted at the Site

Waste Code	Description	Dust Risk
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**	
17 03	**Bituminous mixtures, coal tar and tarred products**	
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01*	Low

Table 5 showing the individual treatment processes and risk rating for dust creation

Treatment	Treatment stage	Risk for each stage	Overall Dust risk
Bituminous Processing	Reception, storage, treatment, export	Low, Low, Med, Low	Low

4 OVERVIEW OF WASTE PROCESSING AND NORMAL EMISSION CONTROLS

4.1 BITUMINOUS AGGREGATE PRODUCT (BAP) REPROCESSING SITE

4.1.1 The current proposal is that the site accepts up to 100,000 tonnes of non-hazardous bituminous materials per annum. Waste arises predominantly from the local area and are delivered by HGVs and tippers.

4.1.2 The BAP reprocessing site comprises two large reception areas identified for material processing and storage. The storage areas are spilt between pre and post processing. The maximum storage capacity is 20-25,000T at any one time, however, due to the high turnaround of the material this figure is unlikely to be reached. The plant on site has the capability to process up to 350T/day, however, due to the input levels predicted (1,000-2,000T/month), this figure is likely to be much lower.

4.1.3 Waste delivery vehicles are directed to reverse into the appropriate bay within the site according to availability.

4.1.4 Waste loads are tipped onto the floor within the reception area and bulked up temporarily pending screening. All waste deposit, bulking up, screening, storage and loading for off-Site removal takes place within the waste processing area of the site.

4.1.5 The activities associated with the BAP processing typically produce negligible quantities of dust and emissions. The screening of wastes is the only activity of processing and so carries the highest risk. However, due to the nature of the waste accepted for screening,

the risk is deemed as low due to the low dust emitting waste type to be treated (being encased in bitumen means that no dust escapes the bound surface). As a precaution and to ensure potential emissions are not dispersed, dust abatement/monitoring techniques are carried out on-site and are outlined in the following points.

4.1.6 The screening plant is fitted with a dust abatement system; including an internal sprinkler system that can be switched on and off when required. The operation will be initiated as a first response to any dust identified within the visual monitoring rounds detailed within Table 7. This is the most likely measure to control dust emissions at source when processing.

4.1.7 A water tank is available on site for damping down upon reception, storage and loading to the screening plant if required. This is manually operated by the supervisor and is refilled by rainwater (or tap during drought). The tank has a capacity of 2,000l and is only to be used when dust is noted to be leaving the site boundary.

4.1.8 Post screening, the BAP is to be stored under a shelter (specification attached) to reduce impacts from the weather (wind) potentially creating dust emissions leaving site. The shelter, located in the most protected area of the site, consists of an open front and back with protection from the sides and above. The sides and roof of the shelter are fixed, constructed of metal shipping containers and industrial canopy material. The material to be removed from site is loaded from here.

4.1.9 Loading of vehicles is undertaken with as low as possible drop heights and the vehicles are sheeted as they leave.

4.1.10 All potential dust creating activities on site are located as far from the closest receptors as possible.

4.1.11 All on site vehicles are limited to 10mph speed limits to prevent dust creation from traffic across the site.

4.1.12 The yard areas of the site are swept daily to ensure that dusts do not build up. In periods of prolonged dry weather (7 days without rain), water sprays will be used across all operational site surfaces to contain dust. This will include the internal roadway area of the site that leads from the operational area to the main entrance off the road.

4.1.13 The Site is managed by people who have appropriate qualifications and experience, and who are technically competent and familiar with the design and operation of the Site. A site-specific risk assessment and Environmental Management System (EMS) is adhered to minimise the risk of the dissipation of fugitive emissions which could cause pollution or loss of amenity to the environment or any harm to human health.

4.1.14 The main office and workshop acts as a barrier to the east.

4.1.15 Working hours will be limited to 08:00-17:00 Monday to Friday and 08:00-13:00 on Saturday.

4.1.16 Traffic management on site will ensure that only 2 waste deposit vehicles enter the site at any one time to limit the amount of tipping/loading activities.

4.1.17 Machinery used on site will not be permitted to be left idling.

4.1.18 Drop heights will be minimized where possible.

4.1.19 All machinery in operation on site will be maintained in accordance with the manufacturer instructions.

4.1.20 Throughout the life of the Site, the operations will be subject to inspections by management and may have recorded visits from officers of National Resources Wales (NRW). The Site operations and documented procedures will be reviewed and improved as necessary in accordance with site EMS.

4.1.21 The surfaces and containment area are inspected regularly to check for any defects or damage to their integrity. Any necessary maintenance will be recorded.

4.2 MATERIAL EXPORTED OFF-SITE

4.2.1 All wastes are dispatched from the Site in suitably enclosed or sheeted vehicles to authorised facilities in accordance with the Duty of Care and Waste Transfer Note procedure to ensure dusty emissions are not discarded beyond the boundary of the Site.

Material rejected from the Site is issued with a record stating why, when and from which contract the waste was provided. This record is held on Site for NRW to inspect.

5 DUST EMISSIONS MANAGEMENT

5.1 RESPONSIBILITY FOR IMPLEMENTATION OF THE EMP

5.1.1 The Site Manager and Supervisor will oversee the implementation of the EMP and ensure that the methods detailed within this EMP provide effective emission mitigation.

5.1.2 Where the responsible individual is unavailable to supervise in the implementation of dust suppression measures, a suitably experienced Site operative will be allocated responsibility.

5.1.3 If dust emissions continue to be observed following the use of the dust suppression measures outlined above, this EMP will be reviewed and additional measures such as fixed suppression systems considered.

5.1.4 Amendments of the EMP to reflect any potential improvements will be made during the 12-monthly review process (also reviewed if complaints are received).

5.1.5 Review of all management documents will be undertaken by third party companies to ensure fairness and honesty.

5.1.6 The site manager who will administer the implementation of the EMP, has been assessed

in the implementation of Site control measures as part of the job role and therefore is deemed proficient to execute this EMP.

5.1.7 During the induction process, all staff members will be trained in the dust suppression and reduction measures outlined in this EMP. Refresher training will be provided in the scenario where additional measures have been introduced to ensure staff remain competent.

5.1.8 The EMP will be reviewed at least annually or following any adjustments in operations which have the potential to increase the level of exposure to surrounding sensitive receptors.

5.1.9 A housekeeping/checklist is to be used across the site and is included as part of the EMS.

5.2 SOURCES AND CONTROL OF FUGITIVE EMISSIONS

5.2.1 Detailed below are examples of potential sources of fugitive emissions associated with all the operations and activities at the Site:

- Vehicles entering and/or leaving the Site with mud on wheels, and tracking dust on to or off the Site;
- Debris falling off lorries which arrive uncovered;
- Vehicles and plant moving around the Site;
- Road vehicles tipping waste;
- Site surfaces (i.e. the ground, plant and equipment);
- Loading wastes on to vehicles for removal off-Site to authorised facilities and loading the material into the screen;
- Particulate emissions from the exhaust of vehicles/plant/machinery on site;
- Plant operation;
- Defective plant.

5.2.2 **Table 6** below details the measures to be applied to the Site for each of the sources outlined above to break the source-pathway-receptor routes.

5.2.3 Preventative and remedial measures to initiate on the Site to alleviate potential fugitive emissions are tabulated in **Table 7** below. Visual monitoring for off site emissions will be used to both escalate the measures required and to de-escalate them when the emissions are back under control.

Table 6 Source-Pathway-Receptor Route

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted through mitigation
Mud	Tracking dust on wheels and vehicles. Mud dropping off wheels/vehicles when dry	Neighbouring units within the Industrial Estate	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	• The external yard comprises engineered concrete surface. Vehicles will not be required to drive over any unpaved areas for long distances. • Inspection of vehicles and, where required, removal of any mud from the wheels etc prior to exiting the Site. • In the unlikely event that mud or dust is identified as an ongoing issue a road sweeper can be provided by a nearby supplier.
Debris	Falling off lorries	Neighbouring units within the Industrial Estate	Visual build-up and soiling of dust and particulates, also consequent resuspension into the air column	• Waste loads will be delivered to the Site in contained waste vehicles or sheeted vehicles. • Efficient and prompt unloading of vehicles into the designated area. • All areas subject to daily housekeeping. • Where debris is identified as an ongoing issue a road sweeper can be provided from a local road sweeper hire company.
Vehicles and plant moving	Atmospheric dispersion	Surrounding sensitive receptors and neighbouring units within the Industrial Estate	Airbourne particulates	• All areas, vehicles and plant machinery are subjected to daily housekeeping comprising of sweeping and wiping down and removal of loose particles. • 10mph speed limits imposed across the site. • Traffic management system in operation to limit quantity of vehicles.
Tipping and storage of wastes Site surfaces used for storage and movements	Atmospheric dispersion	Surrounding sensitive receptors and neighbouring units within the Industrial Estate	Visual soiling and dispersion of airborne particulates.	• Site bounded by fencing, vegetation and a 3m bund which aids as a barrier. • Minimise source strength by means of low drop heights. For storage piles, dampening down of material when there is prolonged periods of no precipitation coinciding with wind strength (and direction if relevant) that is likely to result in off-site emission releases (7 days without rainfall). This will be proactively undertaken before this period if the loads are identified during the inspection process as fine in particle size. The on-site water tanks will be sued for this. • Dampening down of the Site surface if dust shows signs of migrating off site. A road sweeper will be used for this. • All plant is inspected prior to and after use for dust and debris build-up. • Plant is cleaned down after use to prevent the accumulation of dust and loose material.

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted through mitigation
				• Material is stored in a free standing stockpiles to a maximum size of 25m x 20m x 4m post processing and 15m x 15m x 4m pre-processing (l x w x h). • All plant used on Site is maintained and serviced in accordance with manufacturers' guidelines and service agreements. • Avoid banging of tailgates when tipping.
Loading Vehicles	Atmospheric dispersion	Surrounding sensitive receptors and neighbouring units within the Industrial Estate	Airbourne particulates	• Minimise drop heights when loading vehicles for export from site. • Ensure that every vehicle has the sheet in place and open, before leaving the site.
Exhaust emissions	Atmospheric dispersion	Neighbouring units within the Industrial Estate	Airborne particulates	• Regulatory controls and best-practice measures to minimise source strength. Plant will be switched off when not in use. Delivery and collection vehicles will be required to switch engines off while unloading and loading where possible.
Plant operation	Atmospheric dispersion	Neighbouring units within the Industrial Estate	Airborne particulates	• When in operation a trained member of staff will be maintaining observations surrounding any dust creation. • All screening plant are fitted with abatement systems and to be used when, in the unlikely situation, dust levels could be impacting outside the boundary of the site. • Additional water sprays can be used as an extra to the in-built abatement systems. • When not in use, the plant will be shut off. • Plant will be limited to only be used in the permitted working hours. • Stiffening ribs and mufflers can be fitted to plant if required to reduce failure and limit vibration, all work will be undertaken by fully qualified mechanics and fitters.
Defective Plant	Atmospheric dispersion	Neighbouring units within the Industrial Estate	Airborne particulates	• All plant used on Site is maintained and serviced in accordance with manufacturers' guidelines and service agreements. • If defective, the plant is not to be used until replaced or fixed.

Table 7 Measures used on site to identify and then to control Dust/Particulates (PM10) emissions

Measure	Description / Effect	Overall consideration and implementation
Routine measures in place each day		
Site layout in relation to receptors	Most of the Site is covered with an impermeable concrete surface, the only area of hardstanding is the waste reception/processing area. The entire boundary of the Site is bounded by hedgerows, trees, wire fencing and in part, permanent buildings.	The off-loading, bulking up, storage and loading of wastes within designated area and the enclosed aspect of the trucks will help to minimise any fugitive emissions. The operations deemed to be more likely to produce dust are located the furthest point away from the most sensitive receptors.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels and limit revving of engines.	A site speed limit of 10mph will be enforced. Vehicle engines will be switched off when not in use, to minimise any idling.
Minimising drop heights for waste.	Minimising the height at which waste is handled should reduce the airborne generation of debris, dust/particulates and reduce the level of nuisance.	As stated above, vehicle drops heights will be minimised.
Checking meteorological data at the beginning of each working day	Should the weather forecast indicate that high winds greater than 40 mph could occur (continuous not gusts), on-Site sweeping would be implemented at the beginning of the working day if the conditions are not wet or damp. A water bowser and hose will be used if the conditions are dry (7 days without rainfall) or if dust movement is noticed to have potential to migrate off site. This will	As a remedial measure to prevent the dispersal of any dust and loose material, checking the weather forecast is an easy method of proactively implementing dust suppressions methods if required. Having an active knowledge of wind direction can also impact the daily operation of the screening plant. If high wind strength is forecast then the site management may make the decision not to screen material that day, or until the wind has decreased in strength.

Measure	Description / Effect	Overall consideration and implementation
	prevent the presence of dust and reduce the likelihood of dispersal.	
Visual Monitoring	Visual inspections are made to identify if emissions extend beyond the Site boundary at locations shown on the site plan below.	As a measure to trigger the implementation of further preventative measures that are identified below. The trigger used will be visual confirmation that any dust is leaving the permitted boundary.
Measures initiated* when visible emissions are noted during monitoring		
***Not all measures may be required to be implemented to control emissions. Depending on the weather conditions/emission level, they could be done in combination or isolation. They will be implemented progressively with the worsening emissions noted through monitoring.**		
Use of fully enclosed or sheeted vehicles to deliver wastes	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Waste loads will be either be fully enclosed or delivered in sheeted vehicles to avoid dispersion of emissions.
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	Waste material will not be stockpiled over long periods of time prior to transfer to relevant recycling or waste facilities. Material is stored for a minimum of 1 week to a maximum of 1 month. If dust is noted to be an issue that other measures cannot resolve, the stockpile heights and therefore volumes will be decreased to reduce the surface area subject to wind exposure.
On-site sweeping	Sweeping is effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles, especially in dry conditions. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.	Sweeping will form part of the general, daily routine of the Site to minimise the build-up of loose material and litter, thus the generation of potential dust and to maintain dust and litter free surfaces across the Site. Road sweeping will be activated when the sweeping activities cause a potential issue on its own during dry weather conditions.

Measure	Description / Effect	Overall consideration and implementation
	This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.	
Hosing of vehicles on exit	May remove some dirt, dust, and particulates from the lower parts of vehicles although unlikely to be necessary due to the low amount of tracking on hardstanding required.	As a preventative measure to reduce the deposition of dust and loose material off site.
Water suppression with hoses/sprays on site and within plant	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping. The initiation of in-plant suppression can be used to prevent the emissions at source.	Will be predominantly implemented during dry (7 days without rain) and dusty (if high wind strength conditions link to dry spells) conditions and for dampening down vehicles. When dust is seen (via visual checks) to be leaving the site boundary the internal suppression system of the plant will be switched on to instantly reduce the creation of wind-blown material. This measure will be the first implantation for dust noted when the screening plant is operational.
Water suppression with bowser	Using bowsers is a quick method of damping down large areas of the site with large water jets.	This will be implemented for the dampening down of larger areas, should dust be released and pose a threat of leaving the permit boundary. This will act as a trigger for dampening down the Site surfaces.
Measures to be initiated if all the above fail to control emissions leaving site		
Ceasing operations	During periods of continued emissions when the above-mentioned controls have been ineffective (identified through follow-up visual monitoring), the deposit of wastes could be stopped along with all treatment processes.	During periods of elevated/prolonged emissions, this could be due to high wind speeds or when there has been prolonged dry weather, the deposit of wastes within the waste transfer station should still ensure that emissions are suitably controlled and minimised. If all abatement measures have failed to control emissions, the Site Manager will assess the situation and if deemed serious enough, stop all external treatment operations and waste deliveries. This would be to focus on, firstly stopping the issue and secondly, planning on to reduce emissions if the above measures are not effective.

5.3 DUST MONITORING

5.3.1 Dust monitoring at the Site boundary will be carried out as part of the routine daily Site inspections with any relevant observations recorded and retained on-Site. Should dust be deemed (by the site manager) to have the potential to cause significant (CICS definition) impacts outside of the site boundary, treatment operations will cease until emissions are controlled.

5.3.2 Dust monitoring at the locations identified below will be undertaken by the supervisor at regular intervals throughout the day when screening. The monitoring locations will be checked 15 minutes after screening is initiated and then once per hour thereafter until the processing has ceased. The check sheet below will be used as a control log for all dust monitoring.

5.3.3 Continuous monitoring will be undertaken by the plant operator throughout the processing of the material. If at any time the dust being produced increases for any reason, the site manager will be informed and the relevant actioned initiated to reduce the impacts and creation of dust.

5.3.4 Training will be undertaken by the site supervisor and training records will be maintained in the employee folders.

5.3.5 Meteorological data regarding wind speed and direction is checked using the Windfinder data point at Ebbw Vale and/or Rhigos at the beginning of the working day. Should the forecast indicate that wind speed would be greater than the levels identified above, immediate on-Site sweeping would be enforced if the conditions are not wet or damp. A water bowser and hose will be used to dampen down Site surfaces and stockpiles and/or materials comprising of small particle size. It is important to ascertain the wind speed and direction as emissions from site are likely to be worse in weather conditions that are dry and windy.

5.3.6 All plant will be inspected before and after use and cleaned after use, as appropriate, in order to prevent the accumulation of dust and loose materials.

5.3.7 Informal dust monitoring comprising of operational staff remaining vigilant for observable dust and particulate will be carried out during the operational process. Where dust emissions are identified, operations will temporarily cease, and the Site boundary will be examined to ensure emissions are not dissipating towards sensitive receptors. Dampening down of the source of any fugitive emissions will be undertaken before operational processes resume.

5.3.8 In the event that abatement measures are unable to control the dispersal of emissions and have not succeeded in reducing them, the Site will stop all site activities to focus on suppression, before informing NRW and neighbouring businesses, residents and sensitive receptors identified previously via telephone (note that there is a contact list held in the Site office that is updated regularly).

5.3.9 Due to the levels of abatement measures to be integrated on the Site as detailed and given that the waste types received on-Site are not inherently dusty or of small particle size, the likelihood of emissions impacting on the identified sensitive receptors is considered low. Therefore, no other forms of additional dust monitoring is proposed for the Site.

5.3.10 In the unlikely event that dust emissions are identified as an issue, the operator will review the mitigation measures and monitoring techniques detailed in this EMP to reduce exposure levels and inhibit emissions dispersing from the Site. In this scenario, quantitative techniques will be considered as a monitoring process.

5.3.11 Once mitigation measures have been initiated, visual monitoring will be undertaken once more by the site manager immediately after treatment processes restart. The monitoring will be carried out for 10 minutes at each monitoring point to ensure that no dust can be seen to be created and therefore migrating off site.

5.3.12 Records (to include photographs/videos) will be maintained by the site management post-dust recording as evidence that the mitigation measures have worked to allow operations to re-commence.

5.3.13 The company complaints procedure will be followed in relation to the complainant.

Week commencing ??/??/??	Dust emission identified								
	Assessor	**Time**	**Weather**	**Activities being undertaken on site (loading/unloading, screening)**	**Monitoring Location 1 (Y/N)**	**Monitoring Location 2 (Y/N)**	**Monitoring Location 3 (Y/N)**	**Monitoring Location 4 (Y/N)**	**Monitoring Location 5 (Y/N)**
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									
Friday									
Saturday									

Monitoring Location	Day Noted	Comments (Severity etc)	Mitigated measures required	Implemented and actioned	Emissions controlled?
1					
2					
3					
4					
5					
Management sign-off:	Date:				

6 REPORTING AND COMPLAINTS

6.1.1 Tazrock Ltd operate and maintain an Environmental Management System (EMS). Any complaints received concerning emissions at the Site will be dealt with in accordance with the company`s complaints procedure.

6.1.2 Any complaints received at the Site, e.g. dust, will be reported to the Site Manager who is responsible for the Site management or supervisor, e.g. in the absence of the Site Manager due to illness or annual leave etc.

6.1.3 The complaints will be escalated to the director if 3 are received within 24 hours.

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

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

COMPLAINT RECORD FORM

Who made the complaint?	
Name:	
Address:	
Phone No:	
Date and time they made the complaint	
What caused it?	
Was anyone else aware of this? If so who?	
What was the source of the problem, what went wrong? If source is unknown, has the site manager been informed?	
Complaint be escalated to director?	
What have you done to make sure it won't happen again?	
Was there any significant pollution?	
If there was then you must notify Natural Resources Wales (open 24hours/day) **Have you done so?**	**Yes/No/not applicable** **Time:** **Date:**

You must also notify NRW via email or letter.	Incident number:
Please print name and sign:	

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

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

6.1.6 The Site Manager will subsequently undertake the following further assessment process:

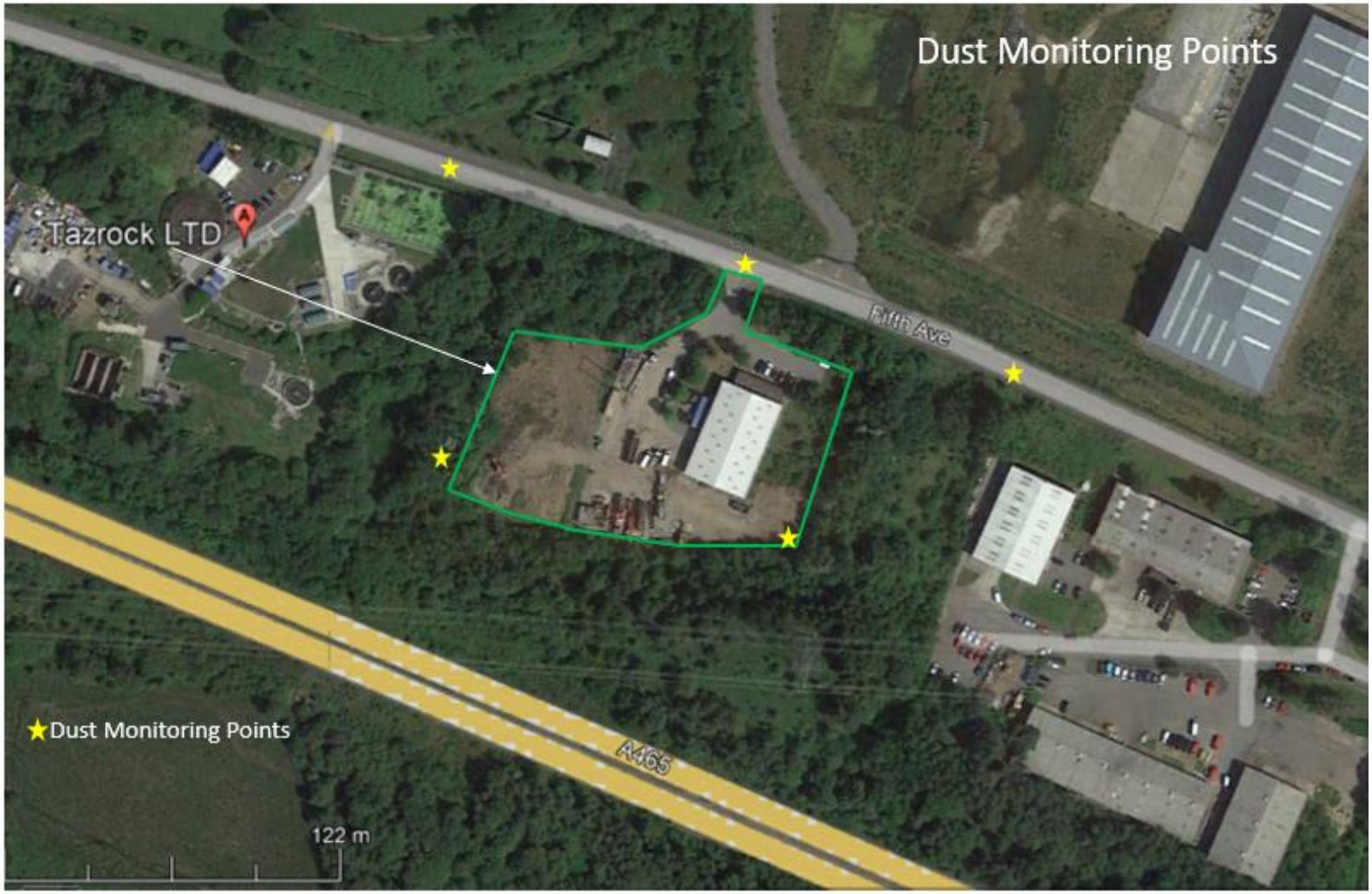
- Review of the operations at the Site prior to and at the time of the complaint;
- Review of the environmental control systems prior to and at the time of the complaint;
- Review of the meteorological conditions (wind speed, wind direction, rainfall, atmospheric pressure) prior to and at the time of the complaint – to establish whether a pathway can be established between the Site and the complainant;
- Review of the previous complaint history at the location identified.

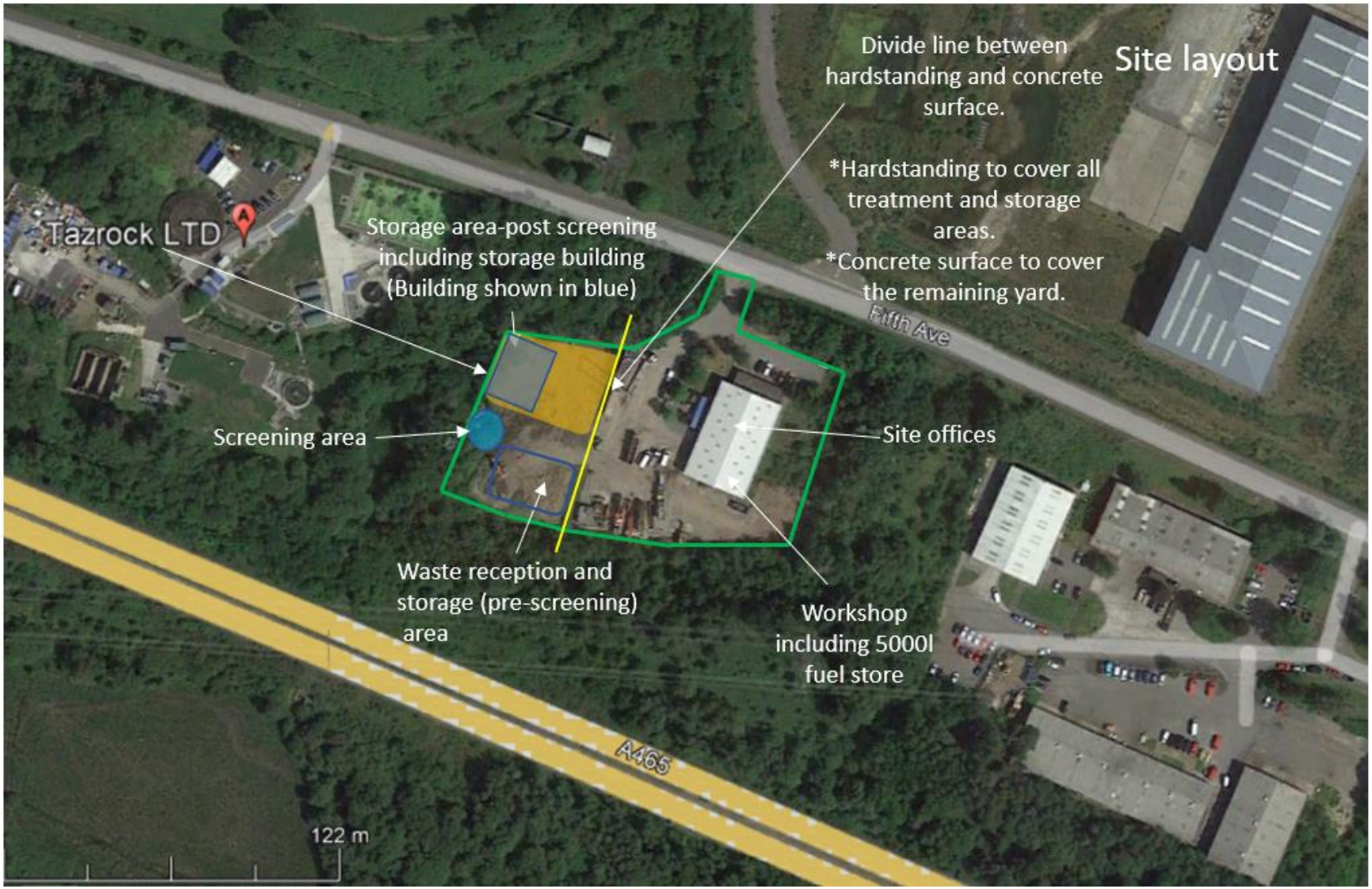
6.1.7 Where a significant complaint is substantiated by the Site Manager, the Operator will

contact NRW to discuss the incident as soon as possible following receipt of the complaint details, allowing sufficient time for the above investigation to be completed, and within a maximum target response period of 24 hours from complaint receipt. If the necessary contact details are available and direct feedback has been requested the Operator will also contact the complainant directly to discuss the issue, the findings of the subsequent investigation, and any actions arising.

6.1.8 Once actions have been completed the Site Manager will visit the complaint location to ensure that the cause of complaint has subsided.

6.1.9 On site processes and the EMP will be reviewed and updated were required.


Dust Monitoring Points
Tazrock LTD
Fifth Ave
Dust Monitoring Points
A465
122 m


Site layout
Divide line between hardstanding and concrete surface.
*Hardstanding to cover all treatment and storage areas.
*Concrete surface to cover the remaining yard.
Tazrock LTD
Storage area-post screening including storage building (Building shown in blue)
Fifth Ave
Screening area
Site offices
Waste reception and storage (pre-screening) area
Workshop including 5000l fuel store
A465
122 m