

MCDR INSPECTION REPORT
Pandarettu Lst mine of M/s Malabar Cement Ltd

S. N.	Particulars	Details
1	Name of the Mine	Pandarettu Limestone mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	234.94 Ha (Forest)
3	Mine code	38KRL08001
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4265/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Malabar Cements Ltd. Walayar (P.O) Palakkad -678 624 jtkmcl@yahoo.com
6	Village	Pudussery
7	Taluk/Mandal	Palakkad
8	District	Palakkad
9	Pin code	678 624
10	State	Kerala
11	Post office	Walayar
12	Nearest police station	Walayar
13	Nearest Railway station	Palakkad
14	Date of Grant of Mining Lease	26/08/2003
15	Date of Execution	26/08/2003

16	Date of opening of Mine	04/06/1980
17	Date of first Renewal, if applicable and its period & expiry	-
18	Date of second Renewal, if applicable and its period & expiry	-
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	-
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	M.Mohammad Ali
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mohan Laxman Bevinakatti
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Jose Thomas
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sony Kuriyakose
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Mohan Chandran
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	03/02/2021

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26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	03/02/2021 (2021-22 to 2025-26)
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/ Non captive	Captive
31	Date of inspection	24.08.23
32	Name of accompanying mine officials with designation	Sony Kuriyakose, Mining Engineer and others.

Exploration

S. N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	5 boreholes (2021-22)	10 boreholes have been drilled .	These boreholes drilled in between April to July,2023.
1b	Exploration over lease area for Geological axis 1 or 2.	12 boreholes of total Meterage 810 Mts proposed for the year	No exploration has been carried out.	The violation has been issued.

		2022-23		
1c	Exploration Agency & Expenditure in lakh Rupees during the year.	The lessee	Not specified	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified	G1-30.90ha G2-204.04	-
1e	Balance reserves as on <u>01.04.2023</u>	Reserves tonnes as on 1.4.2022 is 8355715 tonnes. -	Grade-above 34%CaO	Reserves tonnes as on 1.4.2023 is 7975337tonnes.
1f	General remarks of inspecting officer on geology, exploration etc.	The proposed exploration work has not been carried out for the year 2022-23. The violation has been issued.		

Development

S. N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Northing: 1200918 to 1201066 Easting: 693469 to 693825	Development carried out within the proposed area.	-
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches proposed for OB and Mineral.	Benches maintained as per the proposals	-
2c	Stripping ratio or ore to OB ratio	1 : 0.49 (in tonnes)	1: 0.42 (in tonnes)	Ore :380378t Waste :1599

				10t
2d	Quantity of topsoil generation in m ³	No proposal	nil	No top soil generated.
2e	Quantity of overburden generation in m ³	92112 m ³	59226 cu.m	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	It is observed during the inspection that the mining operations are being carried out in the absence of valid accorded EC and FC. It is reported during the inspection that the same are under process. In this regard, the correspondence was already made with the State Government, Kerala.		

Exploitation

S. N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	One pit proposed	One pit	-
3b	Quantity of ROM mineral production proposed	500023 tonnes	380378 tonnes	-
3c	Recovery of salable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	No proposal	NIL	-
3e	Grade of mineral reject generation and threshold value declared	No proposal	Nil	-
3f	Quantity of sub-grade mineral generation	No proposal	Nil	-
3g	Grade of sub-	No proposal	Nil	-

	grade mineral generation			
3h	Manual / Mechanised method adopted for segregating from ROM	No proposal. Only crushing and screening proposed	Crushing of ROM carried out.	-
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	-
3j	Provision of drilling & blasting in mineral benches	Deep hole Drilling and blasting proposed	Deep hole drilling and blasting carried out.	Drills of 100mm dia. Blasting carried out using slurry explosive in conjunction with delay electric detonators.
3k	Provision of mining machineries in mineral benches	Excavator and Tipper combination proposed	Hydraulic Excavator 2.7cum. -3 Back hoe 1.0cum - 1 Drill 100mm - 4 Tipper 35tons -9 Tipper 10tons-1 Water Tanker 27000lt -1 Dozer -3 Crusher 400tph-1 Crusher 250tph-1	Nil

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of benches in OB and Limestone – 9m.	Height of benches in OB and Limestone – 9m.	Nil
3m	Total area covered under excavation/pits	30.90 ha at the end of the plan period(2025-26)	30.90 ha	As per the Annual Return 2022-23
3n	Ore to OB ratio for the pit/mine during the year	1 : 0.49 (in tonnes)	1: 0.42 (in tonnes)	Ore :380378t Waste :159910t
3o	Total area put in use under different heads at the end of year	Area under Mining -30.90ha Waste dump – 31.27ha Infrastructure&Roads- 12.74ha Mineral storage - &Mineral Separation plant - 4.6ha Green belt - 8.19ha at the end of the plan period(2025-26)	Area under Mining - 30.90ha Waste dump – 27.24ha Infrastructure&Roads-12.74ha Mineral storage - &Mineral Separation plant – 3.30ha Green belt -8.0ha at the end of the plan period(2022-23)	As reported in AR 2021-22.
3p	Production of ROM mineral during last five-	2018-19 : 600000 2019-20 : 600000 2020-21: 600000	2018-19 :315174 2019-20 :416362 2020-21: 369056	nil

	year period, as applicable	2021-22 : 599998 2022-23 : 500023 (in tonnes)	2021-22 : 399019 2022-23 : 380378 (in tonnes)	
3q	General remarks of inspecting officer on method of mining etc.	There is no change in the method of mining.		

Solid Waste Management-Dumping

S.N	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of Overburden proposed.	OB dumping carried out in the earmarked area.	No top soil generated.
4b	Location of topsoil, OB & mineral reject dumps	OB dump-E - 693758 to 693955 N-1200609 to 1200669	The dumping of waste carried out in the proposed area.	Nil
4c	Number of dumps within lease area and outside lease area	1 OB dump within the mining lease.	1 OB dump within the mining lease.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB dump proposed outside the UPL	OB dump is outside the UPL	Nil
4e	Number of active & alive dumps	One OB dump within the lease.	One OB dump within the lease	Nil

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4f	Number of dead dumps	Nil	Nil	Nil
4g	Number of dumps stabilized	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall and garland drain all along dump proposed.	The retaining wall and garland drain not present at the toe of the waste dump as proposed.	The violation has been issued.
4i	Length of Retaining wall or garland drain all along dump	200m Retaining wall and 200m garland drain all along dump proposed for the year 2021-22.	200m Retaining wall and 200m garland drain all along dump not constructed.	Violation issued.
4j	Number of settling ponds	No proposals	Nil	-
4k	Specific comments of inspecting officer on waste dump management.	The construction of 200m Retaining wall and 200m garland drain all along dump has not been carried out. The violation has been pointed out.		

Solid Waste Management-Backfilling

S.N	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposals	Nil	-
5b	Area under backfilling of mined out area	No proposals	Nil	-

5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposals	Nil	-
5d	Total area fully reclaimed & rehabilitated	No proposals	Nil	-
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposals for backfilling hence no specific comments.		

Progressive Mine Closure Plan

S.N	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	To be submitted the annual report on PMCP under Rule26(2)	Annual PMCP Report for the year 2022-23 submitted on 30.6.2023	-
6b	Area available for rehabilitation (ha)	0.05	0.05ha	As reported by the lessee
6c	Afforestation done (ha)	0.05	0.05	As reported by the lessee
6d	No. of saplings planted during the year	15	15	As reported by the lessee
6e	Cumulative no. of plants	190	205	As reported by the lessee
6f	Any other specific method of rehabilitation	No proposal	nil	nil
6g	Cost incurred on watch & care during the year	Not specified	nil	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for	No proposal	nil	nil

	backfilling (L x B x D)			
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	No proposal	nil	nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	No proposal	nil	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No proposal	nil	-
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No proposal	nil	-
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	No proposal	nil	-
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	nil	-

6p	Compliance of Environmental monitoring (core zone & buffer zone)	Environment monitoring proposed for Air, Water, Dust, Ground water & Noise.	Environment monitoring carried out for Air, Water, Dust, Ground water & Noise.	All the environmental parameters within limit
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The PMCP proposals have been implemented in the mine as per the proposed.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposal for grade wise sorting. Only crushing and screening proposed	Crushing of ROM carried out.	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No proposal	nil.	Nil
7c	No proposal	nil.	Nil	No proposal
7d	No proposal	nil.	Nil	No proposal
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No specific comments.		

Environment

S.N	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	nil.	Nil
8b	Concurrent use or storage of topsoil	No proposal	nil.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping proposed for waste.	Separate waste dump maintained.	No generation of fines and rejects.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	nil.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No proposal	nil.	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	500 no. of plants	500 no. of plants	-
8g	Survival rate	85%	80%	nil

8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to control airborne dust.	Water sprinkling carried out to control the airborne dust on haul roads and screening plant.	A water tanker of 27000 liters capacity used for water sprinkling.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	There is no change in aesthetic beauty in and around mines area.		

Compliance of Rule 45

S.N	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Returns submitted up to July, 2023. Annual Return submitted for the year 2022-23 on 30.06.2023.		-
S.N	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Sri Mohanachandran, Geologist Sri Sony Kuriyakose, Mining Engineer Sri Jose Thomas, Manager	Appears to be correct.	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Mining - 30.90ha Waste dump – 27.24ha Infrastructure&Roads- 12.74ha Mineral storage - &Mineral Separation	Appears to be correct	-

		plant – 3.30ha Green belt -8.0ha		
9d	Scrutiny of Annual return on afforestation	500 saplings within lease area	Appears to be correct.	-
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Appears to be correct.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	O/S –4974.4t Production -380378t C/S – 20133.4t	Appears to be correct	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production- Rs1058.39/tonne. Ex-pricemine- Rs916.79/tonne	Appears to be correct.	This mine is captive mine and state PSU.
9h	Scrutiny of Annual return on fixed assets	Details of Fixed Assets given.	Appears to be correct	-.
9k	Scrutiny of Annual return on mining machineries	HydraulicExcavator 2.7cum. -3 Back hoe 1.0cum -1 Drill 100mm - 4 Tipper 35tons -9 Tipper 10tons-1 Water Tanker 27000lt -1 Dozer -3 Crusher 400tph-1 Crusher 250tph-1	Appears to be correct	-

Date :

(K. Srinivas)
Junior Mining Geologist

