Caulmert Limited

Engineering, Environmental & Planning Consultancy Services

Cassington Quarry - Plant Area

Hanson Quarry Products Europe Limited

Dust and Emissions Management Plan

Bespoke Environmental Permit Application

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Document Reference: 4656-CAU-XX-XX-RP-V-0304.A0.C1

October 2021





APPROVAL RECORD

Client: Hanson Quarry Products Europe Limited

Project Title: Environmental Permit Application

Document Title: Dust and Emissions Management Plan

Document Ref: 4656-CAU-XX-XX-RP-V-0304.A0.C1

Report Status: Final

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Reviewer	Andy Stocks Associate Director	Date	05/07/2021
Approved	Andy Stocks Associate Director	Date	05/07/2021

Revision Log			
Revision Description of Change Approved Effective D			Effective Date
C1	Initial Release	AS	13/10/2021

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DUST AND EMISSIONS MANAGEMENT PLAN

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4656-CAU-XX-XX-DR-V-1801 Sensitive Receptors Plan **4656-CAU-XX-XX-DR-V-1802** Permit Boundary Plan

Appendices

Appendix 1 Waste Acceptance ProceduresAppendix 2 Mobile Plant Specifications

Appendix 3 Cassington Quarry, Site Checks and Dust Monitoring Form

1 INTRODUCTION

1.1 Report Context

- 1.1.1 Hanson Aggregates Limited (Hanson) has appointed Caulmert Limited to prepare a Bespoke Environmental Variation application at the former processing plant area (hereafter referred to as the 'application site') in Cassington Quarry, Yarnton, Oxfordshire, for the following activities:
 - Undertake a waste recovery operation to restore the application site; and,
 - Aggregates recycling facility to produce soil, soil substitutes and aggregates;
- 1.1.2 The waste recovery operation will be undertaken in accordance with the Waste Recovery Plan (WRP) produced by WYG which was prepared and submitted to the Environment Agency under document reference 'Waste Recovery Plan Cassington Quarry, version FINAL, Nov 2020' to import approximately 279,000 tonnes (155,000m3) of inert waste to restore the site. The final landform will be restored to create grassland, perimeter tree and shrub planting with areas of open water in the south-eastern section of the site.
- 1.1.3 In addition, the client proposes an aggregates recycling facility for the transfer and treatment of waste to produce soil, soil substitutes for restoration infill and secondary aggregates to be imported off site for sale/onwards dispatch and the processed soils will be used for restoration infill at the site. On the odd occasion, should suitable soils be identified, Hanson will seek opportunities for export/sales. This will involve the transfer and treatment of wastes consisting only of sorting, separation, screening, crushing and blending of waste for recovery.
- 1.1.4 The aggregates recycling facility will be located within the recovery operation permit boundary as shown in drawing ref. 4656-CAU-XX-XX-RP-V-1802. As a facility with no fixed location, it will move across the site carrying out crushing and screening activities on waste material stockpiles across the Cassington Quarry Plant Area site. A maximum of 279,000 tonnes of inert material annual, up to 1000 tonnes a day of inert material will be processed. Operations will be carried out as per the site norm operating hours of 07:00 17:00.

1.2 Objectives

This dust and emissions management plan (DEMP) will provide thorough detail of appropriate measures that are required for effective dust emissions management and will outline a 'Dust Action Plan' for any increase in visual dust emissions.

This DMP has the aim of ensuring that potential dust sources are identified and controlled at source where possible. The DMP aims to minimise the risk of dust impact at locations outside of the facility boundary.

1.2.1 As a minimum this DMP will consider the following elements:

- An assessment of the risks of dust emissions at the site;
- Identify the appropriate controls to manage the identified risks;
- Visual monitoring to confirm effectiveness of control measures;
- Complaints handling;
- Identify actions, contingencies, and responsibilities when dust emissions arise; and
- Regular review of the effectiveness of the dust control measures.

1.3 Audience

This dust and emissions management plan (DEMP) will be made available to all site operational staff and its contents distributed through regular site toolbox talks (or equivalent). A hard copy will be kept in the site office and electronic copies stored in the Hanson database system.

A copy can be made available upon the request of the Environment Agency or other local regulatory bodies.

1.4 Site Setting

The application site comprises the 'plant area' within the wider area of restored sand and gravel workings of Cassington Quarry and is approximately 7.12 hectares (ha) in size. The site is situated approximately 670m southwest of Yarnton village and 1.5km northeast of Cassington village. The site is 480m north of the A40 highway and the outskirts of Oxford are located approximately 2.2km southeast of the application site.

The site is located at postcode OX29 4FL and National Grid Reference SP 47437 11274. Access to the Site is from an unnamed road which comes off the eastbound A40 carriageway to the west of the site. This road serves the former quarry workings, the application plant site and three other waste management sites before heading back to rejoin the westbound A40 carriageway.

Plant Site Location Plant Site Location Sorrer Catage Worton Regard Restrict Fill Restrict

The site location is indicated below in Figure 1:

Figure 1 – Site Location (approximate boundary only)

The restoration of the wider area already comprises grassland and water bodies, many of which are immediately to the south of the site (visible in Figure 1), and the proposed enduse of the area once restoration is complete is a combination of agriculture and recreational use.

As mentioned above, the application site is surrounded by numerous large and small water bodies immediately to the south and the A40 main road is further south, 480m away.

There is the Oxford to Evesham railway line along the northern and eastern boundary of the site and arable agricultural land beyond to the north. Immediately east of the application site are some adjacent waste management sites. The site is set within the River Thames valley and the River Thames/Isis is 960m to the south-southwest.

The closest residential receptors are Mead Farm buildings and The Barn approximately 310m northeast. These residences are on the outskirts of Yarnton. The other nearest settlements are Worton 780m west and Cassington 1.5km southwest.

2 POTENTIAL SENSITIVE RECEPTORS

- 2.1.1 The Plant Area is situated within the wider former sand and gravel workings of Cassington Quarry and surrounded by agricultural land to the north and waterbodies to the south.
- 2.1.2 A sensitive receptor search was conducted of the surrounding area within 1km radius of the application site boundary using Defra's Magic Maps website1 and the sensitive receptors identified are listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 4656-CAU-XX-XX-DR-V-1801. The distance to each receptor is measured from the boundary of the application plant site.

2.1 Designated Sites of Ecological Importance & Other Habitats

- 2.1.1 A search of the surrounding area using the DEFRA Magic Maps website¹ has identified there is a Site of Special Scientific Interest (SSSI), a Special Area of Conservation (SAC) and a Local Wildlife Site (LWS) within 1km of the application site boundary:
 - Pixey and Yarnton Meads SSSI
 - Oxford Meadows SAC
 - Oxey Mead LWS
- 2.1.2 The Pixey and Yarnton Meads SSSI is located on the floodplain associated with the River Thames and forms part of the larger Oxford Meadows SAC.

Pixey and Yarnton Meads SSSI

2.1.3 This designation is noted for being amongst the best remaining examples of neutral grassland in lowland England with botanically rich grassland. A variety of species include the cuckoo flowers which occupies much of the largest area of the SSSI with other notable plants including the green winged orchid and autumn crocus are part of the 150 species which dominates the meadow grassland. The watercourse surrounding the Meads have tall emergent vegetation frequented by dragon and damselflies. The Meads have been the subject of detailed botanical research and regular agricultural plant breeding.

Oxford Meadows SAC

2.1.4 The general site character of the Oxford Meadows is predominantly humid and mesophile grassland and improved grassland. Oxford Meadows represents lowland hay meadows in the Thames Valley centre include vegetation communities that are unique in reference to long-term grazing, hay-cutting on lowland hay meadows. The site benefits from the survival of traditional management and therefore exhibits good conservation of structure and function. Oxford Meadows is selected as a SAC because is it one of the larger of only two

¹ DEFRA Magic Maps 2021: https://magic.defra.gov.uk/MagicMap.aspx

known sites in the UK for creeping marshwort, a creeping perennial that grown in wet grassland and areas subject to winder flooding (typically by rivers).

Oxey Mead LWS

2.1.5 The Oxy Mead Local Wildlife Site is home to swathes of flowers and butterflies found in profusion in England's meadows and pasture. It is described as one of the surviving ancient 'lot' meadows near the city of Oxford which date back to medieval times. The site is a dominant feature of wild flowers and wild grasses included common birds-foot, fairy flax and yellow rattle. Butterflies are attracted including the orange-tip, meadow brown and ringlet. Bird life is not prevalent to this area, with the occasional Skylark hovering high overhead and waders include snipe and redshank which may be observed during the wetter winter months.

Cassington to Yarnton Gravel Pits LWS

- 2.1.6 The Cassington to Yarnton gravel pits are extensive areas of lowland meadow habitat provides areas of standing water attracting a number of wildfowl. Similar to surrounding designation classes, this LWS provides a range of flora communities for wildflowers and meadow grasslands supporting a range of butterfly and insect habitats.
- 2.1.7 A review of the habitat designations detailed above indicate that these areas are predominantly grasslands and meadows with occasional bird species found in Oxey Mead LWS and the presence of native butterflies and insects during flowering seasons. It is considered that their sensitivity to dust (smothering) is low due to their distance from the site boundary. There are no Special Protection Areas (SPAs), National Nature Reserves (NNRs), Ramsar sites, Areas of Outstanding Natural Beauty (AONB), Local Nature Reserves (LNRs) or Ancient Woodlands within 1km of the site boundary.
- 2.1.8 An ecological assessment of the application site and wider Cassington Quarry was undertaken in 2015 by Applied Ecology Limited (report ref. AEL1044 v2) and evidence was found of the presence of Great Crested Newts (GCN) habitat on site and in the vicinity of the plant area. The long rectangular pond <10m to the southwest of the application site boundary and the smaller pond 50m to the southwest were both found to be home to Great Crested Newts. Prior to any restoration activities (waste recovery and aggregate recycling operations) commencing at the application site, the newts will be captured and relocated to another area. The report highlighted that the restoration of the former gravel extraction (plant) area "would result in an increase of 0.9 ha of newt friendly terrestrial habitat within newt commuting range of two confirmed GCN waterbodies, and would result in no loss or damage of any GCN breeding pond".

2.2 Summary of Identified Sensitive Receptors

- 2.2.1 The sensitive receptors within 1km of the site boundary are presented in Table 1 below.
- 2.2.2 The closest residential receptors are Mead Farm buildings and The Barn approximately 310m northeast. These residences are on the outskirts of Yarnton. The other nearest settlements are Worton 780m west and Cassington 1.5km southwest.

Table 1 – Summary of Sensitive Receptors within 1km of the site boundary

Receptor	Land Use	Distance/Direction
Long rectangular pond	GCN Habitat – Surveyed	<10m SW
Waste Transfer Station	Commercial/Industrial	<10m N
Woodland – Priority Deciduous	Habitat	<10m S, 270m NW, 670m E, 720m NW, 800m NW, 800m SE
Footpath	Public Footpath	15m E
Severn Trent Green Power Cassington Anaerobic Digestion Facility	Commercial/Industrial	20m W
Small pond	GCN Habitat – Surveyed	50m SW
Large Waterbodies	Surface Water	60m W, 100m S, 100m SW, 320m SE, 700m W
Unnamed Access Road	Public Road	100m W
Arable Fields	Agricultural	110m ENE, 120m N
M&M Skip Hire Ltd Waste Management Site	Commercial/Industrial	120m NW
Mead Farm	Residential/Recreational	310m NE
The Barn	Residential/Recreational	310m NE
Yarnton Manor	Residential/Recreational	350m NE
St. Bartholomew's Church	Residential/Recreational	410m NE
Pixey and Yarnton Meads SSSI	Habitat – Designated Site	460m S
Oxford Meadows SAC	Habitat – Designated Site	460m S
Oxey Mead LWS	Habitat & Surface Water	470m SE
A40	Public Road	480m S
Cassington Road	Public Road	510m NW
Windmill Farm	Residential/Recreational	580m N
Residential area of Yarnton	Residential/Recreational	610m NE
Car Tyre Shop / Yard	Commercial/Industrial	620m NE
Worton Kitchen Gardens	Commercial	780m WNW
Recreation Ground	Residential/Recreational	870m NE
Worton Business Park	Commercial/Industrial	870m WNW

Receptor	Land Use	Distance/Direction
Worton Hall / Events Venue	Recreational	925m WNW
Business Park / Depots	Commercial/Industrial	940m NE
Yarnton Nursing Home	Residential/Recreational	960mN
River Thames/Isis	Surface Water	960m SSW
William Fletcher Primary School	Residential/Recreational	990m N

2.3 Meteorological Setting

- 2.3.1 Fugitive emissions of dust, litter, odour and noise from the site are likely to be affected by local weather conditions, in particular by wind direction. Wind statistics observed from Oxford Airport/Kidlington weather station located 5.5km to the north of the application site boundary are considered to be representative of the typical conditions at the site (Figure 2 below).
- 2.3.2 A review of the data recorded between 2015 and 2021 on the Windfinder.com website² indicates that the most dominant wind direction is from the west-southwest towards the east-northeast. The sensitive receptor plan shows that predominant wind conditions are likely to blow from the application site towards the woodland, arable fields and residential properties of Yarnton to the northeast.

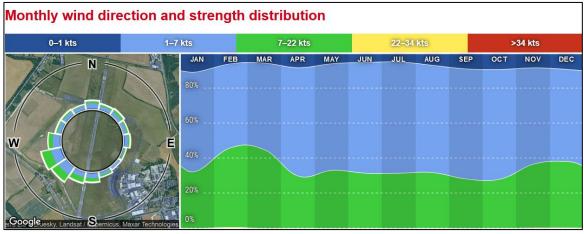


Figure 2 – Oxford Airfield wind statistics – average wind direction & strength 2015 to 2021

² Windfinder Wind Statistics 2021: https://www.windfinder.com/windstatistics/oxford-airport_kidlington

Weather conditions

- 2.3.3 Adverse weather conditions are measured via routine inspections will form part of the daily inspection and use of MET Office monitoring station (or equivalent) to provide meteorological readings for that day.
- 2.3.4 'high winds' that could impact on wind whip on stockpiles are defined whereby 'light materials are blown/wind shipped off stockpiles and also during loading/unloading process where dust and airborne emissions are blown off site. When a visual assessment of materials blown off stockpiles is made and/or during loading and unloading emissions are seen to blow beyond the site boundary, dust control measures or the cessation of activities will be actioned.

3 OPERATIONS AT CASSINGTON QUARRY

3.1 Waste Deliveries to Site

- 3.1.1 All wastes brought to site will be in covered waste vehicles travelled via main and public roads, due to the nature of the way types (potential for dusty emissions) all loads are required to be covered as a minimum.
- 3.1.2 As part of the Waste Acceptance Procedures for the site (Appendix 1) all incoming vehicles are required to report to the site weighbridge where details are checked against the Duty of Care notes and relevant waste transfer notes to ensure that the load is acceptable at site.
- 3.1.3 Waste will be visually inspected, weighed and details will be recorded for every load deposited at the site using the sites computer record system for the following information:
 - 1. Date and time of delivery
 - 2. Name and address of the waste producer
 - 3. Description of waste types including quantity
 - 4. How the waste is contained e.g. loose/ container type
 - 5. Carriers name and address
 - 6. Drivers name, signature and vehicle registration No.
 - 7. Signature or initial of person(s) accepting/inspecting the waste
 - 8. Additional handling details (e.g. notes made by the driver after inspecting the load)
 - 9. SIC code of the premises which produced the wastes (if relevant)
 - 10. Waste hierarchy declaration
 - 11. Information on previous treatment of the waste e.g. manual or mechanical
- 3.1.4 Weighbridge personnel will also check that all vehicles are a registered waste carrier, any expired certificates will be advised to contact the Environment Agency.
- 3.1.5 If on the weighbridge, waste cannot be accurately categorised or described incorrectly on the waste transfer note, the haulier will be directed to a quarantine area where the Site Manager or technically competent person will inspect the waste and make a decision whether it will be accepted to site or not.
- 3.1.6 If accepted, the haulier is directed by the weighbridge clerk to deposit the waste into Plant Site area.

3.2 Overview of waste processing, dust and other emission controls

3.2.1 It is proposed to restore Cassington Quarry Plant Area in accordance with the waste recovery operations detailed in the Waste Recovery Plan (WRP) produced by WYG, document ref. 'Waste Recovery Plan – Cassington Quarry.

- 3.2.2 The activity is for the transfer and treatment of waste to produce soil, soil substitutes and aggregates. This will involve the treatment of wastes consisting only of sorting, separation, screening, crushing and blending of waste for recovery.
- 3.2.3 The aggregates recycling facility will be located within the recovery operation permit boundary, as a facility with no fixed location, it will move across the site carrying out crushing and screening activities on waste material stockpiles across the Cassington Quarry Plant Area site. A maximum of 279,000 tonnes of inert material, up to 1000 tonnes a day of inert material will be processed, with no more than 90,000 tonnes of inert material to be stored at any one time. Operations will be carried out as per the site norm operating hours of 07:00 17:00.

3.3 Mobile plant and equipment

3.3.1 The Operator proposes a variety of mobile aggregate facilities which will provide flexible screening efficient at scalping, screening and recycling applications which can process mixed demolition wastes into different grade which range from finer grains to oversized grains. An indication specification of mobile aggregate facilities is included in Appendix 2. These are not brand specific and chose for its versatility of operation a number of application such as sand, gravel, aggregates and recycling.

4 DUST AND PARTICULATE MANAGEMENT

4.1 Responsibility for Implementation of this Plan

4.1.1 Is it the responsibility of the Site Manager and deputy for ensuring the DEMP is distributed to site staff/contractual staff. This is achieved through Site Inductions, fresher (annual) Site Inductions and Toolbox Talks (or equivalent) which will be delivered by Site Manager/deputy.

4.2 Staff Training

- 4.2.1 The Site Manager will be responsible for ensuring relevant staff receive proper and adequate training in respect of dust emissions management. Under the company management system 'UK SP006 'Training, Competence and Awareness, staff will receive the necessary training and instruction in their duties relating to all operations and the potential sources of dust emissions. Emphasis will be given to plant and equipment malfunctions and abnormal conditions.
- 4.2.2 Relevant site staff will undergo training to ensure that they understand how their actions and the site operations can affect airborne emissions. The staff will be instructed to not operate unless the site controls are operational and alert site management at times when the site could potentially cause a dust nuisance. The staff will be trained to ensure that materials are sprayed with water during unloading and loading or when conditions require. The staff will be trained to visually inspect for airborne emissions. Staff will be instructed to report fugitive emissions to the Site Manager with immediate effect.
- 4.2.3 Staff training records will also be updated and stored within the site office.

4.3 Dust and Emissions Management Plan Review

4.3.1 This Dust and Emissions Management Plan (DEMP) will be reviewed by site management on a regular basis as a minimum to ensure that the controls described are effective and reflect best available techniques. The DEMP will also be reviewed following a number of complaints at the site or relevant changes in the site operations, permit variation or procedures.

4.4 Sources of Fugitive Dusts & Other Emissions

Sources

4.4.1 Crushing, screening and blending activities and the stockpiles of material should be designed, set up and operated in such a way that any substances released have the minimum impact on the environment and people. Fugitive dust could result in visible dust being observed crossing the site boundary and nuisance can be caused by dust deposition on surfaces at sensitive receptors.

- 4.4.2 Potential dust sources have been identified at the site from the operational activities to be carried out, these are detailed below:
 - Vehicle movements (particularly on un-surface routes. Tyres and exhausts may cause dust);
 - waste processing (crushing, screening, sorting etc.)
 - Loading and tipping of wastes (dusts may be given off through impact);
 - Debris falling off lorries which arrive uncovered
 - Handling and movement of stockpiles;
 - Wind blow/action across stockpiles;
 - Restoration operations;
 - Handling and deposition of waste materials and stockpiles.
- 4.4.3 In addition to the above, the proposed activity could result in airborne dust emissions where treatment activities may include; sorting, separation, screening, crushing and blending of wastes.

Off-site Sources

4.4.4 A review of the surrounding area has identified that the M&M Skip Hire Ltd waste management site is located 120m NW from the permit boundary, it is considered this waste site could be a potential for off-site sources of dust.

Pathways

- 4.4.5 It is considered the potential pathway for dust and particulate emissions to receptors are via airborne transmission, atmospheric dispersion and after tracking onto the public highway on the wheels of vehicles. Factors affecting dust and particulate emissions include:
 - Quantity of wastes;
 - Type of wastes;
 - Warm, dry weather
 - Wind direction, exposure and speed; and,
 - Exposure of sensitive receptor to site operations.

4.4.6 As the aggregates facility is a mobile operation, it will be moving around the site. Potentially sensitive receptors are therefore likely to be at greater exposure from dust impacts depending on the location of the facility.

4.5 Control of Fugitive Dusts & Other Emissions

- 4.5.1 This section details the control measures that will be undertaken on site to mitigate dust emissions from site activities. The abatement of dust emissions will be based on best management practices. General principles will include:
 - i) Allowing recycled waters to settle prior for use in dust suppression;
 - ii) Anti-idling policy for vehicles (monitored by weekly reports for mobile plant);
 - iii) Consideration of sensitive receptors, and the direction of wind blow;
 - iv) High standards of house-keeping to minimise track-out and wind-blown dust; and
 - v) Effective staff training in respect of the causes and prevention of dust.

Waste Acceptance

- 4.5.2 Waste carriers will report to the weighbridge and waste transfer notes inspected for their load, and if in order, the waste carrier will then be sent to the appropriate unloading area within the site and site operatives will visually inspect the waste load, including for dust emissions. Any non-conforming wastes will be rejected from site.
- 4.5.3 Drop heights will be minimised during the loading and unloading of materials to reduce the likelihood of dispersion of dust and agitation. The weighbridge will conduct assessments of waste inputs and impose controls and restrictions on potentially dusty wastes. If required, the surface of the material will be dampened down prior to entering site.
- 4.5.4 Taking into account the meteorological conditions for that day, Site Management may impose the following restrictions to reduce the impact of dust and particulate emissions:
- 4.5.5 Limiting only one vehicle at a time to tip, any load carrying high particulate matter will be deposited and covered as quickly as possible;
- 4.5.6 Instructions given to all incoming waste loads that all wastes remain sheeted until immediately prior to waste deposition;
- 4.5.7 Rejection of dusty and high particulate wastes at weighbridge; and,
- 4.5.8 Complete site closure during adverse weather conditions.

Dust Suppression

4.5.9 Dust suppression will be carried out via a tractor and a 2000-gallon tank bower and is recorded by the number of fills and deployment. Water is taken from onsite water lagoon. Under rare circumstances where there is limited water availability from the onsite lagoon, then water from mains source can be utilised.

Site Management

- 4.5.10 Site management shall be responsible for the satisfactory working of the whole site and operations ensuring full compliance with the dust management plan.
- 4.5.11 In line with the site permit and waste acceptance procedures, wastes consisting solely or mainly of dusts is excluded from site.
- 4.5.12 The impacts and overall risk of dust emissions at the Plant Area in relation to the proposed activity has been assessed in the Amenity and Accidents Risk Assessment, document ref: 4656-CAU-XX-XX-RP-V-0302.A0-C1.
- 4.5.13 As part of the company management system (UK SP006 'Training, Competence and Awareness) Staff will receive the necessary training and instruction in their duties relating to all operations and the potential sources of dust emissions. Emphasis will be given to plant and equipment malfunctions and abnormal conditions.
- 4.5.14 Site management shall ensure that customers, contractors', suppliers and visitors are aware of the need to comply with this dust management plant summarising road transport.
- 4.5.15 Any persons on site failing to comply with the requirements of the dust management plan will be re-trained as necessary. External hauliers failing to abide by site road rules in respect of vehicle operations will be reported and if required, asked to leave site.
- 4.5.16 Further measures used on site to control the release of dust, particulates and other emissions from operations/activities are included in Table 2 below.

Table 2: Control and Measures on site for dust/particulates and other emissions

Table 2: Control and Measures on site for dust/particulates and other emissions					
Activity	Description of Mitigation and	Trigger for implementation			
	Control				
Plant, Machinery and Hauled Materials	When positioning equipment, consideration will be given to the proximity of receptors and the prevailing wind direction.	Continually			
	All plant and machinery will be regularly maintained and washed down using on-site washing facilities available to limit the potential of airborne dusts.	Continually			
	If older items of plant are found to give rise to unacceptable dust levels, consideration will be given to their replacement.	Continually			
	In line with manufacture's specifications, all mobile plant and machinery shall be maintained as per the minimum requirements specified by the manufacturer.	Continually			
	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.	During malfunction/breakdown			
	Haul routes will be located (where possible) in positions which are remote from sensitive boundary).	During operation			
	Unpaved haul routes shall be kept damp in dry, windy conditions using a bowser.	During high-risk weather conditions e.g. dry and windy			
	All vehicles delivering materials will be sheeted or enclosed to minimise dust generation. All loaded vehicles will be evenly loaded to avoid spillage or over toppling of material.	Continually as part of site operations			
	Regular grading and road maintenance will be carried out to	As and when required			

	reduce dust disturbance from vehicle movements.	
	Anti-idling policy will be in place for vehicles. Vehicles will be supervised during unloading and loading to ensure that they deposit materials correctly and are not overfilled on dispatch.	Continually
	A separate paved parking area for off-site vehicles such as staff cars, with no access to the working areas will help prevent track-out of mud/dust and debris onto the public highway.	Continually
Vehicles movements	All haul and access roads within the site shall be kept free from mud and debris by manual clearing and hiring of road sweeper. Mud and debris on access and haul roads will be undergo visual daily monitoring by the site manager and his nominated deputy, cleaning/remedial will be actioned when required.	Continually – observations made daily by Site management and operatives on site
	A road sweeper will be hired if necessary and used on the nearby public highway if mud/debris builds up.	When mud is reported on road and/or following complaint
	Site management shall ensure that adequate measures are provided throughout the site to dampen and wet surfaces. E.g. hoses/bowser during periods of dry weather.	Continually and during dry and windy weather
	All new drivers to site, contractors and visitors will be fully inducted on traffic movement and their responsibility to minimise dust emissions from site driving.	Site induction and continual site management
	All vehicles and plant will be checked by the driver/operator prior to leaving site to ensure that deposits of mud and debris are not carried outside the site. Wash down	Continually

	of vehicles will be actioned if required.	
	Long access haul road on site encourages mud & debris drop from vehicles prior to leaving site	Continually
	An Anti-idling policy will be in place for vehicles.	
	A site speed limit of 10mph will be enforced for all vehicles to minimise the potential entrainment of dust into the atmosphere. Standard good practice include avoiding abrupt changes in direction will be implemented.	Continually
		Continually
Movement of Stockpiles	Site Management will consider weather conditions at the site on a daily basis and shall have regard for high winds, wind speed and direction.	Daily
	If high winds are encountered and towards sensitive receptors, site management will ensure that the movement of materials on site is controlled (reduced speeds/stopped/suppression applied) until wind speeds reduce significantly.	Adverse weather conditions
	The covering and compacting of wastes at the end of the working day to reduce the potential for dust emissions and the effect of windblow on potentially dusty wastes.	Continually as part of site operations
	Site management shall ensure that appropriate measures are used throughout the site to dampen surfaces during periods of dry weather.	Continually and during dry and windy weather
Windblow across stockpiles	The effects of windblow across stripped surfaces, unpaved areas, stockpiles and other areas of bare	Continually as part of site operations

	ground will be minimised by ensuring that loose materials are removed or treated as necessary. Site Management will consider weather conditions at the site on a daily basis and shall have regard for high winds, wind speed and direction.	Daily
	If high winds are encountered and towards sensitive receptors, site management will ensure that the movement of materials on site is controlled (reduced speeds/stopped/suppression applied) until wind speeds reduce significantly. The aggregates recycling facility will be positioned so that dust sensitive receptors are not downwind of operations during high winds.	During adverse weather conditions and dominant wind direction towards sensitive receptors
	During dry conditions, unpaved haul road areas and surfaces of stockpiles in the open will be watered using a water bowser. Water will be applied as necessary to stabilise loose bare surfaces such as near the site boundary.	During dry weather conditions
	Site management shall ensure that appropriate measures are used throughout the site to dampen surfaces during periods of dry weather.	Continually
Screening, Crushing and Blending of Wastes	All inert handling/loading/screening operations on site shall be monitored by site management/nominated deputy, and if necessary appropriate measures shall be implemented to prevent dust generation.	Daily and continual observations made on site
	During screening of waste, dust emissions shall be visually monitored continuously by staff.	During site operations

	Materials will be dampened down prior to screening if required.	
	As the treatment activity is mobile, due care and consideration will be taken for nearby sensitive receptors and pathways. I.e. appropriate siting away from the boundary or suspending activities (e.g. carrying out treatment activities at another part of the site) on windy days if sensitive receptors are downwind from operations.	Continual observations made if activity is located near sensitive receptor and/or predominant wind is towards sensitive receptor. Activity can be temporarily halted and/or moved to another part of the site
	Dust suppression utilised during operations if required.	During dry and windy conditions, following a complaint or if site activities are creating a dust/particulate emission at source
	Site Management will ensure visual inspection of screening, crushing and blending activities during operational hours to assess the extent of dust being generated. In circumstances where visual dust inspection identifies a significant dust emissions, management shall adopt appropriate dust suppression measures to prevent or minimise dust being generated.	As above
Loading and tipping operations	All wastes handled on site shall be done so in a controlled manner, with consideration given to the potential for dust generation at all times.	Continually during site operations
	Loading and tipping heights will be minimised to avoid uncontrolled dust emissions.	Continually during site operations
	Suppression equipment available (e.g. hoses and bowser) to dampen down dusty loads.	As and when required during dry and windy weather
	All vehicles will be sheeted when entering and leaving the site.	Continually as part of site procedures

The site will endeavour to locate particulate emitting activities at a greater distance and downwind from receptors to reduce receptor emissions.	Daily by Site Management during site observations and checks.
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4.5.17 The water suppression systems for tractor bowser are sourced from onsite lagoons. Mains water supply is available during warmer and drought periods.

4.6 Enclosure of waste processing & storage areas

- 4.6.1 Where the aggregates treatment facility is a mobile operation, processing will be undertaken to minimise the effect of dust emissions. This will include:
 - Processing taking place within a sheltered part of the site, away from sensitive receptor boundaries where possible;
 - Dampen material and wetted down stockpiles prior to crushing operations
 - Protect equipment (e.g. conveyors and process plant) by partial or complete enclosures (where possible);
 - Use crushing and screen plant within its design capacity; and,
 - Maintain food standards of all plant and equipment.

5 VISUAL DUST MONITORING AND RECORDING

5.1 Pro-active daily visual monitoring

- 5.1.1 Site Management will make daily visual monitoring across the site to ensure that a pro-active approach is being undertaken and that dust and emissions are not affecting local neighbours and nearby sensitive receptors. In the absence of the Site Manager, their nominated deputy or TCM will carry out daily visual monitoring.
- 5.1.2 It is the responsibility of all site personnel to maintain a visual awareness of dust emissions during the working day. Any significant dust emission occurring with the potential to travel beyond the site boundary will be reported to site management, who will be responsible for investigating the cause and taking immediate action to minimise further emissions. If necessary, site operations will be halted until appropriate remedial action(s) is completed.
- 5.1.3 The Site Manager/TCM shall implement adequate dust suppression measures to control dust from any activity which has the potential to generate unacceptable emissions of dust.
- 5.1.4 There are no fixed dust monitoring points, dust monitoring is observed with particular emphasis made around operational and storage areas. Visual dust monitoring will include observing the movement of vehicles, stockpiling and the movement/transfer and treatment of materials, to establish if such operations are giving rise to dust emissions and the size and frequency of these releases. Forms for monitoring, checks and complaints are included in Appendix 3.
- 5.1.5 The frequency of site inspections will be increased when site activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- 5.1.6 Site management or nominated technical person will make daily visual assessment of the site and will make observations and record in the site diary and Appendix 3 if any dust emissions are observed. Details will be recorded including information:
 - 1) Date, time of dust emission
 - 2) Meteorological conditions
 - 3) Potential source of dust emissions/operations during the observation
 - 4) Any complaints received and remedial actions to be taken to minimise or eliminate dust emissions.
- 5.1.7 If during routine visual monitoring, significant volumes of airborne dust are identified, or dust is being produced with the potential to affect nearby sensitive areas and cross the site boundary the following actions will be taken:

- Take immediate steps to establish the cause of the abnormal emissions;
- Cease operations until corrective action can be taken, or adverse weather conditions change;
- Implement corrective action, such as the use of water sprays; and
- Enter actions into site log book.
- 5.1.8 Any dust incidents will be reported in line with the company management system UKSP005 'Non-Conformance, Corrective and Preventative Actions'.

5.2 Particulate Monitoring

5.2.1 The site is not within an Air Quality Management Area. The Cassington Quarry Plant Area will undergo regular and daily site inspections to monitor compliance with the Dust and Emissions Management Plan. As per Section 5.1 there are no fixed dust monitoring, where visual dust monitoring is carried out and the frequency of site inspections can be increased according to dust risk (e.g. higher frequency in dry and windy conditions). It is considered that with daily visual dust checks (detailed in the above section) and site management controls, and where the site is not within an Air Quality Management Area, additional continuous particulate matter monitoring is not required at site.

6 DUST ACTION PLAN

- 6.1.1 In the event that an unacceptable dust impact is caused at a nearby sensitive receptor, and a justified complaint is received by the site management, the following action will be undertaken, including:
 - Additional visual monitoring to identify the extent of the impact and potential cause and source;
 - Examination of the operational activities at site and aggregates recycling facility at the time of the complaint or identification of an impact;
 - Examination of the meteorological conditions at the time of the complaint or identification of an impact;
 - Carry out a review of the operational procedure and controls and instigate any control measures immediately following identification of the problem;
 - Further monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.
- 6.1.2 It is the responsibility of all site personnel to maintain a visual awareness of dust emissions during the working day as part of continual proactive environmental monitoring. Any significant dust emissions occurring with the potential to travel beyond the site boundary will be reported to the Site Manager/Supervisor who will be responsible for investigating the cause and taking immediate action to minimise further emissions.
- 6.1.3 Site management (or nominated deputy/technical person) will also be responsible for daily visual checks which will be carried out as part of their normal operational procedures monitoring of dust levels and conditions associated with the potential for fugitive emissions of dust. In particular, this is in relation to:
 - Dry surfaces where mud or debris is present;
 - Any part of the site where movement of vehicles may generate dust;
 - Any part of the site where dust may be generated by wind;
 - Stockpiles of material;
 - Sorting, separation, screening, crushing and blending of wastes for recovery and;
 - Material handling operations.

7 REPORTING AND COMPLAINTS RESPONSE

7.1 Engagement with the Community

- 7.1.1 Hanson Quarry Products Europe Limited will endeavour to hold a positive and interactive relationships with nearby communities and neighbours. Engagement will include open communication with neighbours and communities and providing a point of contact should any site issues arise.
- 7.1.2 Communities and neighbours will be notified in advance of activities, which may give rise to increased dust emissions beyond the site norm.

7.2 Management Responsibilities

- 7.2.1 Typically, any complaints received at the site are likely to be through the Environment Agency or Local Authority, although the operator is willing to deal directly with the complainants and where necessary the following can be implemented:
 - Information can be provided to the local neighbours (via the Environment Agency) regarding the point and method of contact for the site in the event that fugitive dust has been detected or they want to discuss any activities.
 - Complainants can be advised that any complaints / concerns will be addressed immediately following identification / notification and contingency action(s) implemented.
 - Complainants can be advised of any corrective action and a follow up call carried out if required.
- 7.2.2 The Operator will continue to maintain a routine liaison with the Environment Agency regarding nuisance dust. In the event of a dust complaint being received by the EA the complaint is then passed to the Operator for the investigation. The primary point of contact at the site for complaints and liaison within the complainant is the Site Manager who will ensure that the recording, investigation and close-out of complaints is undertaken as described below and in accordance with company management procedures. Every complaint will be recorded within Hanson recording system including entry made in the site diary:
 - All complaints are recorded by the site manager or site staff;
 - Depending on the severity, the complaint can be escalated to senior management for investigation if necessary; and,
 - The system is a digitalised process and records a wide range of reporting.

7.3 Complaints Monitoring

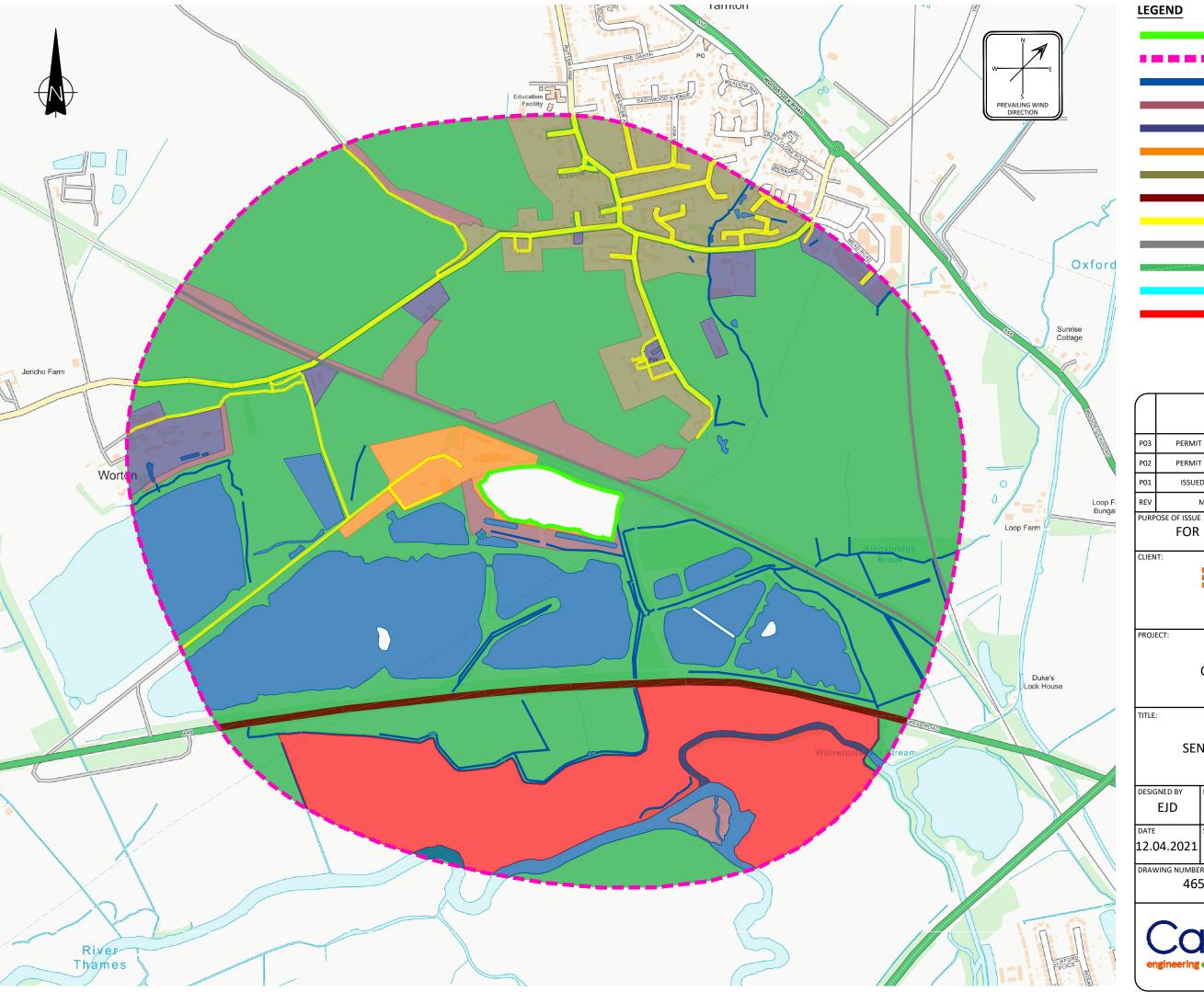
- 7.3.1 Any complaints received directly to Hanson or via the Regulatory bodies, including the EA and Local Authority, will be recorded as per the Hanson recording procedures (UKSP005). This will instigate dust monitoring (and recorded in Appendix 3) at the location of the complaint and on site to determine the source and extent of any suspected plume. Information recorded will include the following:
 - Date and time of complaint;
 - Extent of complaint;
 - Meteorological conditions at time of complaint;
 - The complainant's contact details including name and contact telephone;
 - Name of person filling out Complaint Record Form/Site Diary;
 - Action taken to resolve complaint or investigate complaint further;
 - Depending on the severity, the complaint can be escalated to senior management for even further investigation if necessary.
- 7.3.2 If necessary (and possible), qualitative and/or quantitative monitoring will also be carried out at the complainant's property and the monitoring results recorded for review by Hanson.

7.4 Record Keeping and Reporting

7.4.1 Following receipt of a complaint, it will be recorded as per the Hanson recording procedures (UKSP005). A record will be logged as per the Hanson's Environmental Management System (UK SP001 'Document Control and Record Storage) and made available to the regulating authorities on request.

Drawings

4656-CAU-XX-XX-DR-V-1801 Sensitive Receptors Plan **4656-CAU-XX-XX-DR-V-1802** Permit Boundary Plan



1000m OFFSET SURFACE WATER

PERMIT BOUNDARY

COMMERCIAL

WOODLAND

INDUSTRIAL RESIDENTIAL

MAJOR ROAD

MINOR ROAD RAIL

AGRICULTURAL

EDUCATIONAL

SSSI AND SAC DESIGNATION

KB KB 04.06.21 PERMIT BOUNDARY UPDATED KB KB 23.04.21 PERMIT BOUNDARY UPDATED EJD SB SB 20.04.21 ISSUED FOR INFORMATION BY RE AP DATE MODIFICATIONS

STATUS FOR INFORMATION S2



CASSINGTON QUARRY

SENSITIVE RECEPTORS PLAN

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	SB	SB
DATE	SCALE @ A3	JOB REF:	REVISION
12.04.2021	1:10000	4656	P03

DRAWING NUMBER

4656-CAU-XX-XX-DR-V-1801



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PERMIT BOUNDARY

P02	PERMIT BOUNDARY UPDATED	EJD	KE	3	КВ	04.06.21
P01	ISSUED FOR INFORMATION	EJD	SB		SB	12.04.21
REV	MODIFICATIONS	BY	RE		AP	DATE
PURPOSE OF ISSUE STATUS						

FOR INFORMATION



PROJECT:

CASSINGTON QUARRY

PERMIT BOUNDARY PLAN

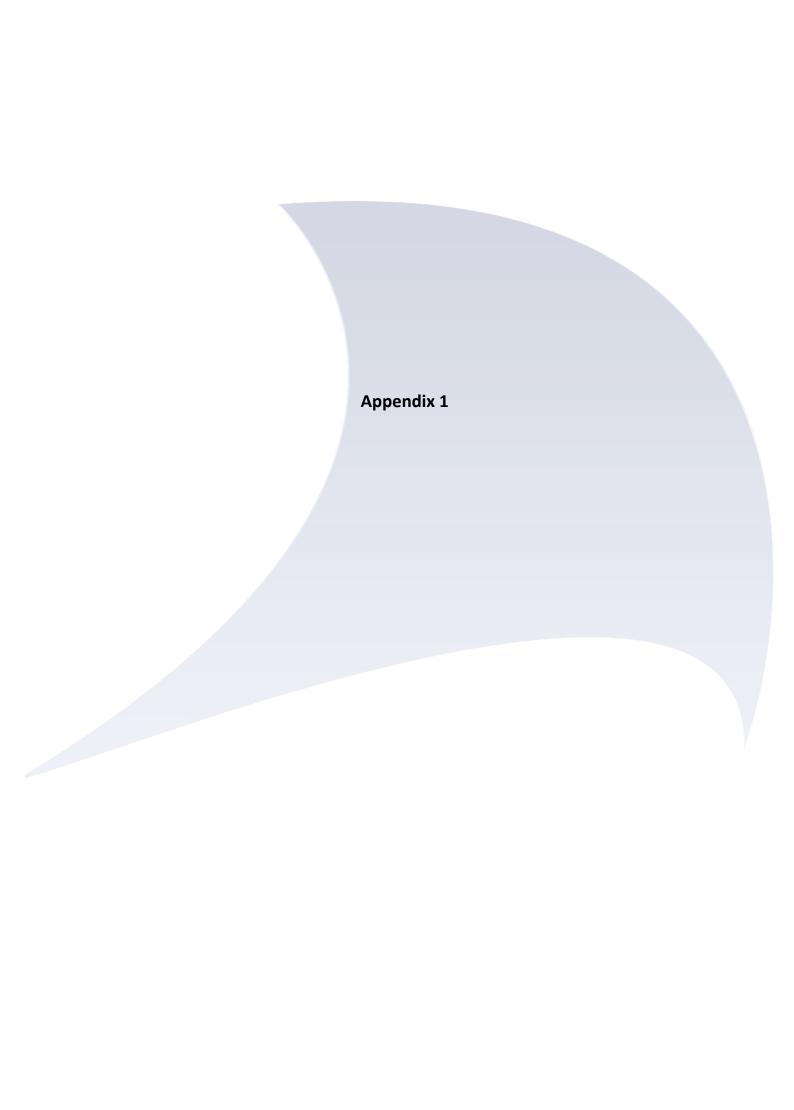
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EJD	EJD	КВ	КВ	ľ
DATE	SCALE @ A3	JOB REF:	REVISION	,
15.04.2021	1:5000	4656	P02	•

DRAWING NUMBER

4656-CAU-XX-XX-DR-V-1802



S2





Cassington Quarry Plant Area

Hanson Quarry Products Europe Limited

WASTE ACCEPTANCE PROCEDURE				
Revision	0			
Description of change	Initial Release			
Author	Caulmert Ltd			
Effective Date	30/04/2021			

1.1 Purpose

1.1.1 The purpose of this procedure is to ensure that:

- Only permitted wastes are accepted into Cassington Quarry Plant Area
- Adequate Duty of Care checks are carried out and records kept, and;
- Wastes are deposited into their designated areas.

1.2 Responsibility

- Site Manager
- Site Supervisor
- Site Operatives
- Weighbridge Personnel
- Technical Competent Managers

1.3 Referenced Documents

Treatment and Storage Site plan 4416-CAU-XX-XX-DR-V-0304 Appendix 1- Waste Information Form

1.4 Pre-Acceptance

Basic Characterisation of waste (Level 1 waste assessment)

All wastes brought to site will undergo a basic characterisation as per the GOV.UK guidance 'Dispose of waste to landfill' which will include information relating to:

- The source and origin of waste;
- The Standard Industry Classification (SIC) code for the process that produced the waste (include a description and the characteristics of materials and products);
- Any description if the waste has undergone treatment;
- Any testing information provided where relevant;
- Description of the appearance of the waste (smell, colour and physical form);
- The EWC code;
- For hazardous and mirror entry hazardous waste, the hazardous property code;



Waste Enquiry

- 1.4.1 For every new waste stream enquiry proposed to be brought to site, needs to provide information to confirm that the proposed waste stream will be compliant with the permit. It will undergo an appropriate technical appraisal to ensure that it complies with specific waste acceptance criteria so that is suitable to be stored/processed on site.
- 1.4.2 Information required to achieve basic characterisation (defined in Section 1.4) is contained on the 'Waste Information Form' (Appendix 1) and will require the customer/waste carrier/producer to sign the form before loads can be accepted onto site.
- 1.4.3 The producer/carrier has a legal duty (issued under duty of care, Section 34(7) of the Environmental Protection Act 1990) to accurately describe the waste as per the 'basic characterisation of waste' (Section 1.4), they will be asked about the nature of the wastes intended for site and given/emailed a copy of the 'Waste Information Form' (Appendix 1). If during the waste enquiry it is confirmed that the soils, aggregates or construction/demolition wastes originate from a potentially contaminated hotspot within a site, then an analysis is required for that hotspot as per the technical guidance WM3 to confirm if the waste is hazardous or non-hazardous Only wastes confirmed as non-hazardous properties will be accepted to site. The 'Waste Information Form' only needs to be filled in for a new waste stream, not every waste load to site.
- 1.4.4 The Waste Information Form must be completed by the customer/waste producer/carrier, on completion of the form the waste producer/carrier will return the form and Site Management will make decision based on the information provided whether the waste can be accepted to site.
- 1.4.5 The purpose of the 'Waste Information Form' is to ensure sufficient information is provided to achieve basic characterisation from the customer.

Waste Information Form

- 1.4.6 If on Section 2 of the 'Waste Information Form' that waste is sourced from a contaminated hotspot, then the waste will need to be supplied with laboratory results to confirm that it is not hazardous and suitable to be accepted to site. Any wastes containing asbestos or is odorous will not be accepted to site. Other information including any details regarding site investigations, borehole reports or chemical analysis which are available for that waste stream should be supplied.
- 1.4.7 Any wastes confirmed with hazardous properties or wastes that cannot be confirmed as non-hazardous will require an analysis of waste (as per technical guidance WM3) before any material is accepted on site. It is also imperative that the waste producer/carrier correctly fills in the 'Details of Existing and/or Previous use of site'. Waste analysis must follow BS EN 14899:2005 Characterisation of waste sampling of waste materials'.
- 1.4.8 The producer must provide the European Waste Catalogue Code (EWC) of the intended waste in the 'Waste Information Form'. Wastes that do not appear in the sites environmental permit



will not be accepted to site and the 'Waste ACCEPTED/NOT ACCEPTED' section of the form will be completed and signed off by Site Management stating the reason why wastes were not accepted.

- 1.4.9 Wastes will not be accepted to site unless the weighbridge clerk has received confirmation that the waste has been reviewed by Hanson Quarry Products Limited and approved for acceptance. Approved persons will check the customer has a current Waste Carriers licence, up to date information can be checked by Site Management and/or Environment Agency website.
- 1.4.10 Waste producers/carriers will identify the waste they are importing by using a Waste Transfer Note. The weighbridge operator will check against the list of approved EWC Codes and complete the Waste Transfer Note ensuring all fields are completed. A copy will be retained in the weighbridge and then sent for archiving.
- 1.4.11 After wastes have been characterised (See Section 1.4), all wastes undergo a visual inspection of that waste, if suitable, the waste will be accepted to site.

Mirror entries - Mirror- Hazardous Waste

- 1.4.12 The site proposes the following waste codes to be brought into Cassington Quarry Plant Area, the entry type has been identified below in Table 1.
- 1.4.13 The entry types include:

AN – Absolute Non-hazardous

MN - Mirror non-hazardous

Table 1: Waste Codes for Cassington Quarry Plant Area

EWC Code	Description	Restriction			
01	WASTE RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS				
01 01	Wastes from mineral excavation				
01 01 02	Waste from non metalliferous excavation	Restricted to waste overburden and interburden only			
01 04	Wastes from physical and chemical processing of non-metafillerous minerals				
01 04 08	Waste gravel and crushed rocks other than those mentioned in 04 04 06				
01 04 09	Waste sand and clay				
10	WASTES FROM THERMAL PROCESSES				
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products				
10 12 08	Waste ceramics, brick, tiles and construction products (after thermal processing)				
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them				



10 13 14	Waste concrete				
10 13 14	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCA	WATED			
17	SOIL FROM CONTAMINATED SITES)				
17 01	Concrete, bricks, tiles and ceramics				
17 01 01	Concrete	Selected C&D waste only			
17 01 02	Bricks	Selected C&D waste only			
17 01 03	Tiles and ceramics	Selected C&D waste only			
	Mixtures of concrete, bricks, tiles and	Selected C&D waste only. Metal			
17 01 07	ceramics other than those mentioned in 1701 06	from reinforced concrete must			
		have been removed.			
17 03	bituminous mixtures, coal tar and tarred products				
17 03 02	road base and road planings (other than those containing coal	tar) only			
17.0E	Soil (including excavated soil from contaminated sites), stones	and			
17 05	dredging spoil				
	Soil and stones other than those mentionedin 17 05 03	Excluding topsoil, peat; excluding			
17 05 04	Son and stories other than those mentionedin 17 05 05	soil and stones from contaminated			
		sites			
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE W THE PREPARATION OF WATER INTENDED FOR HUMAN CONSU USE	IMPTION AND WATER FOR INDUSTRIAL			
	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSU				
19 19 12	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUUSE				
	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSULUSE Wastes from the mechanical treatment of waste (for example	sorting, Wastes from the treatment of			
	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSULUSE Wastes from the mechanical treatment of waste (for example	wastes from the treatment of waste aggregates that are			
19 12	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUUSE Wastes from the mechanical treatment of waste (for example crushing, compacting, pelletising) not otherwise specified	wastes from the treatment of waste aggregates that are otherwise naturally occurring			
	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSULUSE Wastes from the mechanical treatment of waste (for example	Wastes from the treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines			
19 12	THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUUSE Wastes from the mechanical treatment of waste (for example crushing, compacting, pelletising) not otherwise specified	Wastes from the treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-			
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- 1.4.14 To ensure that no hazardous wastes mirror entries are accepted to site, as part of the information required for the 'Waste Information Form', new waste streams are required to be identified against an EWC code and confirmed that it is not hazardous waste. Any wastes given an EWC code that is not on the site permit or is hazardous, will not be accepted to site.
- 1.4.15 The producer/carrier of the waste will be required to undertake testing on waste which are considered to arise from potentially contaminated hotspots. Any wastes considered



potentially contaminated will not be accepted to site until analytical results have been provided from a UKAS accredited (or equivalent) laboratory by the customer. Laboratory results indicating that the materials are non-hazardous will be accepted to site.

- 1.4.16 As per the analytical methods described in the technical guidance WM3, 'the analytical laboratory (whether in-house of external provision) should, wherever possible, be accredited by the United Kingdom Accreditation Services (UKAS) (or equivalent) to BS EN ISO/IEC 17025 'general requirements for the competence of testing and calibration laboratories' for the scope of the work'.
- 1.4.17 If in doubt, test results/site investigation and report finding must be provided for the wastes to confirm its suitability to site. Wastes will not be accepted to Cassington Quarry Plant Area without the correct documentation.

1.5 Waste Acceptance Procedure

- 1.5.1 Loads arriving to site can only be accepted if the 'Waste Information Form' and a transfer note has been completed. A check will be made to ensure that the 'Waste Information Form' has been completed and approved. A visual inspection will also be made on the wastes.
- 1.5.2 On arrival, all incoming vehicles are required to report to the site office, details are checked against the relevant waste transfer notes and waste Information Form' to ensure that the load is acceptable at site. Waste is visually inspected (to ensure it complies with its Duty of Care documentation) weighed and details recorded including supplier, quantity and quality of waste being accepted. The following details will be provided to Hanson by the waste producer/courier as detailed in the Waste Transfer Note (WTN).
 - 1. Date and time of delivery
 - 2. Name and address of the waste producer
 - 3. Description of waste types including quantity
 - 4. How the waste is contained e.g. loose/ container type
 - 5. Carriers name and address
 - 6. Drivers name, signature and vehicle registration No.
 - 7. Signature or initial of person(s) accepting/inspecting the waste
 - 8. Additional handling details (e.g. notes made by the driver after inspecting the load)
 - 9. SIC code of the premises which produced the wastes (if relevant)
 - 10. Waste hierarchy declaration
 - 11. Information on previous treatment of the waste e.g. manual or mechanical
- 1.5.3 Weighbridge personnel will also check that all vehicles are a registered waste carrier, any expired certificates will be advised to contact the Environment Agency.



- 1.5.4 If on the weighbridge, waste cannot be accurately categorised or described incorrectly on the waste transfer note, the haulier will be directed to a quarantine area where a suitably qualified person will inspect the waste and make a decision whether it will be accepted to site or not.
- 1.5.5 If accepted, the haulier is directed by the appointed person to deposit the waste into either the storage and treatment area, or down to the quarry face.

1.6 Permitted Waste Types

- 1.6.1 Only wastes detailed in Table 1 will be accepted for the permitted operations.
- 1.6.2 Notwithstanding the waste types set out in Table 1, wastes having any of the following characteristics shall not be accepted:
 - Consists solely of mainly of dusts, powers or loose fibres;
 - Wastes that are in a form which is either sludge or liquid;
 - Clinical and Healthcare wastes; and,
 - Hazardous wastes.
- 1.6.3 Any wastes detailed in Section 1.6.2 will be rejected according to the Waste Rejection Procedures detailed in the companies Environmental Management System.

1.7 Legal compliance for waste transfer notes and consignment notes

- 1.7.1 The appointed person must ensure that any carriers own waste transfer note template complies with the requirements of the Duty of Care for Waste (Section 34 of the Environmental Protection Act 1990).
- 1.7.2 It should also be ensured that the company is registered as a registered waste carrier.

WASTE INFORMATION FORM

SECTION 1

(To be completed by the waste producer/carrier)

Waste Producer:	
Contact Name:	
Telephone Number:	
Waste Carrier:	
Contact Name:	
Telephone Number:	
relephone rumber.	
Source of Waste:	
e.g. address, postcode, grid ref	
etc)	
etcj	
EWC Code of waste brought to	
site (must be EWC permitted to	
be brought to site)	
Is the EWC a mirror non-	
hazardous entry?	
If the constant is not become an accom-	
	onably suspected to be hazardous – please confirm the following
observations with a tick:	
I cannot see or smell hydrocarbor	ns or other chemicals in the waste ()
I cannot see visible pieces of asbe	stos containing materials in the waste ()
The waste does not, and is not lik	ely to contain pieces of asbestos ()
The waste does not come from a	contaminated site where hazardous waste is proven to be
present ()	
p. 556.10 ()	
If all the above is confirmed – cor	tinue to Section 2 'Declaration'
if all the above is committed – cor	itilide to section 2 Decidiation
16	and the second fall and have real and a self-section to the second section.
7 -	ned, you must follow the waste classification technical document
<u> </u>	sify the waste as; non-hazardous, uncontaminated and
acceptable for site – See Chemica	l Analysis Section below.
Provide a copy of assessment,	
including any waste analysis	
undertaken	
ader taken	

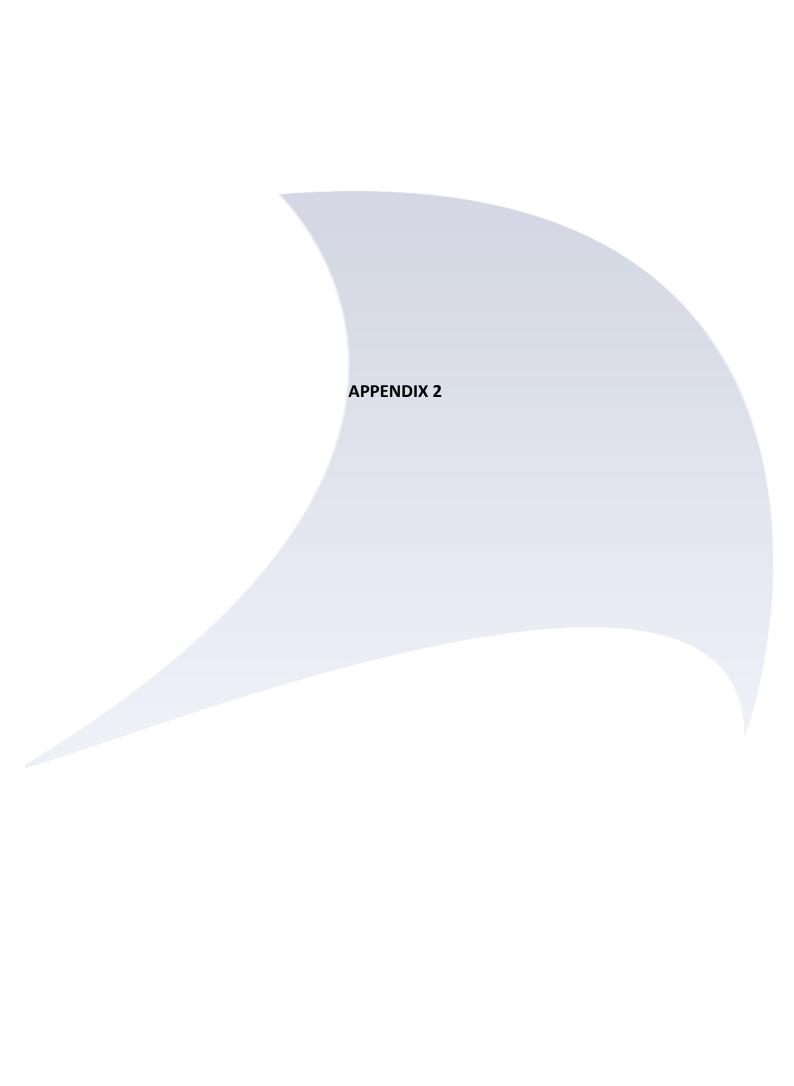
SECTION 2 DECLARATION

(To be completed by the waste producer/carrier)

I confirm that to the best of our knowledge the information provided with this form are:

- 1) Representative of the material to be disposed of, and;
- 2) Waste is acceptable, and;
- 3) (where further assessment was required evidence has been provided to determine the waste characterisation and composition and to confirm the waste is non-hazardous .

Signed by the Waste Producer/Carrier:
Dated:
SECTION 3 DECISION CRITERIA
(to be completed by site management)
Date WIF sent for assessment:
Waste ACCEPTED? (YES, NO)
Waste NOT ACCEPTED (YES, NO)
State reasons for above

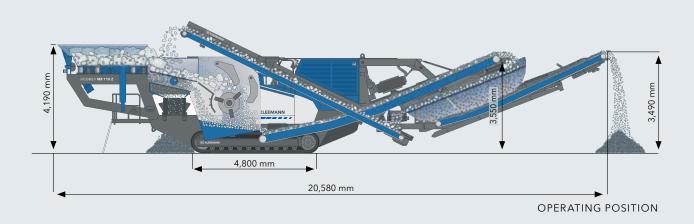




TECHNICAL INFORMATION I TRACK-MOUNTED IMPACT CRUSHERS

MOBIREX MR 110 Z/110 Zi EVO2







TECHNICAL HIGHLIGHTS

- Optimised material flow as a result of extending system widths
- Hydraulic gap setting
- **■** Simple and intuitive control concept SPECTIVE

■ Efficient and powerful diesel direct-drive

Power supply unit

■ High-performance secondary screening unit with oversize grain returning (option)

TECHNICAL INFORMATION MR 110 Z/110 Zi EVO2

Feeding unit	
Feed capacity up to approx. (t/h)1)	350
Feed size max. (mm)	880 x 550
Feed height (with extension) (mm)	4,190 (4,550)
Hopper volume (with extension) (m³)	4,4 (8)
Width x length (with extension) (mm)	2,100 x 3,700 (2,800 x 3,700)
Vibrating feeder	
Width x length (mm)	900 x 2,600
Prescreening	
Туре	double-deck heavy-piece screen
Width x length (mm)	1,010 x 2,100
Side discharge conveyor rigid (optional)	
Width x length (extended) (mm)	650 x 4,000 (6,000)
Discharge height approx. (extended) (mm)	2,900 (3,650)
Crusher	
Impact crusher type	SHB 110-080
Crusher inlet width x height (mm)	1,100 x 800
Crusher weight approx. (kg)	13,000
Rotor diameter (mm)	1,100
Crusher drive type approx. (kW)	direct, 310
Adjustment of impact toggles	infinitely variable, fully hydraulic
Crushing capacity with demolished concrete up to approx. (t/h)	2402)
Crushing capacity with rubble up to approx. (t/h)	2402)
Crushing capacity with broken asphalt up to approx. (t/h)	2053)
Crushing capacity with limestone up to approx. (t/h)	2102)
Discharge chute	
Width x length (mm)	1,200 x 2,400
Crusher discharge conveyor	
Width x length (mm)	1,200 x 9,300
Discharge height approx. (mm)	3,550

Power supply unit	
Drive concept	Diesel direct ⁴⁾
MR 110 Z EVO2: Scania (Tier 3/Stage IIIA) (kW)	371 (1,800 rpm)
Scania (LRC) (kW)	410 (1,800 rpm)
MR 110 Zi EVO2: Scania (Tier 4f/Stage IV) (kW)	368 (1,800 rpm)
Generator (kVA)	135
Secondary screening unit (optional)	
Туре	single-deck lightweight screen
Width x length (mm)	1,350 x 4,550
Return conveyor (mm)	500 x 9,100
Discharge height of fine grain discharge conveyor approx. (mm)	3,490
Transport	
Transport dimensions without options	
Transport height (mm)	3,600
Transport length (mm)	17,340
Transport width	3,000
Transport dimensions with secondary screening unit	
Transport length with screening unit (mm)	21,110
Transport width with screening unit (mm)	3,050
Transport weight screening unit (kg)	6,100
Transport weight of basic plant – max. configuration (kg)	44,500 - 58,000

- $^{\mbox{\tiny 1)}}$ dependent on the type and composition of the feed material, the feed size, the prescreening, as well as the desired final grain size
- ²⁾ for final grain size 0 45 mm with approx. 10 15% oversize grain
- ³⁾ for final grain size 0 32 mm with approx. 10 15% oversize grain ⁴⁾ all ancillary electric drives



The mobile impact crusher MOBIREX MR 110 Z EVO2 can be deployed universally and produces first class final product quality. With a crusher inlet of 1100 mm and numerous technical highlights, a formidable production rate can be achieved with best cost effectiveness. Thanks to its compact design, the machine is easy to transport and can be assembled and disassembled again quickly.

STANDARD EQUIPMENT

- Hydraulically foldable feed hopper, can be operated from the ground
- ▶ Frequency-controlled vibrating feeder
- ▶ Frequency-controlled prescreen
- Prescreen with slotted grate or punched plate (upper deck) and wire cloth mesh (lower deck)
- Impact crusher with blow bars set manganese
- Continuous Feed System CFS: for optimal and continuous crusher feed
- Automatic crusher gap adjustment
- Integrated overload protection

- Lock & Turn (rotor turning and locking device): Device for safely turning and locking the rotor for service purposes or blockages
- Swivel arm for changing blow bars
- SPECTIVE control concept: menu-guided user interface, 12-inch control panel; telematic system WITOS FleetView for efficient fleet and service management
- **■** Lockable control cabinet, dust and vibration-protection
- LED lighting
- Eye hooks
- Water spray system for dust reduction

OPTIONS

- Hopper extension: hydraulically foldable
- Side discharge conveyor 4 m, rigid: can be mounted on left or right, discharge height 2,900 mm, must be dismounted for transport, including spray system
- Extended side discharge conveyor 6 m, rigid: can be mounted on left or right, discharge height approx. 3,650 mm, must be dismounted for transport, including spray system
- Side discharge conveyor belt cover (sheet metal) in connection with rigid side discharge conveyor
- Side discharge conveyor, hydraulically folding, can be mounted on both sides, discharge height 3,390 mm, remains on machine during transport, inc. spray system
- Quick Track for selecting machine operating mode quickly and easily, operation via radio remote control
- Climate packages: Hot or cold package

- Ergonomic power pack enclosure for insulation of noise sources
- **■** Electromagnetic separator, permanent magnet or magnet preparation
- Secondary screening unit, in convenient container dimensions, hook-lift compatible inc. spray system
- Belt scale, available for crusher discharge conveyor and fine grain conveyor (secondary screening unit)
- Wind sifter for removing foreign material and light elements from the oversize grain by means of an 11 kW blower with air outlet below the transfer conveyor
- ≥ 110 V socket
- lacktriangle Track pads for crawler chassis for protection of ground
- Premium lighting



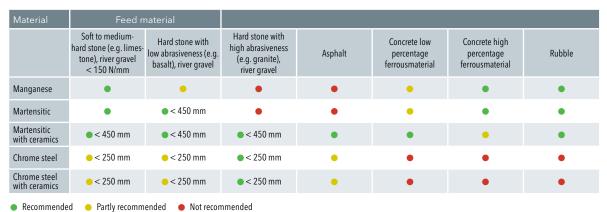
For economical operation of the machine, it is also necessary to select the correct wear parts. Original parts from KLEEMANN are optimally designed for the requirements of the user and machine. They are characterised by a long service life, excellent quality, good availability and trouble-free assembly. With application know-how and competent advice, we can find the optimum wear part for our customers to match their individual application.

BLOW BARS

Machine type	Shape blow bar	Dimensions W x H x L [mm]	Blow bars Manganese	Blow bars Martensitic	Martensitic blow bars with ceramic	Blow bars Chrome steel	Blow bars Chrome steel with ceramics
MR 110 Z EVO2	C-shape	90 x 360 x 1080	X	X	X	X	Χ
MR 122 Z	X-shape	130 x 340 x 1250	Χ	X	Χ		
MR 130 Z EVO2	C-shape	100 x 370 x 1280	Χ	Χ	Χ	Χ	Χ
MR 150 7	X-shane	135 x 370 x 1500	X	X	X		

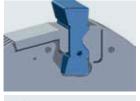


C-shape





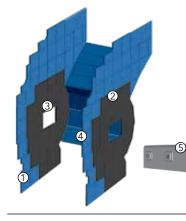
S-shape



X-shape

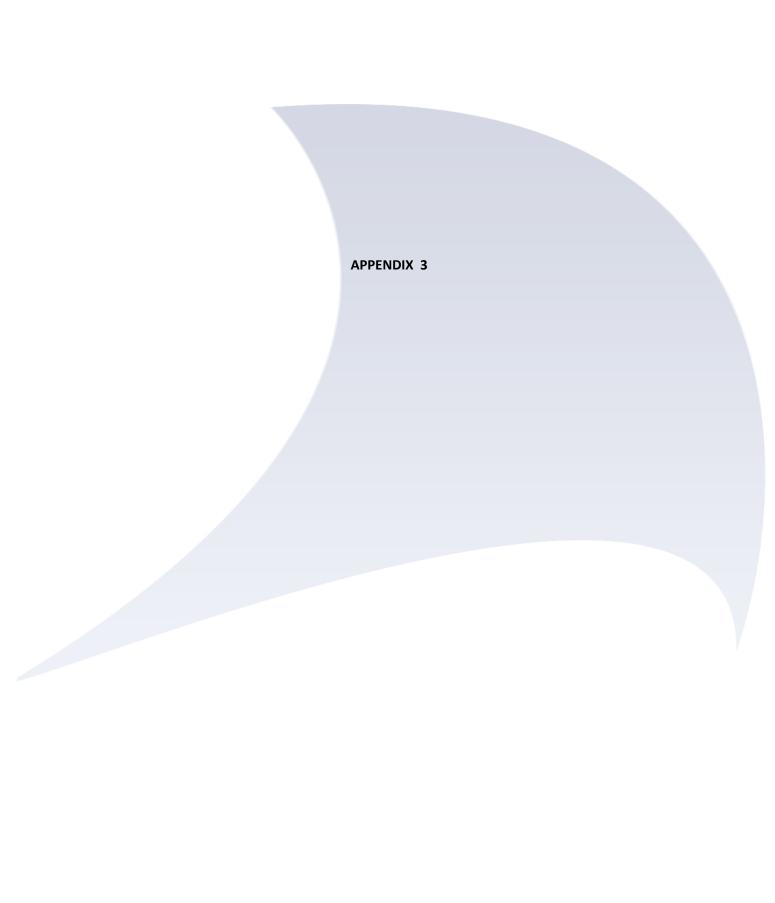
 $For queries about the suitable \ rotor \ ledge, \ please \ contact \ your \ sales \ and \ service \ organisation.$

IMPACT PLATES



- ① All wear plates from the main wear zone with mounting hardware are included in the service package for easy exchange.
- ② Thick-walled KLEEMANN Resistant Steel wear plates protect the housing
- ③ The wear plates are for the most part interchangeable, greatly reducing the spare parts stock.
- The mounting hardware includes all necessary screws for a secure fit.
- (5) Example for cast manganese impact plate that can be replaced individually depending on the machine and requirement.*
- * Two materials available: manganese steel and martensitic steel

Further information is available at www.partsandmore.net or in our Parts and more catalogue



Dust and Emissions Monitoring Record Form

	I	1		I
	Date:	Date:	Date:	Date:
	Time:	Time:	Time:	Time:
	Inspected by:	Inspected by:	Inspected by:	Inspected by:
Weather Conditions				
e.g. wind strength/direction				
Sunny, dry, showers, fog etc.				
		1	1	
Operations				
•				
Describe the current site				
operations.				
Location				
Is there a dust emission?				
Where is it coming from?				
Impact				
Are there any sensitive				
receptors impacted by the dust				
emission?				
Actions				
Describe what actions are being				
undertaken (e.g. suppression).				
Include any follow up detail.				
,				
Complaints				
Has there been a complaint? If				
so, complete the 'Complaints				
Record Form'				
	1			



Delegated Responsibility:

SITE Cassington Quarry Week Commencing

	Item No.	Item Inspected	М	Tu	W	Th	F	s	Su
	1	Are haul roads and quarry faces in a suitable condition for work to commence							
	2	Is edge protection to the required standard on all working haul roads and plant accessed stockpiles							
	3	Were all persons seen to be wearing the appropriate items of protective clothing/equipment during the inspection							
	4	Are emissions visually acceptable (water discharge, dust, gaseous, odour etc)							
	5	Is all environmental control and monitoring equipment working satisfactorily/water bowser in a serviceable condition							
JAILY	6	Does control of waste comply with procedures							
DA	7	Are all storage facilities in good condition / properly labeled							
	8	Are all barriers adequate to discourage trespass							
	9	Is site security suitably addressed							
	10	Is traffic management system being complied with							
	11	Is vehicle sheeting policy being adhered to							
		Have all mobile / static plant inspection sheets been	1	1		1		1	
	12	completed and defects addressed							
	13	Are all signs positioned as necessary							
	14	Is drillers safety equipment being used (harnesses, barriers etc)							
	15	Was maintenance work being carried out safely (lock-off, safe working practices, permit to work etc)							
	16	Is rescue, first aid and safety equipment available and serviceable							
>	17	Condition of structures including all building floors							
EKI	18	Are P.P.E signs positioned as necessary							
WEEK	19	Is the site entrance notice board clean & legible including Responsible Manager's details and emergency contact number							
	20	Are the welfare / washing / office facilities adequate and clean							
	21	Are electrical switch rooms / substations clear of debris / dust							
	22	Can the site be secured							



Key		
AB	Satisfactory	Initials of inspecting person indicates this item is satisfactory at the time of inspection
X	Action Required	If you have found it necessary to place a 'X' in any of the boxes above or have any other defects/comments would you now detail overleaf and report to your supervisor
*	Starred Items at Managers discretion	Should an "X" be placed by a starred item operations must not be started, or if started should be stopped, until the condition is rectified e.g. *1
	Not Checked	If you have not carried out this check please leave the box blank.

Item No	Comments/reported to	Action Taken	Date Completed

	1		
EMPLO'	YEE PARTICIPATION		
I have th	ne following suggestions / comments on healt	h, safety (including reporting	dangerous
occurrer	nces, risk taking situations and near hit incide	nts), environmental and qual	ity matters:
Signatu	re of persons carrying out inspections:		
- 3			
Counter	r signature of Responsible Manager (or ap	propriate person in the ma	nagement structure)
_		Date:	
N	Manager's comments: -		
IV	nanayer s comments		



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