

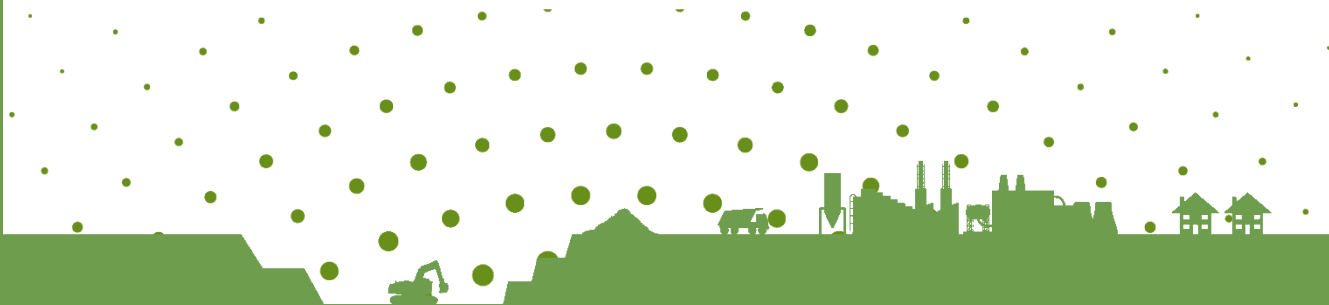


Dust Management Plan

Shellingford Quarry

June, 2020

Multi-Agg Ltd



Document Control Sheet

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1 Introduction

1.1 Overview

Multi-Agg Ltd extract and process limestone at Shellingford Quarry and plan to extend mineral extraction operations to the west of the existing site. Planning application MW.104/18 (P18/V2610/CM, herein 'the development') has received a resolution to grant planning permission, subject to a legal agreement and various conditions, including:

- “no development shall take place until a detailed scheme for the monitoring and management of dust was submitted to and approved in writing by the Mineral Planning Authority”; and
- “no development shall commence until a scheme detailing how the deposition of mud, dust and debris on the public highway shall be avoided has been submitted to the Minerals Planning Authority and approved in writing”.

Potential emissions to air from the proposed site were assessed in 2018 by means of an Air Quality and Dust Assessment. An addendum in May 2019 was also prepared in response to a Regulation 25 request for baseline PM₁₀ and PM_{2.5} monitoring.

To comply with the draft conditions above, DustScanAQ was instructed by GMKC Ltd on behalf of Multi-Agg Ltd to produce a Dust Management Plan (DMP) before any works commence on site. This report therefore comprises a scheme for the management and monitoring of dust for the operation and mitigation methods for the site.

1.2 Site setting

Shellingford Quarry is located in a mostly open location, approximately 500 m west of the western edge of Stanford in the Vale and approximately 500 m east of the village of Shellingford. White Horse Business Park is also located immediately south of the current site and east of the extension area.

The site is situated within open farmland and the nearest high sensitivity receptors to the extension area are those in Shellingford on Church Street approximately 230 m to the south west, and the property approximately 250 m to the north on the corner of Fernham Road.

Access to the site is via a haul road off the A417. The site falls within the outer Impact Risk Zone to Fernham Meadows SSSI and both the quarry and the extension area are within a Conservation Target Area. The site lies 350m south of Shellingford Quarry SSSI, although this is designated for its geological interest.

1.3 Planned development

Multi-Agg plan to extract approximately 1.9 Mt of sand and 1.2 Mt of limestone over 22 years from an area circa 30 ha in size to the west of the existing quarry site. The extension area will be accessed from the existing quarry and all minerals will be processed using the

existing site processing plant. The site will be worked in phases and progressively restored back to agriculture using imported inert material.

1.4 Local Liaison Group (LLG)

A Local Liaison Group (LLG) has been set up at the request of OCC. The purpose of this LLG is threefold:

- to bring together a network of parties that have an interest in the site and its operations;
- to facilitate communication between these interested parties; and
- to provide a forum for this network to share information and discuss matters that arise.

This LLG shall be composed of representatives from the following groups/bodies:

- the Operator – Earthline Ltd;
- the local community – representative from the parish meeting;
- the local planning authority – OCC;
- the local county councillor; and
- the Environment Agency.

The LLG shall meet regularly to discuss ongoing operations, proposed changes, community concerns and received complaints. Where appropriate, dust monitoring data may be provided to the LLG; this is discussed below in more detail.

2 Potential for emissions

2.1 Disamenity dust

'Dust' is generally regarded as particulate matter up to 75 µm (micron) diameter and can be considered in two categories. Fine dust, essentially particles up to 10 µm, is commonly referred to as PM₁₀ and is measured to agreed standards and forms part of the Air Quality Objectives (AQO).

Coarser dust (essentially particles greater than 10 µm) is generally regarded as 'disamenity dust' (or 'nuisance') and can be associated with annoyance, although there are no official standards (such as AQO) for dust annoyance¹.

Although it is a widespread environmental phenomenon, dust is also generated through many human activities. This includes at minerals sites and surface mines, and also by heavy industry, waste management, construction and demolition, agriculture (especially arable farming) and road transport.

Dust is generally produced by mechanical action on materials and is carried by moving air when there is sufficient energy in the airstream. More energy is required for dust to become airborne than for it to remain suspended. Dust is removed through gravitational settling (sedimentation), washout (for example during rainfall or by wetting) and by impaction on surfaces (e.g. on vegetative screening). Dust can be re-suspended where conditions allow, such as from bare ground.

Dust emissions from a minerals site, its propagation and potential impacts can be considered in terms of 'source-pathway-receptor' relationships. Dust can arise from a variety of processes and locations within a site and can be difficult to quantify.

The common pathway for dust propagation is by air. Dust propagation depends on particle size, wind energy and disturbance activities. Large dust particles generally travel shorter distances than small particles. It is often considered that particles greater than 30 µm will largely deposit within 100 metres of sources, those between 10 – 30 µm will travel up to 250 – 500 metres and particles less than 10 µm will travel up to 1 km from sources.

2.1.1 Disamenity dust sampling

Disamenity dust is commonly measured by directional and depositional sampling. Directional dust flux is the horizontal passage of dust past a point, usually driven by the wind, and dust deposition is the vertical passage of dust to a surface, driven by deposition velocity.

In the absence of standards, a range of methods has been developed to assess visible dust. The two principal approaches are based either on the measurement of the mass of

¹ The expression 'disamenity dust' has been recently promoted as a suitable expression for 'nuisance' dust, *i.e.* generally visible particulate matter rather than specifically and in a legal sense to statutory nuisance, as defined in Section 79 of the Environmental Protection Act 1990

settled dust or the assessment of changes in the properties of a surface such as its loss of reflectance or discolouration ('soiling') on a glass microscope slide or adhesive 'sticky pad'.

'Custom and practice' thresholds for dust annoyance are commonly applied to these methods and minerals industry guidance recommends that site-specific thresholds should be agreed between the site operator and the regulator, as these will be appropriate for both the site and its surroundings².

2.2 PM₁₀

Fine dust, essentially particles up to 10 µm, is commonly referred to as PM₁₀. PM₁₀ is measured to agreed standards and, through the National Air Quality Strategy (NAQS) objectives to be achieved for a range of pollutants, forms part of the Air Quality Objectives (AQO). The AQOs for PM₁₀ are 50 µg/m³ averaged over 24 hours, not to be exceeded more than 35 times per year and 40 µg/m³ as an annual mean.

Baseline PM₁₀ monitoring was undertaken as part of an addendum to the 2018 DAQA. Monitoring was undertaken west of the site at Church Farm towards the properties in Shellingford and at Shellingford School in Shellingford for one month from 29 March to 29 April 2019. The average PM₁₀ concentration for the study period was 8.47 µg/m³ at Shellingford School and 12.73 µg/m³ at Church Farm. The maximum 24-hour average PM₁₀ concentrations recorded were 29.89 µg/m³ for Church Farm and 20.97 µg/m³ for Shellingford School. It should be noted that the quarry was not operating for the majority of these periods, with the highest values during each 24-hour period recorded between 12:45 and 15:45 on Sunday 07/04/2019.

In accordance with the IAQM guidance, when background PM₁₀ concentrations are below 17 µg/m³ it is considered unlikely that the quarry process contribution would lead to an exceedance of the annual mean objective. Consequently, this document concentrates on issues relating to visible 'disamenity' dust, although it will be revised as necessary and in accordance with changes to the AQO, such as in relation to objectives for PM_{2.5}.

2.3 Dust sources

As set out in the 2018 DAQA there is a potential for dust emissions to occur at various stages of the operation, but these can generally be controlled by good practice. Potential sources or site activities likely to give rise to dust at the extension area to Shellingford Quarry are:

- Soil stripping, storage and reinstatement;
- Overburden removal, storage and reinstatement (including inert fill);
- Mineral extraction and handling;
- Mobile plant (both on-site and off-site vehicle movements); and
- Wind scouring of exposed surfaces and stockpiles.

² AEA Technology (2010) Management, mitigation and monitoring of nuisance dust and PM10 emissions arising from the extractive industries: an overview.

It should be noted that permitted processes undertaken solely within the existing quarry site and not influenced by the extension area, such as mineral processing in the existing plant site, are not included.

The potential dust sources are considered further below, with reference to the recommended control measures.

2.4 Receptors

Dust receptors can be within or beyond a quarry site boundary. Whilst dust generation within a minerals site is primarily of concern to its operator, staff and visitors, dust can propagate beyond the site boundary to affect people and properties beyond, unless adequate control measures are in place. It is important to recognise that there may be other dust sources in the vicinity of a quarry (such as road traffic or arable farmland).

As determined in the 2017 AQA, the principal dust receptors in the vicinity of the Shellingford Quarry extension area are set out in Table 1, together with the minimum distance (in metres) to the planned working areas, the principal direction (or directions) to the receptor from the phase of quarry workings and the sensitivity level of the receptor, as set out in the IAQM guidance.

Table 1: Principal dust receptor locations, Shellingford Quarry extension area

Receptor	Dust source location	Minimum distance (m)	Direction/s to dust source (degrees)	Sensitivity
Western edge of White Horse Business Park	Phase 5	20	195 - 345	Medium
Quarry Cottage	Existing plant site	200	135 - 195	High
Quarry Cottage	Phases 1 - 2	240	165 - 225	High
Shellingford C of E Primary School	Phases 1 - 2	230	015 - 075	High
Glebe House	Phases 1 - 2	230	015 - 105	High
Timber Yard Cottages	Phases 1 - 2	260	015 - 105	High
Church Colt	Phases 1 - 2	290	015 - 105	High
Church Farm House	Phases 1 - 2	290	045 - 105	High
Shellingford House	Phases 1 - 2	300	045 - 105	High
Home Farm House	Phases 1 - 2	325	045 - 105	High
Orchard Cottage	Phases 1 - 2	345	075 - 105	High
Ford Cottage	Phases 1 - 2	330	075 - 105	High

The distances shown in Table 1 are the minimum between each potential receptor and the closest stage of site operations and thus can be considered to represent a 'worst case' evaluation.

3 Dust management

Standard good practice on dust control is set out in various publications, including PGN 3/08(12)³ which sets out at Section 4 a summary of best available techniques for dust control at minerals sites. In accordance with good practice guidance, potentially unacceptable dust emissions from minerals sites can be addressed through a dust management plan⁴.

3.1 General requirements

Unacceptable dust emissions can be mitigated by ensuring that routine checks of plant and machinery are carried out and that regular staff training is provided.

All activities with the potential to cause either airborne or wind-blown dust emissions will be monitored appropriately. This will include a visual assessment of any potential impacts at downwind receptors.

Should visible dust be generated, the source/s of the dust will be identified, and the necessary corrective action will be taken. Each event, its cause and the action taken will be recorded in the site logbook.

If necessary, to avoid disamenity impacts at off-site receptors, site operations causing visible dust emissions across the site boundary towards a sensitive receptor will be reduced or suspended until the emissions can be controlled.

Site personnel will be empowered to take appropriate action whenever visible dust emissions are observed, or appear likely to occur, as a result of any operation or process on the site.

3.2 Weather conditions

During dry windy conditions, if any operations are identified as causing or likely to cause visible dust emissions across site boundaries, or if abnormal emissions are observed within the site, site operations will be halted or modified until effective remedial actions can be taken and/or the weather conditions giving rise to the emissions have moderated.

A trigger system will be adopted to identify those weather conditions when there is an increased or high risk of wind-blown dust. Suggested weather trigger levels are detailed in Table 2.

³ Process Guidance Note (PGN) 3/08 (12) *Statutory guidance for quarry processes* (Defra, 2012)

⁴ AEA Technology, 2011: *Good practice guide: control and measurement of nuisance dust and PM₁₀ from the extractive industries*

Table 2: Weather conditions and corresponding dust 'risk' conditions

Wind speed		Precipitation		
m/s	Beaufort Scale	Dry	Showers	Heavy Rain
> 6	4+ Dust and loose paper raised. Small branches begin to move.	Red	Amber	Green
2 – 6	2 – 3 Wind felt on exposed skin. Leaves rustle. Wind vanes begin to move.	Amber	Green	Green
< 2	0 – 1 Smoke drift indicates wind direction. Leaves and win vanes are stationary.	Green	Green	Green

Interpretation of the weather trigger levels will be on the basis of:

- Red: All exposed areas of loose bare ground and stockpiles will be inspected and treated as necessary in accordance with the provisions in Section 3.3.5;
- Amber: Loose bare ground and stockpiles within 100 m of the site boundary will be inspected and treated as necessary in accordance with the provisions in Section 3.3.5, and
- Green: no action necessary.

As an overriding requirement, during dry windy weather, i.e. 'red' conditions as defined in Table 2, if any operations are identified as causing or likely to cause visible emissions across the site boundaries, or if abnormal emissions are observed within the site, the Site Manager will immediately modify, reduce or suspend those operations until either effective remedial actions can be taken or the weather conditions giving rise to the emissions have moderated.

3.3 Dust sources

This section of the report sets out dust mitigation measures for the specific processes recognised above as having the potential to generate dust at Shellingford Quarry.

3.3.1 Soil stripping, soil storage and reinstatement

There is potential for high levels of airborne and wind-blown dust propagation from soil stripping, storage and reinstatement although these are generally short-term, transient operations.

Soils will be removed progressively according to operational phasing and transported by dump truck for storage in screening bunds or used directly for restoration.

Unacceptable dust emissions from soil stripping, storage and reinstatement can be controlled by minimising working of soil in very dry, windy conditions, by reducing drop heights at material transfer points and controlling vehicle speeds. This is especially

important when soil is being worked at the site boundary towards the off-site receptors listed in Table 1.

Soil storage bunds will be stabilised by seeding and maintained appropriately.

Additional control measures, such as the use of water sprays or wetting down with a water bowser, will be considered where there is a risk of wind-blow across the site boundary towards off-site receptors.

3.3.2 Overburden removal, storage and reinstatement (including inert fill)

Overburden will be used to form screening mounds and in site restoration.

There is potential for moderate to high levels of dust emissions during overburden handling, storage and replacement, although it can usually be worked at a higher moisture content than soils, thus reducing the risk of unacceptable dust emissions from this aspect of site operations.

The risks of dust emissions from quarry waste and inert material will vary according to the nature of the materials handled. There is a relatively low risk of dust emissions from freshly-excavated subsoil whereas there can be a high risk of wind-blow from dry, unconsolidated materials.

As with soils, working of overburden, quarry waste and inert backfill materials near the site boundary will be minimised in very dry, windy conditions. Drop heights will be minimised at material transfer points (e.g. during loading and tipping). Operations will be suspended when wind conditions would be likely to result in visible dust being carried towards the off-site receptors listed in Table 1.

Additional measures such as the use of water sprays or wetting down with the bowser will be considered where there is a risk of wind-blow across the site boundary.

3.3.3 Mineral extraction and handling

There is a low risk of airborne dust propagation emissions from mineral extraction by hydraulic excavator but additional control measures (such as wetting down with a water bowser) will be used if there is a risk of visible dust from the extraction faces being blown over the site boundary towards the off-site receptors listed in Table 1.

At upper levels and near the site boundary the risk of dust emissions is greater and care will therefore be taken to minimise unacceptable dust emissions over the site boundary, especially in dry, windy conditions.

3.3.4 Mobile plant (both on-site and off-site vehicle movements)

The greatest risk of dust from mineral workings is often considered to be associated with site traffic and there is a high risk of dust emissions from transport on unpaved roads unless appropriate mitigation measures are applied.

As a general rule, mobile plant with upward or sideways exhausts will be used and all site haulage will keep to designated haul routes.

Vehicles leaving the site will be sheeted and be checked for loose deposits that could fall onto the public highway. Any spillages will be cleared as quickly as possible by appropriate means to prevent unnecessary track-out onto the public highway. All HGVs leaving the site will pass through the wheel wash and recently installed wheel spinner before joining the A417. The haul road between the spinner and the A417 has recently been tarmacked, further reducing the potential for track-out onto the public highway. These additional mitigation measures shall further reduce trackout of material onto the public highway, and reduce the potential for dust generation from the haul road itself.

A water bowser will be used for damping down roads around the plant area and quarry. Unmade access roads will be kept in good repair and vehicle speed limits will be determined by the Site Manager according to the site and weather conditions pertaining at the time.

Regular visual monitoring of the haul road, access and the A417 shall also take place to ensure that any spills are identified as soon as practicable.

A powered road sweeper will be available to ensure that any track-out onto the A417 is cleared immediately.

Adoption of an effective road sweeper and use of the wheel wash will ensure that dust from HGV traffic from the access road is kept to a minimum.

3.3.5 Wind scouring of exposed surfaces and stockpiles

Dust emissions from exposed surfaces will be minimised during operating hours by wetting down surfaces with a water bowser as necessary, especially in periods of dry, windy weather. This will also be undertaken at the end of the working day if conditions are expected to continue to be dry and windy to prevent dust emissions outside of operating hours.

Where practicable, stockpiles will be managed to maintain a smooth profile to minimise the spreading of loose materials and will be disturbed as little as possible to encourage the formation and stabilisation of a surface crust.

It may also be necessary to wet down stockpiled materials to reduce the risk of wind-blow from exposed surfaces.

3.3.6 Other

General matters and the management of the site can affect the likelihood of significant dust emissions. These include:

- the use of clean water for dust suppression to avoid re-circulating fine material;
- high standards of house-keeping to minimise track-out and wind-blown dust; and
- effective staff training in respect of the causes and prevention of dust.

The water supply to any dust suppression installations will be protected against frost to ensure its availability at all times.

3.4 Maintenance

Effective control of airborne dust emissions requires the maintenance and proper operation of all plant and equipment, including fixed and mobile dust extraction and suppression equipment.

A programme of planned maintenance will be carried out on all plant and equipment in accordance with the manufacturers' recommendations to ensure that it operates at optimum efficiency. Stocks of essential spares and consumable items will be held at the site or kept readily available for use at short notice.

Any malfunction or breakdown leading to abnormal emissions will be dealt with promptly and operations will be modified or suspended until normal working can be restored. All such malfunctions and the actions taken will be recorded in the site logbook.

3.5 Site management

The Site Manager will exercise, either personally or by delegation to suitably trained and responsible staff, day-to-day control of the site. They will be responsible for the satisfactory working of the whole site and for ensuring full compliance with the dust management and monitoring plan.

Staff at all levels will receive the necessary training and instruction in their duties relating to all operations and the potential sources of dust emissions. Particular emphasis will be given to plant and equipment malfunctions and abnormal conditions.

The Site Manager will ensure that customers and suppliers are aware of the need to comply with the provisions of this plan so far as they are relevant to their activities on site. Specifically, an information sheet summarising the requirements in respect of road transport will be handed to drivers employed by external hauliers. The drivers will be asked to sign for the sheet, acknowledging that they have read and understood the requirements.

Any member of staff who fails to comply with the provisions of the dust management and monitoring plan will be re-trained as necessary and may also be subject to disciplinary action. External hauliers failing to observe the requirements in respect of vehicle operations will be asked to leave the site.

4 Monitoring

Dust emissions at Shellingford Quarry will be monitored routinely by visual means and by fixed dust monitoring equipment at key locations when required.

4.1 Visual

All activities with the potential to cause either airborne or wind-blown dust emissions will be monitored appropriately. This will include a visual assessment of any potential impacts at downwind receptors. Regular inspections of the surrounding highway will also be undertaken, in particular the A417.

Should visible dust be generated, the source/s of the dust will be identified, and the necessary corrective action will be taken. Each event, its cause and the action taken will be recorded in the site logbook.

4.2 Dust monitoring

Directional dust samples will be collected at appropriate locations over weekly or fortnightly intervals only when site activity is closest to receptors, with suggested monitoring locations shown in Appendix A.

The purpose of this monitoring is to evaluate the direction and quantity of dust flux towards off-site receptor locations.

Monitoring will be undertaken during soil stripping operations and when mineral extraction is underway within 250 m of receptors in Shellingford or 100 m of White Horse Business Park.

Environment Agency Technical Guidance Note M17 sets out custom-and-practice criteria for dust disamenity which have been developed based on the mass of dust or dust soiling, coverage or loss of reflectance. These criteria are used in this management plan.

4.2.1 Methodology

Directional dust will be monitored at the designated locations at or near the site boundary using DustScan (sticky pad) directional dust samplers. Being cylindrical, the samplers collect dust from 360° around the sampling head and, as set out below, the data are reported in discrete 15° intervals (*i.e.* 0 – 15°, 15 – 30° and so on).

The samplers will be installed in accordance with best practice guidance (including M17) and the supplier's instructions and will be located away from nearby obstructions to ensure a clear air flow to the monitoring head.

The dust gauges are of modular design to facilitate easy exchange by site personnel. The samples will be collected at fortnightly or weekly intervals and sent to DustScanAQ for processing.

The directional dust monitoring data is reported as Effective Area Coverage (EAC%, the darkness or potential soiling of dust) and Absolute Area Coverage (AAC%, a dust presence

test irrespective of colour) over 15° arcs as specified above. Therefore, for each arc a single %EAC value and a single %AAC value is returned. From this, it can be seen that the data are reported as discrete (non-overlapping) values for each arc around the cylinder.

The directional dust monitoring data shall be assessed in accordance with the 'impact risk' matrix in Table 3.

Table 3: DustScan directional dust 'impact risk' matrix

		AAC: Dust coverage				
		Level 0: <80%/interval	Level 1: 80 to <95%/interval	Level 2: 95 to <99%/interval	Level 3: 99 to 100%/interval	Level 4: 100% over 45°/interval
EAC: Dust soiling	Level 0: <0.5%/day	Very Low	Very Low	Very Low	Low	Medium
	Level 1: 0.5 to <0.7%/day	Low	Low	Low	Medium	High
	Level 2: 0.7 to <2.0%/day	Medium	Medium	Medium	High	High
	Level 3: 2.0 to <5.0%/day	High	High	High	High	Very High
	Level 4: ≥5%/day	Very High	Very High	Very High	Very High	Very High

4.2.2 Locations

The 2017 AQA identified a number of potential dust receptors in the vicinity of the extension area and, as shown in Table 1, these may be considered in relation to the operations at the site.

As with other pollutants, the propagation and effects of 'disamenity' dust can be considered in terms of source-pathway-receptor relationships. From above, a number of potential dust sources have been identified within the site and a number of potential receptors beyond it, and the pathway between source and receptor is by air.

Directional dust monitors will therefore be located at or near the site boundary between the active site operations and nearby receptors, according to the current stage of operation.

The suggested approximate dust monitoring locations at and around the extension area are therefore illustrated in Appendix A. Monitoring location DM1 will be used to assess impacts towards Shellingford when operations are undertaken nearby and monitoring location DM2 will be used when site operations are undertaken at the east of the extraction area to assess emissions towards White Horse Business Park.

4.2.3 Response

The results of the dust monitoring programme will be used to evaluate site dust control at Shellingford Quarry. As set out below, results of the dust monitoring programme will be reported to the relevant Minerals Planning Authority (MPA) and Local Authority (Vale of

White Horse District Council, VWHDC), as requested, and the dust monitoring data will be reviewed in relation to any relevant community response or complaint records.

A record will be kept of the findings and of any actions which are subsequently taken.

The suitability of the dust monitoring regime will be reviewed over time. Any potential revision to the dust sampling locations, methods or trigger levels will be discussed with the MPA before implementation.

4.3 Reporting

Directional dust monitoring results will be reported as AAC%, EAC% and Risk over 15° arcs, as specified above. The dust monitoring results will be tabulated and presented graphically in a 360° 'dust rose' indicating the strength and direction of dust propagation at that location.

All dust monitoring results will be issued to Multi-Agg Ltd and will be made available to the MPA and VWHDC.

Results will be summarised and evaluated in regular dust summary reports when required, with reference to site activities and any dust complaints. These summary reports can be made available to the LLG for discussion during regular liaison meetings.

5 Emergency response

An emergency response procedure, to be followed in the event of a major dust emission, will be kept at the site office.

For the purposes of emergency response, major dust emissions will be defined as including:

- visible dust crossing the site boundaries;
- persistent fugitive dust from mineral processing;
- persistent fugitive dust when loading or tipping soils, minerals or inert waste;
- persistent fugitive dust from transport or plant movements; and
- persistent wind-blown dust.

The contact details of key personnel and organisations will be listed in the procedure.

6 Complaints

All complaints regarding dust emissions will be recorded and reported to the Site Manager, who will investigate the circumstances and ensure that the necessary corrective measures are taken.

In the event of a complaint from a member of the public regarding dust emissions from the site, a record will be kept and made available to the MPA as required. Additionally, details

of any complaints received and corrective action taken will be made available to the LLG for discussion.

All complaints will be investigated as soon as possible and the complainant kept informed throughout the investigation. The MPA will be kept informed of the results of any subsequent investigation.

In the event of any dust complaint substantiated after consultation with the MPA, the effectiveness of the dust management and monitoring plan will be reviewed.

7 Review and update

The continuing effectiveness of this dust management and monitoring plan will be reviewed annually in consultation with the MPA. The reviews will take into account the compliance records, complaints history, monitoring records and any recent sensitive developments on neighbouring land.

Reviews of the plan will also be undertaken in the event of:

- changes to the AQO for PM₁₀ and/or PM_{2.5};
- dust complaints from nearby residents or businesses; or
- consistently high results from the directional dust risk criteria in the direction of sensitive receptors.

The plan will be amended as necessary, including any changes to the monitoring methods (such as the introduction of real-time monitoring, where appropriate) and control measures which may be agreed.

DustScanAQ
June 2020

Appendix A: Site plan and suggested dust monitoring locations

