

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Bangalore regional office

Mine file No : KRL/PAL/LST/1/BNG

Mine code : 38KRL08001

- (i) Name of the Inspecting : **S011**) **K.SRINIVAS**
Officer and ID No.
- (ii) Designation : Assistant Mining Geologis
- (iii) Accompanying mine : Shri. Jose, Chief Mines Manager & Shri Sony, Mining E
Official with
Designation
- (iv) Date of Inspection : 05/12/2017
- (v) Prev.inspection date : 16/12/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **PANDARATHU**
- (b) **Registration NO.** : **IBM/4265/2011**
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : KERALA
- District : PALAKKAD
- Village : PUDUSSERY
- Taluka : PALAKKAD
- Post office : WALAYAR
- Pin Code : 678624
- FAX No. : 0491-2862230 (F)
- E-mail : jtkmcl@yahoo.com,ro@malaba
- Phone : 0491-2862220 (O),944600476!
- (f) **Police Station** : WALAYAR
- (g) **First opening date** : 04/06/1980
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : MALABAR CEMENTS LTD.,
MALABAR CEMENTS LTD , WALAYAR POST, PALAKKAD,
KERALA-678624.
3. (a) **Lease Number** : KRL0003
- (b) **Lease area** : 245.69
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 20/11/2022
4. **Mineral worked** : LIMESTONE Main

5. Name and Address of the

Lessee : MALABAR CEMENTS LTD
 WALAYAR POST, PALAKKAD,
 PALAKKAD KERALA
 Phone:0491-2862373
 FAX :0491-2862230

Owner : K. PADMAKUMAR
 M/s MALABAR CEMENTS LIMITED
 WALAYAR DIST-PALAKKAD
 PALAKKAD KERALA
 Phone: 0491-2862373
 FAX : 0491-2862230

Agent : JOSEPH FRANCIS
 WALAYAR DIST-PALAKKAD
 PALAKKAD KERALA
 Phone: 0491-2862373; 09446004748
 FAX : 0491-2862230

Mining Engineer

Name : SONNY KURIA KOSE, Full Time
 Qualification : B.E.MINING
 Appointment/ : 12/12/2005
 Termination date

Manager

Name : JOSE THOMAS
 Qualification :
 Appointment/ : 01/02/1986
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	09/11/1995
Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	29/05/2002
	:	Mining Scheme rule 12 MCDR1988	21/04/2006
	:	Mining Scheme rule 12 MCDR1988	28/11/2011
	:	Mining Scheme rule 12 MCDR1988	10/03/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2 CORE BOREHOLES	Nil	
1b	Exploration over lease area for geological axis 1 or 2	2 core boreholes	Nil	No drilling has been carried out.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	Dept. of Mining & Geology, Kerala.	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	-
1e	Balance reserve as on 01/04/20	-	-	The balance reserves (111) are 1,03,23,139 tonnes as on 1.4.2017
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Exploration has not been carried out as proposed and hence the violation has been pointed out.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N: 1200891 to 1201149 E: 693806 to 693922	N: 1200891 to 1201149 E: 693806 to 693922	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable	Nil	-
2c	Stripping ratio or ore to OB ratio	1 : 0.68	1 : 0.99	-
2d	Quantity of topsoil generation in m3	Not applicable	Nil	-
2e	Quantity of overburden generation in m3	150715 m3	169423 m3	-

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	The development of pit is being carried out as proposed.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit	One pit	-
3b	Quantity of ROM mineral production proposed	6,00,000 t	4,25,861 t	Actual production for the year 2016-17.
3c	Recovery of sailable/usable mineral from ROM production	Not applicable	Nil	Entire ROM is used for captive cement plant.
3d	Quantity of mineral reject generation	Nil	Nil	There is no generation of rejects.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Nil	-
3f	Quantity of sub grade mineral generation.	Not applicable	Nil	No subgrade is generated.
3g	Grade of sub grade mineral generation	Not applicable	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals	Nil	The average grade of ore from the mine is 45% CaO.
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	-

3k	Provision of mining machineries in mineral benches	Yes	Yes	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	-
3m	Total area covered under excavation/pits	30.9 Hect	30.9 Hect	-
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.68	1 : 0.99	-
3o	Total area put in use under different heads at the end of year	Area under Mining 30.90 Waste Dump Site 27.47 Mineral Storage 0.90 Infrastructure (Workshop Admn. Bldg.) 7.35 Roads 5.39 Crushing & Screening Plant 3.30 Green Belt 2.50 Unbroken Area 157.1307	Area under Mining 30.90 Waste Dump Site 27.47 Mineral Storage 0.90 Infrastructure (Workshop Admn. Bldg.) 7.35 Roads 5.39 Crushing & Screening Plant 3.30 Green Belt 2.50 Unbroken Area 157.1307	-
3p	Production of ROM mineral during the last five year period as applicable	2012-13: 660974t 2013-14: 660342t 2014-15: 660067t 2015-16: 660183t 2016-17: 600000t	2012-13: 555517t 2013-14: 538044t 2014-15: 549346t 2015-16: 303725t 2016-17: 425861t 2017-18: 285160t (upto November, 2017)	
3q	General remarks of inspecting officers on method of mining etc.	-	-	The mining operations are being carried out as per the proposed method of mining in the approved Mining plan.

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB- Yes Top soil-Nil Mineral reject-Nil	OB- Yes Top soil-Nil Mineral reject-Nil	-
4b	Location of topsoil, OB and mineral reject dumps	South-OB	South-OB	-
4c	Number of dumps within lease area and outside of lease area	Three	three	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Southern side	Southern side	-
4e	Number of active and alive dumps.	two	two	-
4f	Number of dead dumps.	one	one	-
4g	Number of dumps established.	Three	Three	-
4h	Whether Retaining wall or garland drain all along dumps are there.	800m	Not completed as proposed.	The violation has been pointed out.
4j	Number of settling ponds	Nil	Nil	-
4k	Specific comments of inspecting officer on waste dump management	-	-	The retaining wall has not made as per the approved proposals. The violation has been pointed out.

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of 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 mineral out area (Rule 32)	No proposals	-	-
5d	Total area fully reclaimed and rehabilitated	No proposals	Nil	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	There is no specific comment on backfilling and recalamation.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	-	Yes	-
6b	Area available for rehabilitation (ha) .	Not applicable	Nil	-
6c	afforestation done (ha).	No proposals	nil	-
6d	No. of saplings planted during the year	No proposals	Nil	-
6e	Cumulative no .of plants	No proposals	Nil	-
6f	Any other method of rehabilitation	No proposals	Nil	-
6g	Cost incurred on watch and care during the year	No Proposals	Nil	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposals	nil	-

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposals	nil	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No Proposals	Nil	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposals	Nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No Proposals	Nil	-
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	No Proposals	Nil	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	No Proposals	Nil	-
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposals	Nil	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	No Proposals	Nil	-

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	There is no specific comment on PMCP.
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Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No proposals	Nil	Entire ROM is transported to the captive cement plant by rope
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposals	Nil	-
7c	Different grade of mineral sorted out at mines.	Nil	Nil	-
7d	Any beneficiation process at mines	No proposals	Nil	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	There is no deviation from the approved proposals of Mineral conservation and beneficiation issues.

Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals	Nil	There is no top soil generation during the year 2016-17.
8b	Concurrent use or storage of topsoil	No proposals	Nil	-

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	Waste is dumped separately in the southern side of the lease area.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No specific proposals	Nil	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposals	Nil	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	500 saplings	500 saplings	-
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	There is no change in aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR for the year 2016-17 submitted. MR submitted.	-	-

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	M.C. Kishore, Geologist, Sony Kuriyakose, Mining Engineer; Jose Thomas, Manager	-	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O/C) Workings: 30.900ha Used for waste disposal : 27.470ha Occupied by plant, buildings, residential, welfare buildings & roads : 12.740ha Other Purpose (Mineral crushing plant, mineral storage) : 4.200ha Work done under progressive mine closure plan during the year : 2.500ha	-	-
9d	Scrutiny of Annual return on afforestation		-	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	425861.000 Production for the year 2016-17	-	-

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The ex-mine price is Rs776/- The cost of production is Rs 865/-	The cost of production is higher than the ex-mine price.	The On-line scrutiny of annual return is under way regarding the cost of production and ex-mine price. The sale value is nil, the mine is captive.
9h	Scrutiny of Annual return on fixed assets	Rs258840000/- -		-
9k	Scrutiny of Annual return on mining machineries	The details given.	-	-

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 27(2)	28/12/2017		MCDR17 Rule 27(2)	28/12/2017	
MCDR17 Rule 11(1)	28/12/2017		MCDR17 Rule 11(1)	28/12/2017	
MCDR17 Rule 55(1)(3)	28/12/2017		MCDR17 Rule 55(1)	28/12/2017	

Date :

(K.SRINIVAS)

Indian Bureau of Mines