

MCDR INSPECTION REPORT

General

S.N.	Particulars	Details
1	File No.	CHG/DRG/LST-10/38MPR13007
2	Name of the Mine Date of Inspection: Name of Inspecting Officer	Pathariya Lime stone mine (Lease- II) 15/06/2021, Rudra N Mishra Senior Mining Geologist,
3	Date of Inspection	15/06/2021 (MCDR)
4	Accompanying mine personnel	Mr. Radhe Shyam Ray, Manager Mr. Amitabh Choudhry (Mining Engineer) Mr. Yogesh Banwade (Geology)
5	Total Lease Area (Ha) with breakup of non-forest and forest land	37.85 Ha, Forest Land: Nil. Non-forest land 37.85 Ha
6	Mine code	38MPR13007
7	IBM Registration Number under rule 45 of MCDR,2017	IBM/256/2011
8	Name of the Lease, Address, Phone, email and fax number	ACC Limited, Cement House,121, Maharshi Karva Road, Mumbai-400020, Phone No- 022-33024321 Fax No-022-66317458 Email: b.sridhar@acclimited.com
9	Village	Pathariya
10	Taluka/Mandal	Dhamadha,
11	District	Durg
12	Pin code	490036
13	State	Chhattisgarh
14	Post Office	Madesara
15	Nearest Police Station	Nandani
16	Nearest Railway Station	Durg
17	Date of Grant of Mining Lease	24-11-1972
18	Date of Execution	22-05-1973
19	Date of opening of Mine	20.02.1978
20	Date of First Renewal, if applicable and its period & expiry	1 ST Renewal 22.05.1993 to 21.05.2003 (10 yrs),
21	Date of Second Renewal, if applicable and its period & expiry	Lease period: 22/05/1973 to 21/05/1993 (20 yrs) 1 ST Renewal 22.05.1993 to 21.05.2003 (10 yrs), 2 nd Renewal 22.05.2003 to 21.05.2023 (20 yrs), As per section 8A of MCDR Act,2015, 22/05/2023 to 31/03/2030 (For Captive Leases)

22	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
23	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Sridhar Balakrishnan (Nominated owner) ACC Limited, Cement House, 121, Maharshi Karve Road, Mumbai, 400020 Ph:02233024321 Fax: 02266317458 Mail. id: b.sridhar@acclimited.com Date of appointment: 21/02/2020
24	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Vaibhav Dixit, Agent & Director Plant, Jamul cement Works, ACC Limited, Durg, CG-490024 Ph:0788-2285081 to 2285085 Fax: 0788 2282585 Mail.id: vaibhav.dixit@acclimited.com Date of appointment: 01/07/2018
25	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Deepak Kumar, Manager Pathariya limestone mines, ACC Limited, PO-Jamul cement works, Bhilai, Dist-Durg, CG, PIN-490024, email: deepak.kumar@acclimited.com Mob: 06260292478 Date of appointment: 07.03.2016
26	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Mr. Amitabh Choudhry, BE(Mining), Total exp-11 yrs, ACC Limited, Jamul cement works, PO-Jamul cement works, Bhilai, Dist-Durg, CG, PIN-490024, Email: amitabh.choudhary@acclimited.com Mob: 9109917185 Date of appointment: 28/04/2017
27	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57. (MCDR 2017)	Mr. Yogesh Banwade, M. ScTech (Geology), Total exp-8 yrs, ACC Limited, Jamul cement works, PO-Jamul cement works, Bhilai, Dist-Durg, CG, PIN-490024, Email: yogesh.banwade@acclimited.com Mob: 9755013664 Date of appointment: 20/01/2017
28	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Mining plan approved vide letter no.- DRG/LST/MPLN-150/NGP-Nagpur dated 29/08/1991. Proposal period- 1991-92 to 1995-96. Mining plan approved vide letter no.- 314(3)/2002-MCCM (C)/MP-1 dated 25.10.2002. Proposal Period – (2001-02 to 2005-06) Modified Mining plan approved vide letter no.- 314(3)/2002-MCCM (CZ)/MP-9/NGP

		dated 11.03.2006. Proposal Period – (2005-06 to 2007-08)
29	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	1 -SOM 314(3)/2012-MCCM (CZ)/MS-42, Dated 04.10.2013 Period - (2013-14 to 2017-18) 2- Modification of Mining Plan DRG/LST/MPLN-1117/2017-RAIPUR, dated 06.11.2017 Period-(2018-19 to 2022-23)
30	Mineral(s) granted in lease and approved for Mining	Limestone
31	Method of Mining (Opencast, Underground)	Opencast
32	Category (Fully Mechanized, Others or Manual)	Fully Mechanised
33	Captive/Non-Captive	Captive for Cement Plant
34	Environment Clearance	840000 MT
35	Status of Financial Assurance	Rs 72,98,100/-- vide BG No 560GT01172970001 dated 24/10/2017 valid up to 31/03/2023.

Exploration

S.N.	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
1a	Backlog of previous year (2020-21)	04	04	
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: 37.85 Ha	Under G1 Category: 37.85 Ha	Reserves of 37.85 ML is already explored under G-1 category
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Earlier exploration was done by RMMP Div, ACC Limited, Thane	Earlier exploration was done by RMMP Div, ACC Limited, Thane (MS)	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Nil	Nil	
1e	Balance reserves as on 01.04.2021	Category-111: 37.14 million tones Category-211: 10.76 million tones		
1f	General remarks of Inspecting officer on geology, exploration etc.	Chandi Limestone formation of Raipur Group of Chhattisgarh Basin. The Regional strike of the beds is considered East - west with a Dip amount of less than 2 degree towards North. Entire lease area is explored in G1 category.		

Development

S.N .	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
2a	Location of Development w.r.t. lease area	No additional area for development proposed and excavation for production is proposed in existing pit.	As per proposal	Quantity encountered in the top bench is used for strengthening parapet wall.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Minerals:03 nos Top Soil: Nil Overburden: Nil	Actual benches maintained in mineral limestone Soil: Nil Overburden: Nil	
2c	Stripping ratio or ore to OB ratio	0.10	0.15	
2d	Quantity of topsoil generation in m ³	2265	Very negligible quantity generated which used for afforestation.	
2e	Quantity of overburden generation in m ³	54010m ³	87232m ³	
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Limestone is flaggy in nature, predominantly grey/pink in color, stromatolitic, fine to medium grained, hard and compact and occasionally grades into shaly variety. Intrabuden is comes in patches. VL pointed out for the excess quantity of overburden generation.		

Exploitation

S.N .	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
3a	Number of pits proposed for production	01	01	
3b	Quantity of ROM mineral production proposed (2016-17)	840000 T	839553.79 T	
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Not proposed in the approved document	Not applicable	
3e	Grade of mineral reject generation and threshold value declared	Not proposed in the approved document	Not applicable	
3f	Quantity of sub-grade mineral generation	Not proposed in the approved document	Not applicable	
3g	Grade of sub-grade mineral generation	Not proposed in the approved document	Not applicable	
3h	Manual/Mechanized method adopted for segregation from ROM	Not proposed in the approved document	Not applicable	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed in the approved document	Not applicable	

3j	Provision of drilling & blasting in mineral benches	Depth: 8m Spacing - 4.2 to 5.0m, Burden- 2.5 to 3.0m	Depth: 8m Spacing - 4.2 to 5.0m, Burden- 2.5 to 3.0m	
3k	Provision of mining machineries in mineral benches	Hyd.Excavator-3nos Drill Machine- 2 Compressor-2 Dozer -1 Water tanker-1 Jeep-1 Truck-1 Explosive van-1 Maintenance van-1 Mobile Pickup van-1 Water pump-2	Hyd.Excavator-3nos Drill Machine- 2 Compressor-2 Dozer -1 Water tanker-1 Jeep-1 Truck-1 Explosive van-1 Maintenance van-1 Mobile Pickup van-1 Water pump-2	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	O/B -3m Mineral-8 m	O/B -3m Mineral-8 m	
3m	Total area covered under excavation /pits	17.86 (As per SOM)	16.63 ha	
3n	Ore to OB ratio for the pit/mine during the year	0.06	0.15	
3o	Total area put in use under different heads at the end of year	1. Pit-17.86 ha. 2. Waste disposal- 2.61ha 3. Occupied by plant, building, residential, welfare & roads-1.57 ha (As per SOM)	1. Area covered under current O/C Working- 16.63ha. 2. Waste disposal- 1.592ha 3. Occupied by plant, building, residential, welfare & roads-0.947 ha	
3p	Production of ROM mineral during last five-years period, as Applicable	Yr-16-17 – 8.40 LT Yr-17-18- 8.40 LT Yr-18-19- 8.40 LT Yr-19-20- 8.40 LT Yr-20-21 – 8.40 LT	Yr-16-17 – 6.57 LT Yr-17-18- 6.97 LT Yr-18-19- 7.94 LT Yr-19-20- 6.75 LT Yr-20-21 – 8.39 LT	
3q	General remarks of inspecting officer on method of mining etc.	Method of mining is Open cast mechanized mining with shovel dumper combination. Working are being carried out as per approved documents.		

Solid Waste Management-Dumping

S.N.	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	Yes	Yes	

4b	Location of topsoil, OB & mineral reject dumps	X 538285 Y538330 X2365120 Y2365011	X 538285 Y538330 X2365120 Y2365011	
4c	Number of Dumps within lease area and outside lease area	1 Outside lease area: Nil	1 Outside lease area: Nil	
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	outside of UPL	outside of UPL	
4e	Number of Active & Alive dumps	01	01	
4f	Number of deed dumps	Nil	Nil	
4g	Number of dumps established	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Retaining wall maintained around the lease area.	Retaining wall maintained around the lease area.	
4i	Length of Retaining wall or garland drain all along dump	332m	551m	
4j	Number of settling ponds	Not proposed in the approved document	Nil	
4k	Specific commends of inspecting officer on waste dump management	One active Dump located outside of the UPL. Very less quantity generated.		

Solid Waste Management-Backfilling

S.N.	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	NIL	NIL	Last two years production increased. No area for reclamation and backfilling.
5b	Area under backfilling of mined out area	Not Applicable	NA	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Applicable	NA	
5d	Total area fully reclaimed & rehabilitated	Not Applicable	NA	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Now no reclamation and rehabilitation is required. After fully exhaustion of limestone up to economic depth the pit will be converted as water reservoir.		

Progressive Mine Closer Plan

S.N	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	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	Yes	Yes	
6b	Management of worked/mined out benches i) Area available for rehabilitation (Ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	Nil 0.114 ha 300 5520 approx. Proposed at conceptual stage Not proposed in approved document	Nil 0.16ha 300 5520(approx.) It will be implemented at end of life of mine 0.75 lakh for Watch and care job awarded to the third party.	
6c	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling (L*B*D)	Not Applicable	NA	
	Void filled by waste/tailings			
	Afforestation on the backfilling			
	Rehabilitation by making water reservoir	Not Applicable	NA	
	Any other specific means			
6d	Compliance of Rehabilitation of waste land within lease Afforestation	Not Applicable	NA	
	Area rehabilitation			
	Method of rehabilitation			
6e	Compliance of Environment monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	PMCP report submitted and implementation is in order.		

Mineral Conservation

S.N.	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area			

7b	Method of grade-wise mineral sorting i.e., manual or mechanical	Not Applicable	NA	
7c	Different grade of mineral sort out at mine			
7d	Any beneficiation process at mines			
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No beneficiation process adopted.		

Environment

S.N.	Item	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	When ever encountered, it should be used for plantation.	Used for plantation purpose during the year.	
8b	Concurrent use or storage of topsoil	Not proposed as quantity not envisaged	Used for plantation purpose during the year.	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	No separate dump area proposed	No separate dump area available	
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	Not envisaged	Use for strengthening parapet wall	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	Proposed in PMCP	Will be done as per proposal	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	5220 nos (Approx)	5220 nos (Approx.) 300 nos (2020-21)	
8g	Survival rate	Not proposed in approved document	71 %	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes, Water sprinkling has been done with the Water Tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	EMP parameters are regularly being monitored.		

Compliance of Rule 45

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	MR Submitted upto May -2021	
		AR Submitted upto 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	
9c	Scrutiny of Annual return on land use pattern for area under pits,	1. Area covered under current O/C Working- 16.63ha.	

	reclaimed area, dumps etc.	2. Waste disposal-1.592ha 3. Occupied by plant, building, residential, welfare & roads-0.947 ha		
9d	Scrutiny of Annual return on afforestation	Within Lease area:300 nos Outside Lease area: NIL Survival Rate: 71%		
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Mineral Reject generation: Nil Grade: less than 34%		
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Opening Stock: Nil ROM production: 839553.79tones Closing Stock: Nil		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex- Mine Price: Rs 208.77 Cost of Production: Rs 208.77		
9i	Scrutiny of Annual return on Fixed assets	Rs 18406055.00		
9k	Scrutiny of Annual return on mining Machineries	Type of Machinery	Capacity of each Unit	No. of Unit
		Back Hoe	2.80 CuM	02
		Showel (Hydraulic)	4.00CuM	01
		Rock Drill (Non-Electrical)	115mm	02
		Dozer	340 HP	01
		Explosive van	4.450 ton	01
		Water Tanker	8000lt	01
		Trucks	9.895 tones	01
		Pumps (Elec)	2000 L/Mn	01

10. Details of Violations observed during current inspection

नियम	उल्लंघन के प्रकार का विस्तृत ब्यौरा
Rule 11 (1)	Mining Operation are not being carried out in accordance with the Mining plan approved vide No DURG/LST/MPLN-1117/2017-RAIPUR/692, dated 06.11.2017 to the extent below: i) As per approved Mining Plan, Proposed Quantity of overburden generation in 54010 m ³ during the year 2020-21, but in F.Y 2020-21 Quantity of overburden increased upto 87232. m ³ .
Rule 35 (2)	The softcopy (in the standard format), of high-resolution satellite images obtained from CARTOSAT-2 Satellite LISS-IV sensor on the scale of cadastral map has not been submitted.

Compliance position of earlier violation pointed out: - No outstanding Violations.

Also, Star rating of mines validated

Date: 08/07/2021

Name: Rudra Narayan Mishra
Designation: Senior Mining Geologist