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# **Quarry Works DfR Activity**

## **Dust and Emissions Management Plan**

## HOOPER-SARGENT LIMITED

**Environmental Permitting Consultancy** 

## Document Control

#### Document: Dust and Emissions Management Plan

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### **1** Introduction

#### 1.1 Report Context

This Dust and Emissions Management Plan (DEMP) has been prepared by Hooper-Sargent Limited (HSL) on behalf of Wetherby Skip Services Limited (WSSL, the proposed Operator) who have applied for a bespoke Deposit for Recovery Environmental Permit (DfR Permit) for their Quarry Works site located on Field Lane in South Elmshall, near Wakefield (the Quarry Works Site).

The Quarry Works Site was an extension of the much larger South Elmsall Quarries site immediately to the south. The two sites were connected historically by a tunnel that extended beneath Field Lane, which also defines the north / south boundary between the two. The larger South Elmsall Quarries site was restored to surrounding ground levels by landfilling around the 1970s. Based on Ground Investigation information, quarry waste and imported construction and demolition waste was also used to build the site entrance area and an access ramp down into the Quarry Works Site. The same material was used to partly infill the base of the Quarry Works Site, with works believed to have ceased in the 1970s. The Quarry Works Site was subsequently used as a waste transfer station for used industrial tyres, but became disused in the early 2010s. The extent of the former quarry has largely remained unchanged throughout, with the original quarry faces still exposed.

The Operator proposes to backfill the former Quarry Works Site using suitable imported inert waste under a DfR Permit. The purpose of the backfilling is to construct a development platform which will be used for residential housing.

The DfR Permit application was selected for Duly Making checks in April 2024 and consequent to that the Environment Agency (Agency) requested more information in their email dated 26 April 2024. In subsequent discussions between WSSL, the Agency and HSL, it was agreed to amend the application to remove the proposal to treat waste on Site prior to its deposit in the recovery activity. The operation of the waste treatment plant was anticipated to be the most significant source of noise on Site and its removal meant a Noise Impact Assessment was not necessary provided certain limitations were applied i.e. no noisy activities would be carried out within 3 m of a sensitive receptor. The Agency requested that the Environmental Risk Assessment for the Site be reviewed to account for the expected reduction in noise emissions. HSL report referenced 2405-016/R/002: Environmental Risk Assessment (ERA) is revision to the original ERA and also considers emissions of noise, dust, mud on the road and any impacts resulting from the influence of flooding or climate change.

As the updated ERA identified dust to still be considered as a potential emission associated with the proposed activity, the emission management plan submitted with the application has also been revised. The previous plan focussed only on dust and this revision therefore references the Agency template for a Dust and Emission Management Plan.

#### 1.2 Report Structure

This DEMP follows the suggested format of the DMP template as follows:

- Section 1 Introduction and Sensitive Receptors
- Section 2 Operations at the Quarry Works Site
- Section 3 Dust and Particulate Management

- Section 4 Particulate Matter Monitoring
- Section 6 Reporting and Complaints Procedure

#### 1.3 Receptors and Justification for Receptor Sensitivity

Protected or sensitive habitats may be adversely impacted by the settlement of dust on vegetation. Persons visiting sites of geological or historical interest may have that experience adversely impacted by dust nuisances, or may have respiratory health issues. Food production quality may be impacted by dust settlement on crops. Dust emissions may represent respiratory health hazard to sensitive individuals or be a nuisance to homes or businesses, or impact product quality. Dust emissions may impact the enjoyment of public or leisure spaces, or represent a respiratory hazard to sensitive individuals. Dust may impair the visibility of drivers on adjacent roads.

The Agency Guidance for the preparation of Dust Management Plans<sup>1</sup> states that any bespoke permit application for the recovery of household, commercial or industrial waste by deposit for recovery, should provide a dust management plan if it is within 500m of a sensitive receptor such as a home, school, hospital or nursing home, food preparation facility or similar.

#### **1.4 Receptor Locations**

When identifying the receptors, the closest or the most sensitive (if different from the closest) have been considered in each direction from the hazard. Account has been taken of the pathway and mechanism of transport to the sensitive receptor e.g. wind direction, ground conditions or physical topography. Receptors are considered sensitive where people and habitats that occupy them have the potential to be adversely affected by the emissions.

The probability of exposure is determined by the distance of the receptor to the site and the likelihood of the hazard reaching the receptor (e.g. frequency of prevailing wind in that direction). This stage of the assessment assumes that exposure has resulted from an uncontrolled emission i.e. without mitigation.

Where two or more receptors of the same type or perceived vulnerability are located in the same direction relative to site, the risk assessment will conservatively consider the closest one of the same type only.

#### **1.4.1 Protected Habitats**

The nearest European Site or other protected habitat including National Nature Reserves (NNR), Local Nature Reserves (LNR), Local Wildlife Sites (LWS) and Ancient Woodland is the Upton Country Park LNR approximately 1.3 km to the north. The distance to this site is far in excess of the thresholds prescribed for the generic risk assessments that support a standard rules waste recovery permit. The potential impacts on this Site will not be considered further.

#### 1.4.2 Sites of Geological or Historical Interest

The South Elmsall Quary SSSI is located 265 m to the east of the Site. This Site is understood to be a popular destination for geologists and therefore consideration of the risks associated with dust will be

<sup>&</sup>lt;sup>1</sup> Control and monitor emissions for your environmental permit - GOV.UK (www.gov.uk)

considered further. There are no historical monuments of interest within 3 km of the Site and they will not be considered further.

#### 1.4.3 Food Production / Livestock Management

There are no livestock management activities carried out in the vicinity. Finley Beverages is located 265 m to the north. A Superdrug distribution centre is located 260 m to the north-northeast and a Asda distribution centre is located 475 m to the north-northeast. The Chip Pan takeaway (next to High Street Stores) is located 150 m to the west-southwest. Agricultural field occupy the surface of the landfill site to the immediate south.

#### 1.4.4 Homes, Schools, Hospitals, Public Buildings and Private Businesses

Residential housing dominates the setting to the west and southwest, with the nearest houses off East Avenue to the west less than 10 m from the Site and a house 20 m from the northern boundary of the Site. It is assumed the building on the immediate east boundary is a residence and it is understood a bungalow is planned further south of that. All of these houses have gardens that directly abut the Site boundary. 40 m further east of the Site Boundary is a lodging house called Montessa. The houses on Valley View and Valley Avenue 135 m to the southwest are associated with a large residential area.

The large distribution activities associated with the Dale Lane Industrial estate dominate the land to the north and east. Numerous large warehouses owned by the Next organisation are present 205 m to the north, 50 m to the east and 330 m to the southeast. Amongst this is an outlet shop for Next staff 265 m to the north-northeast and the Crossroads Truck and Bus vehicle supplier 200 m to the north. A new parking area has been recently constructed 85 m to the north.

Askew Aggregates is located on the immediate eastern boundary of the Site. A landfill operated by Askew Aggregates is located 500 m to the south of Site, with an access road that joins Field Lane 240 m to the east.

#### 1.4.5 Footpaths, Playing Fields and Playgrounds

There are no playing fields, playgrounds or similar in the immediate vicinity of the Site. A recreational walking route is located 300 m to the southeast / south. The public footpath along the north verge of Field Lane terminates to the west of the Site entrance.

#### 1.4.6 Public roads, Railway Lines or other Transport Networks

Field Lane is orientated east to west along the southern boundary of Site. The closest residential street is East Avenue in the adjacent housing estate to the west. Stadium Way and Elmsall Way service the Dale Lane Industrial Estate and are located 200 m to the north and 300 m to the northeast respectively.

#### 1.4.7 Receptor Summary

The distance of these receptors to the proposed permit boundary, their direction relative to the main treatment activities and the frequency the wind blows in the direction of the receptor is detailed in Table 1 below. The relevant sensitive receptors to the Site activities are also identified in drawing referenced 2405-016/D/001 attached in Appendix A. Where a receptor extends across a wide area

incorporating a range of wind directions and distances, the shortest distance and most frequent wind direction will be used. Where the location of Operations on the Site may dictate a receptors position relative to emissions the most conservative wind direction and distance will also be used.

Receptor ID	Receptor Name	Receptor Description	Direction from Main Site	Distance from Permit Boundary (m)	Frequency Downwind (%)
1	Residential Property	Residential	N	20	10.6
2	Next Returns Centre	Commercial	N	205	10.6
3	Finley Beverages	Manufacturing	N	265	10.6
4	Cherry Lea Carpark	Commercial	N	85	10.6
5	Stadium Way	Road	N	200	10.6
6	Next Staff Shop	Commercial	NNE	265	9.5
7	Asda Distribution Centre	Commercial	NNE	475	9.5
8	Elmsall Way	Road	NE	300	12.1
9	Next Stadium 2 Warehouse	Commercial	NNE to E	50	23.5
10	Askew Aggregates	Industrial	Е	<10	23.5
11	Montessa Lodgings	Commercial	E	40	23.5
12	Proposed Bungalow	Residential	E	<10	23.5
13	Next E3 Warehouse	Commercial	ESE to SE	330	1.3
14	South Elmsall Quarry SSSI	Geological Feature	ESE	265	1.2
15	Recreational route	Footpath	SE to S	300	1.3
16	Restored landfill	Agricultural Field	SE to S	10	1.3
17	Askew Aggregates Landfill	Landfill	S	500	1
18	Field Lane	Public Road	S	<10	1
19	Valley View / Avenue properties	Residential	S to SW	135	3.5
20	Chip Pan / High Street Stores	Takeaway / shop	WSW	150	6.7
21	East Avenue Properties	Residential	W to NW	<10	6.4
22	East Avenue	Street	W to NW	70	6.4
23	Superdrug Warehouse	Commercial	NW	260	2.9
24	Crossroads Truck and Bus	Commercial	NNW	200	6.1

Table 1 – Potentially Sensitive Receptors

#### 1.5 Potential Pathways

The potential pathways for dust and particulates to reach sensitive receptors are via the air via wind transmission. Transit of airborne emissions will therefore be determined by the prevailing wind direction and physical obstructions. Additionally, there may be an interrelationship between the nature of a potentially harmful emission and how it behaves in transit. The prevailing wind direction in the locality is from the west-southwest<sup>2</sup>, with the wind blowing from that direction 23.4% of the time. Collectively the wind blows from the southwest, south-southwest or south 32% of the time. This means any receptor to the east-northeast of the site is most likely to receive emissions from the site if they are within a relevant screening distance (see Section **Error! Reference source not found.**), with receptors to the north to northeast the next most likely to receive emissions if relevant.

Wind blowing from the west-southwest and southwest may be obstructed by the two-storey residences, dense scrub and trees on the western boundary. Subject to the stage and location of infilling, Site activities may be below surrounding ground levels affording additional shelter from the

<sup>&</sup>lt;sup>2</sup> Wakefield Wind Forecast, West Yorkshire WF1 2 - WillyWeather

wind. There may be an element of shelter afforded when wind blows directly from the south by the trees / hedgerow on the southern verge of Field Lane.

## 2 Operations at the Quarry Works Site

#### 2.1 Activity Overview

The Operator intends to import waste types which are geotechnically suitable for building a stable development platform which in turn can be built upon. The Operator proposes to import a mix of granular and cohesive construction, demolition and extraction wastes which will provide physical strength and stability to the platform. The final landform will be flush with the surrounding ground levels with a gradient (<1v:30h) falling toward the east. On completion there will be no raised features associated with the platform above surrounding ground levels.

For practical purposes the Operator wishes to maintain site-wide access to HGVs for as long as possible to minimise movement of material by site plant. To achieve this they will place the material in shallow lifts over a wide area and create shallow access ramps onto each lift of material the HGVs can transit / reverse up and down safely. The sub-surface quarry faces will provide confinement of the material and enable a good level of compaction and consolidation. Material will be placed first in the south and southwestern area of the site (Phase 3), with deposit operations extending northwards into Phase 1), with Phase 2 being the last area of Site to be filled.

Following activities can therefore produce dust:

- Material deposit
- Vehicle movements

The nature of the operation that may produce dust and the measures employed to reduce the likelihood of that occurring are detailed in Sections 2.2 and 2.3 below.

#### 2.2 Material Deposit

Stockpiles of dry granular construction and demolition waste have the potential to generate dust under dry and windy conditions. Dust can be emitted during deposit at the site by visiting HGVs, it may also be generated when the material is excavated from a stockpile for onward profiling. Static stockpiles may also generate dust due to wind-whip disturbing the dry outer surface. This could be from the stockpile itself or dried sediment accumulated from surface water run-off in the vicinity of the stockpile.

The Operator will ensure that material deposited in stockpiles at the site will be tipped from excessive height where practicable. The deposit of the material will be carried out in a controlled manner i.e. no short, sudden release of the entire load from the inclined HGV body. It is in the Operators interest to achieve a suitable mix of granular and cohesive material to form a more solid and stable platform base. This would exclude the acceptance of silty loads which when dry have a higher potential to generate fine dust. The Operator will also seek to restrict acceptance of already dry and excessively dusty loads to site.

The depth and dimensions of the former quarry mean that the DfR construction activity will be carried out below surrounding ground levels for much of its duration. The existing layout of the site is conducive to movement of road-going HGVs i.e. shallow gradients on the access road and therefore they will be able to transit to the point of deposit. This reduces the requirement for double-handling

the material with onsite dumpers running between a tipping bay and point of deposit. The sub-surface position of the quarry affords shelter from any crosswinds that may further mobilise dust emissions.

The DfR activity will be completed in 3 Stages enabling one area to achieve its required level, commission the surface water management system and if need be implement temporary cover measures such as grass seeding to prevent wind-whip of surface dust.

#### 2.3 Vehicle Activity

The types of mobile plant to be employed at the proposed activity will likely be limited to a tracked 360 excavator only. This will be used to position the waste as required and compact it by over tracking. Visiting HGVs will deposit waste in designated areas inside the void. There is potential for visiting vehicles to track mud onto the public highway (Field Lane) when they leave site. Mud or other debris tracked onto a public highway can extend the potential for dust generation away from site.

The Operator will ensure that when not in use, vehicles are not left with their engines idling which may generate unnecessary exhaust emissions. Vehicles transiting around the site will use the designated haul routes and not travel at excessive speeds which may generate dust emissions. Depending on the ground and weather conditions it may be necessary to limit speeds to a threshold lower than the limit specified in the planning consent. In dry conditions, particularly when wind speeds may result in dust leaving the site boundary, the Operator will deploy a water bowser to dampen down haul roads. They may also limit traffic to a prescribed route to focus the use of the bowser.

The Operator will prolong the use of the existing concrete hardstanding on Site for as long as practicably possible. The greater the distance vehicles are able to travel on this surface, the less likely they are to pick up mud or debris; or, be able to dislodge any material that may have attached to the vehicle wheels or body. Whilst still exposed, the concrete surfacing and adjacent public roadway will be swept at least daily by a dedicated road sweeping vehicle. This vehicle will also have the ability to clear any debris that may accumulate in road drains. Where it is unavoidable to place DfR material over the concrete hardstanding, The Operator will preferentially select and place hardcore material on the trackways used by visiting HGVs. This will provide a more robust running surface, reduce vehicle rutting and minimise build-up of mud and silt which could dry into dusty residues. The Operator will also install a wheel bath at the base of the access ramp for drivers to clean down their vehicles before leaving Site. The wheel bath will always positioned at the toe of the ramp, the position of which will change as infilling progresses. This means HGVs will always drive onto a concrete hardstanding after the bath when leaving site. Site operatives will also inspect visiting vehicle to ensure they do not leave site with excessive mud or debris attached to their vehicles. The operatives will also make regular checks of the trackways and road to ensure they are clean and if observed to deteriorate, instruct the road sweeper to attend as soon as practicably possible.

#### 2.4 Responsible Persons

The Site Manager (or nominated deputy) will be responsible for assessing predicted meteorological conditions each day, which will determine if dust suppression methods will be required on all or some operational areas of the site. This is part of the routine dust monitoring regime detailed further in Section 7. All personnel employed on site will undertake visual monitoring for dust. Any problems observed will immediately be reported to the Site Manager (or nominated deputy) who will be responsible for investigating the cause and implementing any necessary remedial plan. The operator will ensure appropriate controls are in place during windy conditions to prevent dust spreading beyond

the site boundary. The operator may also restrict or suspend activities most likely to generate dust or refuse inputs that may contain excessive quantities of loose, light material. Additionally the operator will ensure dry dusty waste and dusty haul roads are wetted down to reduce wind whipped dust.

The persons responsible for the operation of the recovery activity are:

• Mr Mark Kent (Technically Competent Manager)

Further details on the technical competency of the above individuals are in the Permit Application forms.

#### 2.5 Remedial Actions for On-Site Dust Emissions

In the unlikely event that unacceptable dust emissions arise from the site, one or more of the following remedial actions will be undertaken. These remedial actions are over and above the routine mitigation measures employed if those routine measures are not considered to be sufficient:

- Operations identified as generating unacceptable emissions of dust will be reduced or suspended until effective remedial actions have been taken or weather conditions resulting in the fugitive emissions have moderated;
- Additional dust suppression may be employed by spraying water onto affected areas;
- If vehicle movements on site are found to be the cause of dust emissions, on-site vehicle movement routes may be reconsidered with regard to location (i.e. relocating further from the receptor at risk), speed limits may be further reduced, or surfaces and gradients altered;
- Waste streams accepted to the site are expected to be consistent in their low dust generation potential as controlled by pre-waste acceptance procedures. In the unlikely event that the nature of the material changes, handling procedures may be altered and waste acceptance procedures reviewed, such as covering dusty wastes upon deposit, or stopping accepting problematic wastes;
- Depending on the severity of weather conditions, consideration will be given to instructing delivery vehicles to remain sheeted until immediately prior to emplacement; and,
- Additional quantitative monitoring may be implemented, if complaints are received and the corrective actions above have not resolved the problem.

#### 2.6 Dust Risk Assessment

Table 2 is a qualitative assessment will be made of the risk to identified receptors from potentially harmful emissions associated with dust. Climate Change impacts have been incorporated as appropriate. The table lists the:

- Nature and source of the emission or hazard;
- Receptor reference number listed in Table 1;
- Direction of the receptor relative to Site;
- Receptors distance from Site;
- Frequency downwind of Site (where relevant);
- Likelihood of receptor exposure to the emission or hazard;
- Unmitigated risk i.e. without controls; and,
- Residual risk after controls or other considerations have been applied.

The unmitigated impact will also reflect the influence of existing features that may enhance or reduce the emission, for example physical barriers that will be present throughout the duration of the activity and after its completion. The type of receptor will also reflect its sensitivity to certain emissions.

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#### Table 2 – Dust Risk Assessment

Type / Source of Emission / Hazard	Receptor ID	Direction from Site	Dist from Site	% Freq Down - wind	Likelihood of Exposure	Unmitigated Risk	Mitigation Measures to be employed	Mitigated Risk
	1	N	20	10.6	High – occasional wind direction and close proximity	High – receptor sensitive to dust	DfR activity confined to small area	
	2	N	205	10.6	High – occasional wind direction and close proximity	High – receptor sensitive to dust	with one 360 excavator operational at any one time.	
	3	N	265	10.6	Medium – occasional wind direction and distance	High – receptor sensitive to dust	Activity will be enclosed within	
	4	N	85	10.6	High – occasional wind direction and close proximity	High – receptor sensitive to dust	former quarry void for majority of operational life of site which also	
Dust emissions generated by:	5	N	200	10.6	Medium – occasional wind direction and distance	Low – vehicles unlikely to be impacted	benefits from dense thickets of vegetation around Site.	
Deposit of inert	6	NNE	265	9.5	Medium – occasional wind direction, extended distance	High – receptor sensitive to dust	HGVs will deposit material close to	
material by delivering HGVs	7	NNE	475	9.5	Low - occasional wind direction, very distant	Low – unlikely to be exposed	place of permanent deposit and not from height to prevent impact	Low
Grading / profiling of deposited material	8	NE	300	12.1	Medium – occasional wind direction and distance	Low – vehicles unlikely to be impacted	emissions of dust. Requirement for stockpiles limited to discrete loads granular material	
	9	NNE to E	50	23.5	High – prevailing wind direction and close proximity	High – receptor sensitive to dust		
Vehicle movements on Site	10	E	<10	23.5	High – prevailing wind direction and close proximity	Medium – receptor less sensitive to dust	occasionally reserved for use in Site haul roads. These are unlikely	
Wind-whip of dry surfaces under normal conditions and long dry spells exacerbated by climate change	11	E	40	23.5	High – prevailing wind direction and close proximity	High – receptor sensitive to dust	to extend above ground level. Concrete hardstanding will be	
	12	E	<10	23.5	High – prevailing wind direction and close proximity	High – receptor sensitive to dust	retained as long as practicably possible to provide cleanable	
	13	ESE to SE	330	1.3	Low – very infrequent wind direction, extended distance	Low – unlikely to be exposed	surface to reduce potential for mud disturbance on unmade roads. If	
	14	ESE	265	1.2	Low – very infrequent wind direction, extended distance	Low – unlikely to be exposed	concrete surface is not available granular material will be selected	
	15	SE to S	300	1.3	Low – very infrequent wind direction, extended distance	Low – unlikely to be exposed	for use in Site roads.	
	16	SE to S	10	1.3	Medium – very infrequent wind direction, close distance	Medium – crops could be impacted	Road sweeper will be employed to sweep internal and external roads	
	17	S	500	1	Low – very infrequent wind direction, extended distance	Low – unlikely to be exposed	to remove tracked mud that could	

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Type / Source of Emission / Hazard	Receptor ID	Direction from Site	Dist from Site	% Freq Down - wind	Likelihood of Exposure	Unmitigated Risk	Mitigation Measures to be employed	Mitigated Risk	
		dry and generated dust when disturbed by vehicles or wind.							
	19	S to SW	135	3.5	Medium – infrequent wind direction, close distance	Medium - receptor sensitive to dust but infrequently exposed	Completed areas of development platform will be seeded to stabilise the surface by establishing		
	20	WSW	150	6.7	Medium – occasional wind direction, close distance	High - receptor sensitive to dust and maybe exposed	vegetative cover. A speed limit of 10 mph will be		
	21	W to NW	<10	6.4	High – occasional wind direction, close distance	High - receptor sensitive to dust and may also be exposed in calm conditions	enforced on Site by the TCM, with formal warnings issued to drivers and their managers. If this is not heeded persons may be banned		
	22	w	70	6.4	High – occasional wind direction, close distance	High - receptor sensitive to dust and may also be exposed in calm conditions	from site.	from site.	
	23	NW	260	2.9	Low – infrequent wind direction, extended distance	Low – unlikely to be exposed			
	24	NNW	200	6.1	Medium – occasional wind direction, extended distance	High – receptor sensitive to dust			

### **3 COMMUNITY ENGAGEMENT, REPORTING & CONTINGENCIES**

#### 3.1 Overview

Prevention will be viewed as the most effective means of controlling dust before an adverse impact occurs from uncontrolled emissions. The Source → Pathway → Receptor model determined above allows for the identification of the critical control points where dust can arise, how it can travel to a receptor and the likely impact.

The performance of a dust management system will ultimately be judged by the impact of the site operations on the receptors. Should complaints be received, a procedure will be in place to effectively deal with the issue in a sensitive, efficient and auditable manner.

The controls for each potential dust source are detailed in previous sections of this report. The management of those controls will be based on the on-going monitoring regime on site. The monitoring regime can work as an early warning system against potential problems (e.g. meteorological monitoring) or a diagnostic tool to establish the cause of a dust event (e.g. perimeter monitoring).

#### 3.2 Monitoring

A member of staff will undertake visual dust monitoring at the site perimeter if dust is observed within the site boundary. Dust monitoring will be undertaken at the whole of the site perimeter in order to identify the potential for dust emissions to leave the site boundary. Monitoring will also identify the potential for dust emissions to leave the site boundary. Monitoring will also identify the potential for dust from other off-site sources. The daily/weekly check list includes a provision for visual dust monitoring at the site perimeter. The site boundary is detailed on Natural Resource Planning drawing referenced NRP-WSS-Permit-Biji attached in Appendix B.

#### **Off-Site Dust**

The Site Manager will be responsible for ensuring that regular visual inspections are made of the site and its perimeter in order to identify any sources of dust and to establish whether any dust has left the site. This will include dust arising from vehicles arriving at site and from the facility itself.

The complaint form will also be used for daily checks (attached in Appendix C), which will be completed for each inspection and all site personnel will be responsible for reporting dust problems as soon as practicable to the Site Manager or the next level of management if the Site Manager is not available.

The following locations will be targeted for dust monitoring by the nominated site staff:

- Waste reception area (continuous monitoring of vehicles);
- Point of waste deposition; and
- Subject to prevailing wind direction (i.e. up and down wind), appropriate areas of the site perimeter.

The following information will be recorded as part of the daily/weekly regular checks:

- Name of assessor and position at facility e.g. TCM etc;
- Nature of any problem identified including location, source, date, time, duration, prevailing weather conditions and likely cause;

- On-site activities and operational condition at the time of the monitoring visit (this should include any of the abnormal events detailed in Section 3.8 below);
- Records of the likely source of any dust, even if it is not from the facility;
- Details on the corrective action taken, realistic timeframes for remedial works and any subsequent changes to monitoring and operational procedures.

The Site Manager will be informed immediately of any findings of dust attributed to the site and will authorise remedial measures to be taken.

#### PM10 Monitoring

Consideration has been given to the possible requirement for PM<sub>10</sub> monitoring at the site. The activities on site depositing inert waste into the construction scheme will be unlikely to produce significant volumes of dust and there will be no activities associated with this activity that will involve further agitation of the waste. The site is not located within a PM<sub>10</sub> Air Quality Management Area (AQMA) and therefore monitoring for PM<sub>10</sub> is not required.

#### 3.3 Complaints Process

Any complaints received at the waste facility or via the Regulatory Bodies including the Agency and Local Authority, will be recorded using the form attached in Appendix C. This will instigate further actions which may include further visual dust monitoring at the location of the complaint and on-site to determine the extent and location of the dust generating materials and/or process will be identified. Where possible, as much information and detail about the complaint will be recorded, whether this is from the relevant authority or a complaint direct to the site. This information will assist in the investigation and determining the source of the dust e.g. differentiating between potential dust from the site or other off-site activities.

All complaints and queries will be logged as soon as is practicably possible. All complaints logged will be subject to investigation, and complainants responded to within 48 hours of receipt, where possible. All responses will be through trained and experienced staff.

In the event that a substantiated dust complaint is received arising from the facility, additional monitoring will be undertaken at the nearest sensitive receptors. The person conducting the survey shall make note of any dust at each monitoring point including those not of obvious waste facility site origin.

Complaints regarding dust from the facility will be investigated in accordance with the protocol, and appropriate records maintained which may include:

- Complaints received including name and contact details of complainant (if known), and complainants description of the dust;
- Nature of problem including date, time, duration, prevailing weather conditions and cause of the problem;
- On-site activities and operational conditions at the time of the complaint;
- Records of the likely source of the dust, even if it is clearly not from the facility;
- Details on the corrective action taken and any subsequent changes to monitoring and operational procedures; and,
- The Agency will be proactively informed by the Operator of the complaint and the Operator will confirm to the best of its knowledge the information described above.

The Operator will ensure that the complainant has all the relevant contact details of the site (i.e. the TCM) and the officer responsible at the Agency. The operator will be in regular contact with the complainant and the Agency whilst the cause of the dust is being investigated and remediated.

An evaluation of the effectiveness of the techniques used will be carried out on completion of any remedial measures, or if the complaints persist. Records of the above will be retained under the management system for future reference.

#### 3.4 Means of Contact

The facility will be readily contactable to outside organisations and to members of the public. The site signage board (placed in a readily visible location) will contain the necessary contact details for both the site operations and Agency. The company website also contains the necessary contact details for the site. Any complaints received directly to site will be notified to the Agency. Should an off-site issue arise, the complainant has a readily available means of getting in touch with the Operator.

#### 3.5 Complaint Screening

As part of each dust complaint received, these will be objectively assessed against the wider environment to ensure that the source of the emission is traced back to the correct source. It is essential that the source is correctly identified in order that mitigating measures can be applied effectively and correctly. The complaint will also be assessed against previous records to place the nature of the complaint into context. If patterns in complaints emerge, community groups or individuals (subject to their agreement) will be called upon to act as an additional dust monitoring resource.

#### 3.6 Complaint Investigation

In the event that dust is found to be causing a problem from the site facility, as determined and confirmed by investigation into off-site complaints, or during routine monitoring, measures will be taken to determine the source of this dust and the following courses of action as detailed below shall be taken to ascertain if the dust is coming from the facility;

- Additional dust monitoring as detailed above to identify the extent of the dust emission and potential cause for the dust i.e. waste material and/or activity;
- Examination of the operational activities at the time of the dust complaint;
- Examination of the meteorological conditions at the time of the complaint;
- Carry out a review of the operational procedure and controls and instigate any control measures immediately following identification of the problem; and,
- Further monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.

It is recognised that whilst complainants are encouraged to report valid complaints to the regulatory bodies, complaints that are received/submitted directly to the site are able to be investigated more rapidly. As a result, complaints reported directly can be substantiated, reviewed and actioned quicker. With the complainant still able to report the complaint to the regulatory bodies after, should it be necessary. Nevertheless all complaints will be investigated.

#### 3.7 Contingency and Emergency Plans

In the event that dust is proven to be from the site and found to be causing a problem, as determined by the investigation of off-site complaints or during routine on-site monitoring, action will be taken to determine the source and the following courses of action. Control and mitigation measures for each stage of the process are as described in Section 2 and summarised in Table 2.

#### 3.8 Abnormal Events

This DEMP assumes that the facility will be running under expected operational conditions. There are however circumstances that could result in a dust emission from the site if not appropriately considered in advance, discussed below.

#### Strong Winds

Daily visual inspection of the site infrastructure will be undertaken and recorded. Additional inspection for damage resulting from high wind events will also be undertaken and contingency actions identified below considered should high wind conditions result in escape of significant dust emissions.

#### Hot / Dry Conditions

The warmer the weather the greater the potential for wastes to become dry and dusty, particularly when stored outside and when agitated. Daily inspections will be undertaken of the waste to ensure waste delivered to the site is not dusty and stockpiles of waste are kept to an operational minimum and wetted down if required to reduce dust emissions. During prolonged periods of hot weather inspection frequency will be increased and the surface area of stored waste will be kept to a minimum.

#### 3.9 Implementation of the Contingency Plan and / or Emergency Plan

Unscheduled unavailability should only take place due to unscheduled maintenance, emergency situations and for Health and Safety reasons such as a fire at the site. In such cases the site staff will initially inform the Site Manager who will in turn inform service managers, the Local Authority and the Agency. Site staff will implement measures to store or divert wastes as required.

The Contingency Plan and Emergency Plan will be reviewed following any incident where they have had to be followed. They will be updated as necessary with any lessons learned.

#### 3.10 Records and Reviews

A daily record relating to the management and monitoring of dust will be maintained. It will include the following details:

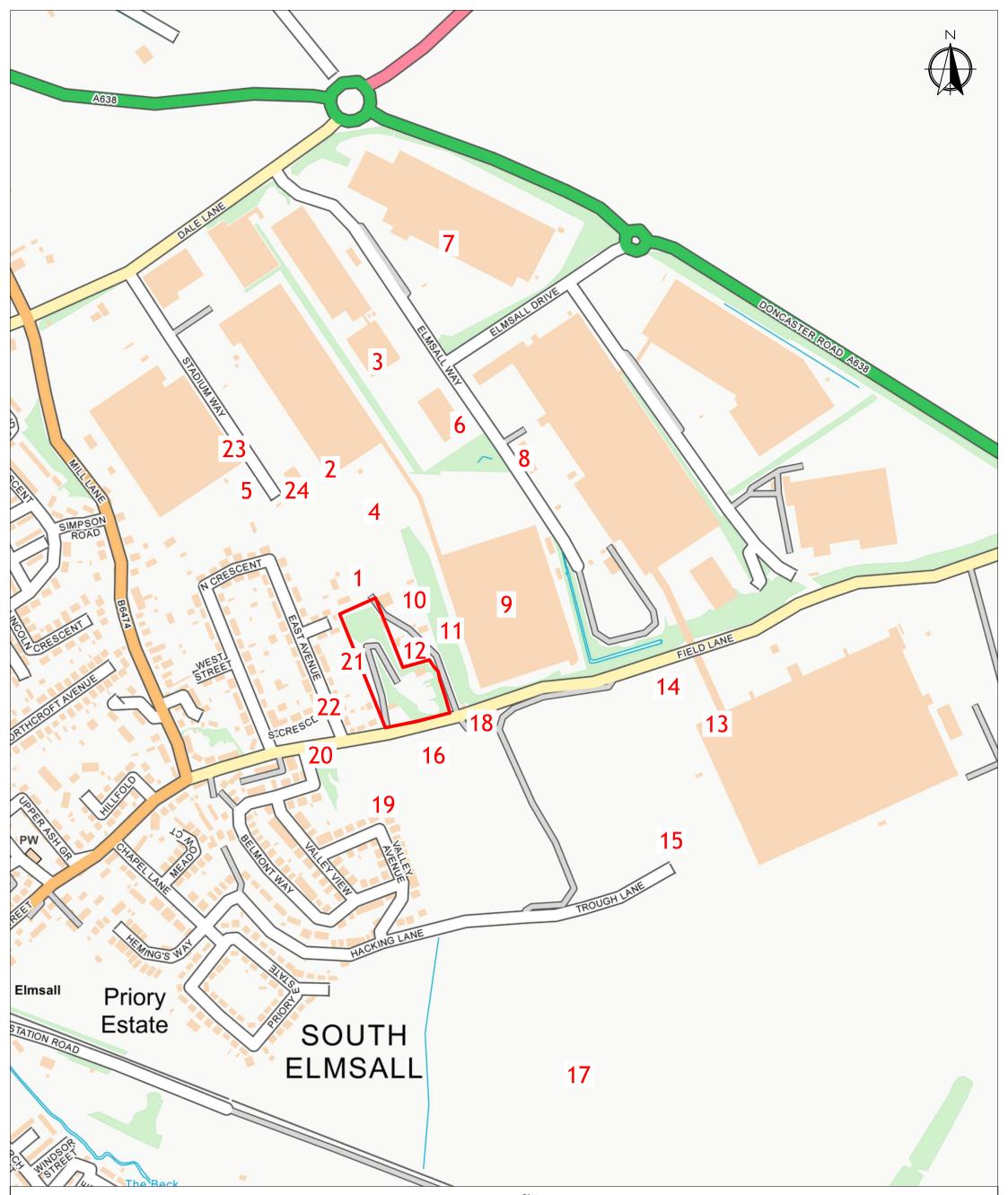
- The results of inspections and visual monitoring carried out by installation personnel;
- Weather conditions including atmospheric pressure, wind speed and wind direction with reference to the ;
- Problems including date, time, duration, prevailing weather conditions and cause of the problem;
- Complaints received including name and address of the complainant; and
- Details of the corrective action taken, and any subsequent changes to operational procedures.

The Dust and Emission Management Plan will be reviewed on an annual basis with the scheduled review of the site's Environmental Management System or with every major decrease, or alteration to the dust generated at site (i.e. a change to dust source term, pathway or receptor).

#### 3.11 Communication tools

Stakeholders will typically include the Local Authority, the Agency and members of the local community. Other stakeholders may include local businesses should the facility be deemed to impact upon them. In addition, and as covered within the complaints section, contact details will be made available so that any complaints can be directed to site and an investigation undertaken immediately.

APPENDIX A – HSL Drawing 2405-016/D/001: Sensitive Receptors



#### Title: Sensitive Receptor Location Plan

Proposed Permit Boundary

1 Receptor Location

Receptor name, Description, distance from Site and direction from Site detailed in Table 3, Section 4.2.7 of Hooper-Sargent Ltd Report referenced 2405-016/R/002 Client: Wetherby Skip Services Ltd

Project: Field Lane Quarry Works

Drawing Ref: 2405-016/D/001

Scale@A3: Date: 1:5000 07/06/24

#### HOOPER-SARGENT LIMITED

Environmental Permitting Consultancy

## APPENDIX B – Natural Resource Planning drawing NRP-WSS-Permit-Biii: Permit Boundary



Map area bounded by: 447809,411462 448209,411862. Produced on 01 January 2019 from the OS National Geographic Database. Reproduction in whole or part is prohibited without the prior permission of Ordnance Survey. rid Crown copyright 2019. Supplied by UKPlanningMaps.com a licensed OS partner (100054135). Unique plan reference: pl6bul.J306873/417312

Site Name Quarry Works,	Title	Permit Boundary
Field Lane	Scale	1 :2500
Wetherby Skip Services Ltd	Reference	PERMIT Biii

## **APPENDIX C - Dust Inspection / Complaint Form**

Customer Details					
Name -					
Address –					
Postcode -					
Contact Details -					
Tel -					
Email -					
Date -					
Complaint Ref Number -					
Complaint Details -					
	Investigation Details	s (Routine / Complaint – circle as appropriate)			
Invest	igation carried out by -				
	Position -				
Date & time inv	estigation carried out -				
	Weather conditions -				
Wind	d direction and speed -				
	Investigation findings -				
Feedback given to Environme	ent Agency and/or local authority -				
	Date feedback given -				
Fee	dback given to public -				
	Date feedback given -				
		Review and Improve			
	provements needed to revent a reoccurrence -				
Proposed date for completion	of the improvements -				
Actua	al date for completion -				
	nsert reason for delay -				
Does the dust management p	lan need to be updated -				
Date that the dust managem	ent plan was updated -				
		Closure			
	te manager review date				
Site manager signature to co	onfirm no further action required				