Castle Hill Quarry

784-B043634

Dust Management Plan

Environmental Permit Application

Castle Hill Quarry Co.Limited

April 2023

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

TETRA TECH

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1.0 INTRODUCTION

1.1 REPORT CONTEXT

1.1.1 This Dust Management Plan (DMP) has been prepared by Tetra Tech on behalf of the operator, Castle Hill Quarry Co.Limited (CHQC).

1.1.2 CHQC currently operate a site known as Castle Hill Quarry at Cannington, Bridgwater, TA5 2QF. The current quarry site is centred at approximate National Grid Reference (NGR) ST 24562 40684 and comprises an active limestone quarry site which is extracted and processed on site to provide aggregates for the construction industry, carboniferous lime for agricultural use and limestone products to the animal feedstuffs industry.

1.1.3 This application relates to two extension areas at the quarry. The first area (known as 'Eastern Extension') is located to the south east of the existing quarry and is centred at approximate NGR ST 24834 40637. The second area (known as 'Old Golf Course Extension'), is located to the south of the Eastern Extension and is centred at approximate NGR ST 24834 40637. The location of both extension areas is shown on Drawing Number CHQC/B043634/PER/01.

1.1.4 CHQC are seeking to gain a bespoke waste recovery permit for the permanent deposit of inert waste to land to facilitate the infilling and restoration at the Eastern Extension and the Old Golf Course Extension Areas following the extraction of mineral.

1.1.5 The Environment Agency's (EA) 'Control and Monitor Emissions for your Environmental Permit' guidance indicates that a DMP must be prepared to support an application that comprises the 'disposing of household, commercial or industrial waste by deposit for recovery'.

1.1.6 As such, this DMP has been prepared in accordance with the EA's 'Dust & Emission Management Plan' template (Version 10, October 2018).

1.1.7 This DMP is a working document, intended to be used as a reference document for operational staff on a day-to-day basis. CHQC will implement the plan to ensure that all reasonable measures are taken to control dust emissions, and in the event that an adverse impact is caused, prompt action will be taken to identify the source and apply corrective measures. It provides a schedule of actions that will be taken to minimise dust impact and details site management procedures for the management and monitoring of dust.

1.1.8 A Dust Suppression scheme was produced to support the relevant planning applications for the Eastern Extension Area (reference 1/13/17/00012) and the Old Golf Course Extension (reference SCC/3894/2021). Copies of both schemes are provided as Appendix A of this document. Dust management techniques, as detailed within the Dust Suppression Schemes and this DMP, would be implemented to minimise the effects of any dust emissions.

2.0 SITE DESCRIPTION

2.1 SITE SETTING

2.1.1 The wider Castle Hill Quarry site is located approximately 960m north west from the village centre of Cannington in Bridgwater and is centred at National Grid Reference (NGR) ST 24562 40684.

2.1.2 This application relates to two extension areas at the quarry. The first area (known as 'Eastern Extension') is located to the south east of the existing quarry and is centred at approximate NGR ST 24834 40637. The second area (known as 'Old Golf Course Extension'), is located to the south of the Eastern Extension and is centred at approximate NGR ST 24834 40637. The location of both extension areas is shown on Drawing Number CHQC/B043634/PER/01.

2.1.3 The immediate surroundings of the site comprise predominantly of woodland and agricultural with commercial properties located to the immediate south of the proposed site.

2.1.4 A Scheduled Monument named 'Cynwit Castle' lies adjacent to the wider Castle Hill Quarry. A further Scheduled Monument named 'Settlement South East of Cannington Park' lies adjacent to the Eastern Extension area. The nearest residential properties, 1-2 Lime Kiln Cottages, lie approximately 30m southeast of the Old Golf Course Extension. These properties are in CHQC's ownership and rented to tenants.

2.1.5 According to DEFRA's 'AQMA Interactive Map', the site is not situated in or within 2km of a designated Air Quality Management Area (AQMA) for particulate matter (PM10), Nitrogen Dioxide (NO_2) or Sulphur Dioxide (SO_2).

2.1.6 Further details regarding the environmental setting of the site are provided in the Environmental Setting and Site Design (ESSD) report that has been prepared to support this application. A copy of the ESSD is provided as Appendix E of the Environmental Permit Application.

2.2 PLANNING HISTORY

2.2.1 CHQC have been extracting limestone from Castle Hill Quarry for over 70 years. The extracted limestone is primarily used as a calcium additive in animal feed but is also used as lime for agricultural purposes and construction aggregates. Mineral and Gravel Working has taken place at the wider Castle Hill Quarry since 2006. All limestone is processed in the main quarry site as shown on Drawing Number CASH 1610/2/C and CHQC intend to transfer all limestone that's extracted from the extension areas to the main quarry site for processing.

2.2.2 In addition to the above, a concrete batching plant is situated at the main quarry site. This plant is currently operational by Hanson and is only a temporary installation that will primarily serve the initial site preparation at Hinkley Point.

2.2.3 The 'Interim Development Order' (IDO) planning permission was granted in 1947 for the continuation of quarrying at Castle Hill Quarry and Cannington Quarry which is located to the south east of Castle Hill Quarry and is centred at approximate NGR ST 25122 40421. The IDO was registered in 1994 (reference 1DO/S/11/B) when modern conditions were applied.

2.2.4 In February 2007, planning permission (reference 1/13/06/033) was granted by SCC to relocate processed stone stockpiles and lorry loading area into a low lying valley outside the quarry enclave (as identified on Drawing Number CHQOGC2109/5/B).

2.2.5 In November 2008, planning permission (reference 1/13/08/028) was granted by Somerset County Council (SCC) to allow a southern and western extension to the quarry site (as identified on Drawing Number CHQOGC2109/5/B).

2.2.6 In February 2017, a planning application was submitted to SCC for the extraction of limestone, infilling with imported materials including waste and restoration to woodland and pasture (reference 1/13/17/00012). The application was submitted to facilitate an extension to the east of the existing quarry site (known as Eastern Extension Area). Planning permission was granted in June 2019 by a Planning Inspector on appeal for non-determination (reference APP/G3300/W/18/3202520).

2.2.7 In November 2021, a further planning application (reference SCC/3894/2021) was submitted to SCC facilitate another extension to extraction and infilling activities in the 'Old Golf Course Extension' Area.

2.3 PERMITTED ACTIVITIES

2.3.1 The proposal entails the importation of inert waste for infilling of the quarry void that will be created within the Eastern Extension and the Old Golf Course Extension Areas following the mineral extraction activities.

2.3.2 The Eastern Extension Area will be restored in accordance with the following plans that were approved by a Planning Inspector on appeal (reference APP/G3300/W/18/3202520):-

- CASH 1610/4/C – Proposed Restoration Landform
- CHILL016(D) – Composite Restoration Scheme
- CASH 1610/6/C – Final Restoration Plan – Whole Quarry

2.3.3 The Old Golf Course Extension Area will be restored in accordance with the restoration plan (Drawing Number 2109_006/012_CHILL025_OGC Rest Plan) that was submitted to Somerset County Council (SCC) under planning permission SCC/3894/2021.

2.3.4 It is considered that the proposed activities on the site will fall under the following R/D codes:-

Table 1: Proposed R/D Codes

R/D Code	Description of Activity
R5	Recycling/reclamation of other inorganic materials
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection on the site where the waste is produced)

2.4 WASTE TYPES

2.4.1 The waste codes to be taken by this site are identified by the EA as suitable for use in the restoration of mineral workings and as general fill material (EA Guidance: Check if your waste is suitable for deposit for recovery, October 2022).

2.4.2 The proposed waste types are listed in Table 2 below. Details regarding the restrictions that will be implemented for the proposed waste types are provided in the Operating Techniques (Appendix C of the Environmental Permit Application).

Table 2: Proposed Waste Types

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 glass-based fibrous materials	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	
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**	
02 04	**wastes from the preparation and processing of meat, fish and other foods of animal origin**	
02 04 01	Soil from cleaning and washing beet	
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	
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**	
17 01	**Concrete, bricks, tiles and ceramics**	
17 01 01	Concrete	
17 01 02	Bricks	
17 01 03	Tiles and ceramics	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Metal from reinforced concrete must have been removed.
17 05	**Soil (including excavated soil from contaminated sites), stones and dredging spoil**	
17 05 04	Soil and stones other than those mentioned in 17 05 03	Excluding topsoil, peat; excluding soil and stones from contaminated sites
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**	
19 12	**Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**	
19 12 09	Minerals only	Wastes from the treatment of waste aggregates that are otherwise naturally occurring minerals. Does not include fines from treatment of any non-

		hazardous waste or gypsum from recovered plasterboard.
19 12 12	Other wastes from mechanical treatment of wastes other than those mentioned in 19 12 12	Restricted to crushed bricks, tiles, concrete and ceramics only. Metal from reinforced concrete must be removed. Does not include fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard.
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**	
20 02	**Garden and park wastes (including cemetery waste)**	
20 02 02	Soil and stones	Only from garden and parks waste; excluding topsoil, peat.

2.5 WASTE QUANTITIES

2.5.1 In order to complete works, a volume of 119,000m^3 of inert materials will be required to restore the Eastern Extension Area and a volume of 550,000m^3 of inert materials will be required to restore the Old Golf Course Extension Area. This provides a total throughput of 669,000m^3.

2.5.2 When using a bulk density conversion factor of 1.5 tonnes/m^3 this equates to approximately 1,003,500 tonnes.

2.6 WASTE STORAGE

2.6.1 CHQC do not intend to store any waste on site prior to placement. Any waste that's accepted in accordance with the waste acceptance procedures (as detailed in the Operating Techniques document), will be directed to the current working face of the site, where it will be unloaded from the vehicle and used immediately as part of the infilling activities.

2.7 OPERATING HOURS

2.7.1 The operating hours for the site will be limited to the following:-

- Monday to Friday: 07:00 – 19:00; and
- Saturday: 07:00 – 13:00

2.7.2 There would be no work on Sundays or Bank and National Holidays

2.8 PLANT AND EQUIPMENT

2.8.1 The infilling and restoration works at the site will use mobile plant and will mainly comprise a 360 excavator.

2.8.2 In addition to the above, a weighbridge and wheel wash, is to be installed as shown on Drawing Number CHQOGC2109.

2.8.3 As a function of the Environmental Management System, the performance of all plant and equipment will be reviewed in comparison to other models that may be available on the market. If there happens to be other models available that perform more efficiently than the site's existing plant and is financially feasible, CHQC may decide to change their existing plant and equipment. As part of the process, CHQC will ensure that all non-road going mobile plant have a minimum Stage IV emission rating and road going vehicles will

have a minimum emission rating of Euro VI. As such, the brand, make, model and specification of the mobile plant and equipment that will be used on site is expected to vary throughout the operational life of the facility.

2.8.4 Only personnel who are trained and licensed to operate equipment and carry out maintenance will do so.

2.8.5 All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements. This will ensure that the integrity and operational efficiency of all plant and equipment is maintained and therefore minimise the risk of mechanical failure which may result in increased dust emissions. This particular programme forms part of the site's Environmental Management System.

2.8.6 In addition, all plant and equipment will be visually inspected on a daily basis by the Site Manager (or a nominated deputy) prior to use. The purpose of this inspection is to identify any signs of defects that may affect the integrity and operational efficiency of the plant.

2.8.7 In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.

2.8.8 As part of the works, the Eastern Extension Area will benefit from a 3m high screening bund that will be situated to the south east (as shown on Drawing Number CASH 1610/3/C). The Old Golf Course Extension Area will benefit from a 6m high screening bund that will be situated to the south of the area (as shown on Drawing Number CHQOGC2109). Both screening bunds will be developed from soils that will be stripped from the area prior to mineral extraction. Although these bunds are not intended for dust management, CHQC understand that the bunds may be a potential source for dust and therefore intend to implement control measures which are detailed in Table 4 of this document.

2.9 DUST SENSITIVE RECEPTORS

2.9.1 Receptors within 1km of the proposed application boundary have been listed in Table 3 and are shown on Drawing Number CHQC/B043634/REC/01.

Table 3: Receptors Within 1Km of the Site

ID	Receptor	Direction from Operational Area	Minimum Distance from the Permit Application Boundary (approx. m)
Domestic Dwellings			
1	1-2 Lime Kiln Cottages	SE	30
2	Residential properties adjacent to Moxhill Rhyne	N	830
3	Residential properties on Combwich Road	E	550
4	Residential properties adjacent to Bridgewater and Taunton College	E	530
5	Residential properties off Rodway	E	500
6	Residential Properties off Park Lane	SE	470
7	Residential properties in Cannington	SE	735
8	Properties off Sandy Lane	W	900
9	Property adjacent to Mr Valley Farm	NW	970

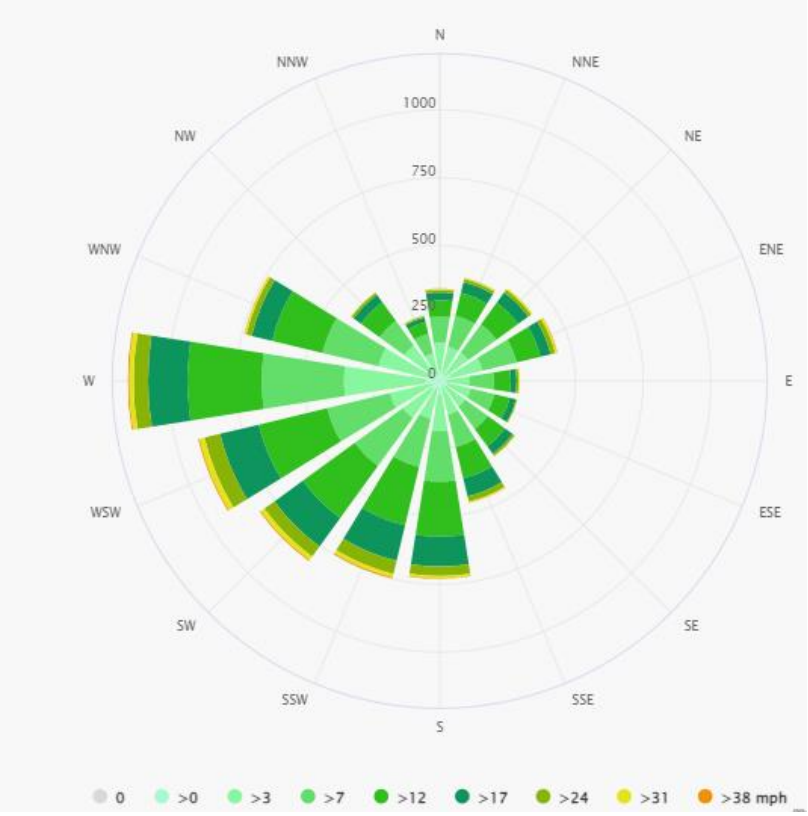
10	Putnell Cottages	NE	420
Commercial and Industrial Premises			
11	Perry Green Farms	S	25
12	Pet friends Pet Services	E	25
13	Henfields Country Retreat	S	310
14	Anode Feeds	E	270
15	Acorn Logs	E	640
16	ACB Automotive	E	650
17	Baker G R & Son and West Country Grain Marketing Ltd	E	750
18	Animal Management Unit	SE	820
19	Withiel Farm	S	685
20	Installed Events	S	840
21	Mr Valley Farm	N	680
22	Commercial Properties Withiel Dr	S	670
Recreational			
23	Cannington Cricket Club	SE	550
24	Cannington Playing Fields	E	640
25	Cannington Golf Course	SE	970
Schools / Hospitals / Shops/Amenities			
26	Bridgewater and Taunton College	E	640
27	National College for Nuclear, Southern Hub	SE	765
28	Construction Skills and Innovation Centre	SE	960
29	Brymore	SW	860
Protected Habitats			
30	Priority Habitat Deciduous Woodland	Adjacent	On Boundary
31	Priority Habitat Deciduous Woodland	NW	200
32	Priority Habitat Deciduous Woodland	NW	415
33	Priority Habitat Deciduous Woodland	W	625
34	Priority Habitat Deciduous Woodland	W	770
35	Priority Habitat Deciduous Woodland	SE	650
36	Priority Habitat Deciduous Woodland	SE	810
37	Priority Habitat Deciduous Woodland	SW	850
38	Priority Habitat Deciduous Woodland	SW	820
39	Priority Habitat Deciduous Woodland	SW	965
40	Priority Habitat Lowland Calcareous Woodland	NW	490
41	Priority Habitat Coastal and Floodplain Grazing Marsh	N	165
Nature and Heritage Conservation Sites – Local Wildlife Sites (LWS)			
42	Cannington Park	Adjacent	On Boundary
43	Putnell Moor	Adjacent	On Boundary

Protected Species			
44	European Eel Migratory Route	N	462
Surface Water e.g. rivers and streams			
45	Pond	E	70
46	Wild Moor Middle Rhyne	N	180
47	Putnell Rhyne	N	185
48	South Moor Main Brook	N	470
Groundwater (sensitivity)			
According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site is not situated within a Groundwater Source Protection Zone. In addition, the MAGIC website indicates that the site is located on a Principal aquifer.			

2.9.2 The prevailing wind direction will determine which receptors will be affected and at what frequency.

2.9.3 Meteorological data has been used from Cannington from www.meteoblue.com which is considered to be representative of conditions within the vicinity of the application site. According to the wind rose data for the area, the prevailing winds in the local area is from the west as shown in Figure 1 below.

Figure 1: Prevailing Wind Direction for Cannington



2.9.4 As such, areas at most risk from dust emissions, should it occur, are therefore located east of the site.

2.9.5 As noted in Table 3, there are surface water features within 1km of the site. According to the EA's 'Dust & Emission Management Plan' template, surface water and groundwater are not identified as receptors that are susceptible to the adverse effects of exposure to high levels of dust and particulates. As such, these receptors are not considered further in this DMP.

3.0 DUST AND PARTICULATE MANAGEMENT

3.1 RESPONSIBILITY FOR THE IMPLEMENTATION OF THE DMP

3.1.1 The implementation and dissemination of this DMP will be the responsibility of the Site Manager, supported by other staff. The Site Manager can delegate certain tasks as required, although ultimate responsibility will remain with them.

3.1.2 A nominated deputy will be appointed for all times when the Site Manager is not on site. In such circumstances, it will be the nominated deputy's responsibility to ensure that the requirements of the DMP are adhered to.

3.1.3 All site staff will receive instructions on how the plan is to be implemented during toolbox talks on site.

3.1.4 This document forms part of the site's Environmental Management System (EMS) and will be reviewed on an annual basis to ensure that it is fit for purpose and meets the requirements of current guidance.

3.2 SOURCES AND CONTROL OF DUST – LOCAL CONTRIBUTORS

3.2.1 According to the EA's public register, there are no permitted facilities within 1km of the site that may be considered as a local contributor to dust emissions.

3.3 SOURCES AND CONTROL OF DUST – ACTIVITIES AT THE SITE

3.3.1 The key aspects of the process which may lead to dust emissions are identified in Table 4 below and the control measures that will be used are detailed in Table 5.

Table 4: Source-Pathway-Receptor Routes from Waste Activities at the Site

Source	Pathway	Receptor	Type of impact
Mud	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Public highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Debris	Falling off waste delivery vehicles	Public Highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Tipping and handling wastes in the open	Atmospheric dispersion	Occupiers of domestic dwellings listed in Table 3. Workforce in commercial and industrial properties listed in Table 3. Priority habitats listed in Table 3. Local Wildlife Sites listed in Table 3. Sensitive land uses listed in Table 3.	Visual soiling and airborne particulates
Vehicle exhaust emissions	Atmospheric dispersion		Airborne particulates
Non road going machinery exhaust emissions	Atmospheric dispersion		Airborne particulates
Dust from screening bunds	Atmospheric dispersion		Airborne particulates

Table 5: Measures to Control Dust/Particulates from Permitted Waste Activities

Abatement Measure	Description / Effect	Trigger for implementation
Preventative Measures		
Site speed limit	Vehicle speeds will be limited on site and the access road to prevent suspension and entrainment of dust. Clear signage is established on the site to reinforce the speed limit.	All preventative measures will be implemented during the operating hours detailed in Section 2.7.
No-idling policy	A 'No-idling policy' is in place at the site which requires all vehicles and plant to be switched off when not in use. All vehicles delivering waste to the site will be directed to the working waste face, where they will tip their load (as directed by site operatives) and then leave the site.	
Minimising drop heights for waste.	Drop heights will be minimised as much as practicable to reduce the generation of dust whilst waste is being deposited.	
Road surfacing	Within the site, internal haulage will be restricted to clearly delineated routes, generally on a prepared surface and at low level where possible. The haul routes will be compacted, graded and maintained to provide a smooth-running surface and will be designed to avoid sharp changes in gradient or alignment. Vehicles leaving the site will use the wheel wash before travelling over a haul road which benefits from a concrete surface.	
Sheeting of vehicles	Wastes being delivered to the site will be covered or sheeted to prevent dust emissions whilst the waste is in transit.	
Installed wheel wash	The wider quarry site benefits from a wheel wash which will be used by all outgoing vehicles before they leave the site. The wheel wash is situated on the proposed exit route which is considered to be a suitable location in minimising mud being tracked onto the public roads.	
Maintenance of Plant and Equipment	All plant and equipment will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased dust emissions. In addition, all plant and equipment will be subject to visual checks on a daily basis prior to use to ensure that the equipment functions correctly. In the event that any damage is identified on any plant or equipment that may affect its performance, necessary remedial work will be completed as soon as practicable. If necessary, defective plant or equipment may be isolated/closed off for use until the necessary remedial works have been undertaken. With regards to cleaning equipment (i.e., road sweeper), arrangements will be made to employ alternative equipment.	

	All dust producing equipment will be contained. This includes the enclosing and sealing of hoppers, covering conveyors and enclosing transfer points as well as screens and crushers.	
Vehicle exhausts	All site vehicles will be fitted with upswept exhausts and radiator cowls.	
Seeding of screening bunds	All screening bunds (as shown on Drawing Number CASH 1610/3/C and CHQOGC2109), will be watered and seeded at the earliest opportunity to bind the surface and minimise the effects of wind blow.	
Dust Extractors	Dust extractors will be installed on plant and stockpiles at points of high dust generation.	
Remedial Measures		
Water suppression with bowser and spray bars.	A water bowser towed by a tractor will be used to suppress dust on haul roads, exposed waste surface, waste stockpiles and screening bunds.	The water bowser will be employed if daily visual inspections identify any visible dust. It may also be employed following a review of the weather conditions which will be recorded on a daily basis. If these observations indicate that there is an increased risk to dust emissions, the water bowser will be employed.

3.4 OTHER CONSIDERATIONS

Water Availability

3.4.1 A water bowser will be used on site on the haul roads and the exposed waste surface if observations of the weather conditions indicate that there is an increased risk of dust. The water bowser will be supplied through mains water.

3.4.2 In addition, the wider quarry site benefits from a sump which collects incidental rainfall, run-off and groundwater ingress from areas of the quarry where mineral was extracted below the water table. The water is subsequently transferred to the adjacent Rhyne network (Wild Moor Middle Rhyne) in accordance with a Water Abstraction Licence (reference SW/052/0007/004). The abstracted water is discharged under a water discharge permit (reference 103118).

3.4.3 The proposed waste activities at the Eastern Extension Area and the Old Golf Course Extension will comprise works below the water table and therefore will require dewatering to ensure that the area can be worked dry. To facilitate this, CHQC propose to abstract the water to Wild Moor Middle Rhyne, in line with existing site water management practices, either directly, or via the sump.

3.4.4 In the event that the water can not be supplied through a mains water supply, CHQC would aim to use water that's recovered from the dewatering process.

3.4.5 In the unlikely event that water can not be supplied through a mains supply, operations would continue until dust monitoring indicates that remedial measures are required. This may include the following:-

- Employ a road sweeper to clean the site entrance and access road that may be affected;
- Relocate operations to less sensitive locations of the working face (if possible);
- Reduce vehicle speeds to 10mph to 5mph
- Reduction in site activities (e.g. limit waste deliveries to the site).

3.4.6 In the event that visible dust is still identified following the implementation of remedial action(s), operations on site will cease.

Housekeeping

3.4.7 The only area of the site that will comprise a cleanable (concrete) surface is the access road that joins the site from Combwich Road.

3.4.8 For the purposes of the DMP, this road will be cleaned by a road sweeper based on specific triggers that are detailed in Table 5. In addition, the rest of the permit area comprises an active quarry site where the landform is expected to change during its operational phase. As such, CHQC do not propose to implement a housekeeping procedure at the site.

3.5 VISUAL DUST MONITORING

3.5.1 Daily monitoring in the form of a visual assessment will be conducted across the site boundary to ensure that there are no visible dust emissions. According to the EA's Technical Guidance Note (TGN) M17 'Monitoring Particulate Matter in Ambient Air around Waste Facilities', a minimum of two monitoring points (one upwind and one downwind in relate to prevailing wind) should be established. As such, a visual assessment will take place at the points shown on Drawing Number CHQC/B043634/DMP/01 as a minimum. These points take into consideration the prevailing wind direction (W) and sensitive receptors that are potentially downwind to some of the working phases.

3.5.2 Monitoring will also comprise daily observations on the meteorological conditions (particularly the wind speed and direction) at the site. This information will be used by the Site Manager (or a nominated deputy) to determine the risk of dust emissions which is typically elevated during periods of dry weather or high winds. For the purposes of this DMP high winds have been defined Number 7 on the Beaufort scale where wind speeds range from 28-33 knots. The Beaufort Scale defines land conditions in high winds as "whole trees in motion; inconvenience felt when walking against the wind".

3.5.3 Daily monitoring will be undertaken by a member of site personnel who is trained in this procedure.

3.5.4 The results of the visual assessment and comments on the meteorological conditions will be recorded in the Daily Dust Conditions Log (Appendix B) and will be reviewed by the Site Manager (or a nominated deputy). CHQC will maintain a record of the Daily Dust Conditions Log and will be referred to in the event of a complaint (as detailed in Table 6).

3.5.5 Monitoring will be undertaken during the operating hours detailed in Section 2.7. CHQC do not propose to make any arrangements to monitor dust outside operating hours as it's considered that the risk of dust will be low during this period.

3.5.6 In the event that visible dust or high winds are identified through daily monitoring, the following actions will be undertaken.

Table 6: Action Plan for Visible Dust or High Wind Speeds

Action	Person responsible for ensuring action is carried out	Timescale for action completion

1	The Site Manager (or a nominated deputy) will be notified and will make the appropriate managerial staff and site operatives aware. In the event that visible dust is identified from daily monitoring, the Site Manager (or a nominated deputy) will review site operations to establish if the site can be identified as the source of the dust. In the event that high wind speeds are observed, the Site Manager (or a nominated deputy) will proceed to implement remedial action(s) that are detailed in Step 2.	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.
2	If the visible dust can be directly related to the site or high wind speeds are observed, remedial action will be undertaken and may include the following depending on the source: - • Employ water bowser to dampen areas or equipment that may be generating dust; • Employ a road sweeper to clean the site entrance and access road that may be affected; • Relocate operations to less sensitive locations of the working face (if possible); • Reduce vehicle speeds. • Reduction in site activities (e.g. limit waste deliveries to the site and limit waste treatment).	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.
3	A follow up visual assessment will be undertaken off site on the local road network for any visible dust.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
4	If visible dust is not identified, the Site Manager (or a nominated deputy) will ensure that any action taken, and the effectiveness of that action is documented and a record will be maintained.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
5	In the event that visible dust is identified following the implementation of remedial action(s), operations on site will cease and the EA will be informed.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).

4.0 REPORTING AND COMPLAINTS RESPONSE

4.1 PURPOSE OF COMPLAINTS PROCEDURE

4.1.1 A DMP should show how the operator will respond to complaints. Any complaints should be investigated promptly, and appropriate remedial action should be taken. The complainant and anyone else likely to be affect should be informed of any action taken in response to the complaint.

4.1.2 A procedure has been developed (see Table 7 below) to ensure that complaints will be handled by CHQC appropriately and consistently and to reassure the EA and the public that any of their concerns will be acknowledged and acted upon where appropriate. The procedure will be reviewed on an annual basis or in the event of any significant dust issues.

4.2 COMPLAINTS REPORTING ROUTE

4.2.1 In order to ensure that members of the public are easily able to report any complaints relating to dust emissions from the site, there will be a display board at the site entrance which details the site name, the permit number, the EA's contact details and CHQC's contact details. By providing contact details for the EA as well as the operator, this ensures that the member of public can report their complaint and be confident that it will be received by the appropriate party even if they feel uncomfortable discussing directly with the operator.

4.3 COMPLAINTS RECORDS

4.3.1 Auditable records would be kept of any complaints made and the investigations undertaken. This would provide an ongoing record of the causes incidents and would be made available to the regulator to examine on request. The Site Manager or an appropriately trained operator will review the DMP once a year, in light of any complaints or issues that have been identified during the previous year. Should any control measures be shown to be failing, or should a need for further control measures be identified, new controls will be agreed and implemented in an updated DMP.

4.4 COMMUNITY ENGAGEMENT

4.4.1 CHQC will be undertaking regular community liaison group meetings with any interested local parties and any issues with dust can be raised at that time.

Figure 2: Reporting Route

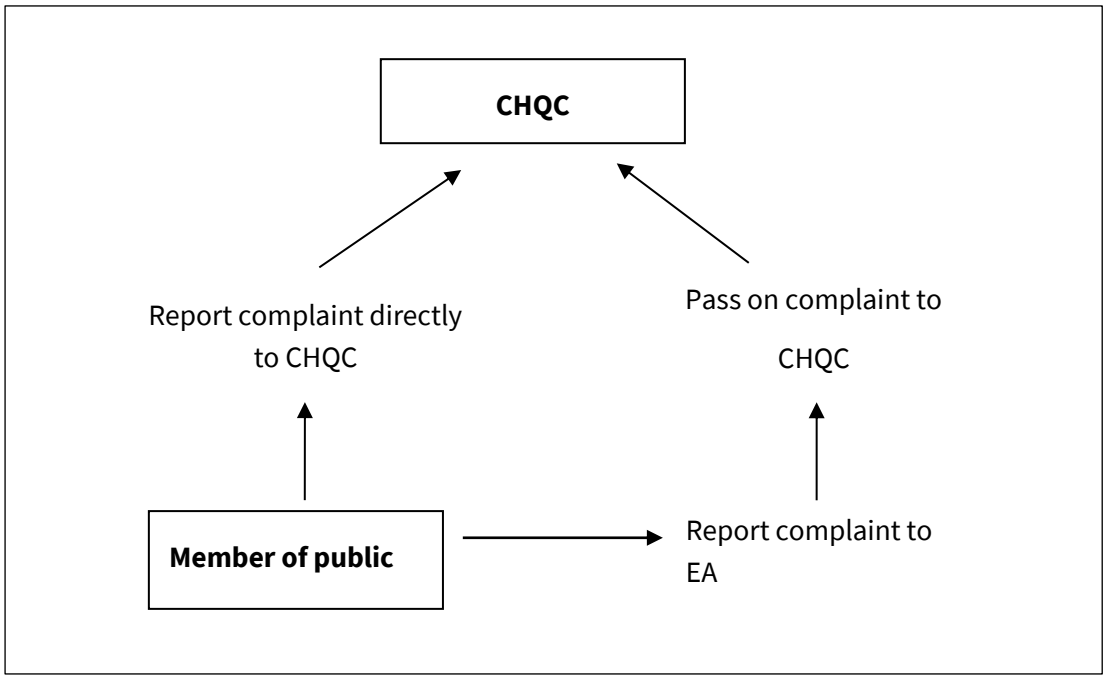


Table 7: Complaints Procedure

	Action	Person responsible for ensuring action is carried out	Timescale for Action Completion
1.	The Site Manager (or a nominated deputy) will be notified of the complaint and will make the appropriate managerial staff and site operatives aware of the complaint. The EA will also be notified of the complaint. The complaint shall be formally recorded using the Complaint Report Sheet (Appendix C).	Site Manager (or a nominated deputy)	Within two working days of receipt of the complaint.
2.	The complaint will be investigated by: - a) Checking the monitoring records to see whether the complaint corresponds to the monitoring records. b) Checking the Site Diary and waste acceptance records to see if any particularly dusty waste was accepted. c) Checking the Site Diary to see whether the complaint corresponds to any operational issues at the site. If the cause of the complaint is established, it would be recorded within the Complaint Record Sheet (Appendix C). If no particular cause is identifiable then this will also be recorded.	Site Manager (or a nominated deputy)	Within one working day of receipt of the complaint.
3.	If more than one complaint is received about a particular incident, then operations would cease and CHQC would engage with the	Site Manager (or a nominated deputy)	Within one working day of receipt of the complaints.

	complainant(s) and agree corrective action(s) to be undertaken and timescales to implement.		
4.	The Site Manager (or a nominated deputy) will instigate any necessary reviews of procedures and will implement any required changes.	Site Manager (or a nominated deputy)	Works would commence within seven working days of agreeing corrective action. Completion will depend on timescales agreed with the complainant.
5.	If appropriate, the complainant and the EA will be informed of any corrective actions taken.	Site Manager (or a nominated deputy)	Within one working day of corrective action(s) being implemented.
6.	A follow up audit on the corrective actions implemented shall be undertaken to ensure the complaint is not made again in the future and that the preventive procedure is effective.	Site Manager (or a nominated deputy)	Within two weeks of corrective action(s) being implemented.
7.	Once the follow up audit has been completed, the Site Manager (or a nominated deputy) will ensure that the complaint and any action taken and the effectiveness of that action are recorded in the Site Diary. This record shall also note any amendments to procedures, both environmental and health & safety, which may be required following the investigation. The record shall be kept in the site office at all times or if it is an electronic record it will be accessible from the site.	Site Manager (or a nominated deputy)	Within two weeks of receipt of corrective action(s) being implemented.

DRAWINGS

CHQC/B043634/PER/01 - Environmental Permit Boundary

CASH 1610/2/C – Whole Site Plan

CHQOGC2109/5/B – Planning Boundary Plan

CHQ/B043634/REC/01 - Receptor Plan

CASH 1610/4/C – Proposed Restoration Landform

CHILL016(D) – Composite Restoration Scheme

CASH 1610/6/C – Final Restoration Plan – Whole Quarry

2109_006/012_CHILL025_OGC REST PLAN – Final Restoration Plan

CASH 1610/3/C – Eastern Extension Area

CHQOGC2109 – Road Access Proposals

CHQC/B043634/DMP/01 – Dust Monitoring Locations

APPENDICIES

APPENDIX A – COPIES OF DUST SUPPRESSION SCHEMES

APPENDIX B – DAILY DUST CONDITIONS LOG

Daily Conditions Log

Date	
Name	
Monitoring Location(s)	
Observations	
Actions	
Signature	

APPENDIX C – COMPLAINT RECORD SHEET

Dust complaint report form	Date:	Ref. No.
Name and address of complainant		
Tel no. of complainant		
Time and date of complaint		
Date, time and duration of offending dust		
Weather conditions (e.g., dry, rain, fog, snow)		
Wind strength and direction (e.g. light, steady, strong, gusting)		
Complainant's description of dust		
Has complainant any other comments about the offending dust?		
Any other previous known complaints relating to installation (all aspects, not just dust)		
Any other relevant information		
Potential dust sources that could give rise to the complaint		
Operating conditions at the time offending dust occurred		
Action taken:		
Final outcome:		
Form completed by	Signed	