

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	S. Kartikeya, Jr. Mining Geologist, Indian Bureau of Mines, Raipur
2	Date of inspection	09/10/2017
3	Name of the Mine	Pathariya Lime stone mine (Lease- II)
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease Area: 37.85 Ha, Forest Land: Nil. Non-forest land 37.85 Ha
5	Mine Code	38MPR13007
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/256/2011
7	Name of the lessee, Address, phone, email and fax number	ACC Limited, Jamul Cement Works , Durg, CG-490024 Ph:0788-2285081 to 2285085
8	Village	Pathariya
8	Taluka / Mandal / District	Dhamadha, Durg
10	State	Chhatisgarh
11	Post office & PIN	Madesara, 490036
12	Nearest police station	Nandani
13	Nearest Railway station	Durg
14	Date of Grant of Mining Lease	1972
15	Date of Execution	-
16	Date of opening of Mine	20/02/1978
17	Date of first Renewal, if applicable and its period & expiry	Lease Period: 22/05/1973 to 21/05/1993 (20 Years) 1st renewal 22.05.1993 to 21.05.2003 (10 Years)
18	Date of second Renewal, if applicable and its period & expiry	2nd renewal 22.05.2003 to 21.05.2023 (20 Years) As per Section 8A of MMDR Act, 2015 22.05.2023 to 31.03.2030 (For Captive Leases)
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Neeraj Akhoury (Nominated owner) ACC Limited, Cement House, 121, Maharshi Karve Road, Mumbai, 400020 Ph:02233024321 Fax: 02266317458 Email: neeraj.akhoury@acclimited.com Date of appointment:04/02/2017
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Manoj Shrivastava, Agent & Director Plant Jamul cement Works, ACC Limited, Durg, CG-490024 Ph:0788-2285081 to 2285085 Fax: 0788 2282585 Email: manoj.shrivastava@acclimited.com Date of appointment: 06/06/2017
22	Name of the Mines Manager with Address, phone, email,	Shri Radhe Shyam Ray , Manager Pathariya limestone mines, ACC Limited, PO-Jamul

	fax number and date of appointment in mines	cement works, Bhilai, Dist-Durg, CG, PIN-490024, Email: radheshyam.ray@acclimited.com Mob: 09816616929 Date of appointment: 15/05/2017
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Amitabh Choudhry, BE(Mining), Total exp-10 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
24	Whether Geologist appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Mr. Yogesh Banwade, M.Sc-Tech(Geology), Total exp-7 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
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved vide letter no. 314(3)/2002-MCCM (C)/MP-1 Nagpur dated 25.10.2002 Period: 2001-02 to 2007-08
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	1st Scheme of Mining approved vide letter no. 314(3)/2007-MCCM (CZ)/MP/MSPMCP-34, Nagpur Dated 14.05.2018 Period: 2008-09 to 2012-13 2nd Scheme of Mining approved vide letter no. 314(3)/2012-MCCM (CZ)/MS-42, Nagpur Dated 04.10.2013 Period: 2013-14 to 2017-18
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Category 'A' Fully Mechanised
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

1.0 Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Exploration has been proposed during Scheme Period	Not Applicable.	-
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: 37.85 Ha	The entire lease area has not been explored under G1 category	Remarks has been incorporated in the scrutiny comments of the submitted

				Modified Mining Plan for approval in this office
1c	Exploration Agency & Expenditure in lakh Rupees during the year	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	Remaining area will be explored during the period of Mining Plan.	As per approved document reserves of 37.85 ML is already explored under G-1 category
1e	Balance reserves as on 01.04.2017	Under (111): 41.56 Million Tonnes Under (211): 5.94 Million Tonnes	Under (111): 42.91 Million Tonnes Under (211): 5.94 Million Tonnes	-
1f	General remarks of inspecting officer on geology, exploration etc.	As per approved Scheme of Mining it has been mentioned that the entire lease area has been explored in G1 category. In actual the lease has not been completely explored in G1 category.		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	SRP 0.0 to SRP 3.5	SRP 0.0 to SRP 3.5	-
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Mineral: 03 nos Topsoil: NIL Overburden: NIL	Mineral: 03 nos Topsoil: NIL Overburden: NIL	-
2c	Stripping ratio or ore to OB ratio	0.038	0.13	-
2d	Quantity of topsoil generation in m3	Not proposed in the approved document	Very negligible quantity generated which used for Afforestation.	-
2e	Quantity of overburden generation in m3	32382 cubic meters	53137 cubic meters	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	NIL		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	840160 Metric Tonnes	377730.220 Metric Tonnes	-
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 / Mechanised method adopted for segregating 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- 8.0 m Spacing- 4.2 to 5.0 m Burden- 2.5 to 3.0 m	Depth- 8.0 m Spacing- 4.2 to 5.0 m Burden- 2.5 to 3.0 m	-
3k	Provision of mining machineries in mineral benches	Tata Hyd.Excavator Ex-400 2.8 cum: 02 nos Tata Hyd Rock Breaker Ex-200: 01 no. Atlas Copco Wagon Drill Machine BVB 25, 115mm dia: 02 no. Atlas Copco Compressor XAH-210 450CFM: 02 nos.	Hyd.Excavator-3nos Hyd Rock Breaker-1 Drill Machine- 2 Compressor-1 Dozer -1 Water tanker-1 Jeep-1 Truck-1 Explosive van-1 Maintenance van-1 Mobile Picup van-1 Water pump-3	-

		BEML Dozer D155 A-1 340 HP : 01 no. M&M Jeep Bolero 80 HP: 01 no. Tata Water Tanker 1210 SE 5000 Liters: 01 no. Tata Truck 1210 SE 10 Tonnes: 01 no Tata Explosive van 1210 SE 10 Tonnes: 01 no. Kirloskar Water Pump 253 HP 800 Cum/Hr: 01 no.		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	O/B – 3.0 m Mineral- 8.0 m	O/B – 3.0 m Mineral- 8.0 m	-
3m	Total area covered under excavation/pits	16.78 Ha. (At the end of Scheme of Mining as per approved document)	12.00 Ha	-
3n	Ore to OB ratio for the pit/mine during the year	1: 0.038	1: 0.15	-
3o	Total area put in use under different heads at the end of year	Pit: 16.78 Ha. Waste disposal: 1.170 Ha. Others: 2.887 ha (At the end of SOM Period)	Pit: 12.0 ha. Waste disposal: 0.23 ha Others: 1.037 ha	
3p	Production of ROM mineral during last five-year period, as applicable in Metric Tonnes	Yr- 2012-13: 600000 Yr- 2013-14: 50000 Yr- 2014-15: 50000 Yr- 2015-16: 839400 Yr- 2016-17: 840160	Yr- 2012-13: 5792.490 Yr- 2013-14: 11441.350 Yr- 2014-15: 15018.210 Yr- 2015-16: 17831.660 Yr- 2016-17: 377730.220	
3q	General remarks of inspecting officer on method of mining etc.	NIL		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Waste Dumping: South-west part of the lease area.	Waste Dumping: South-west part of the lease area.	
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	Approx 500m & 120 m SW of SRP 0.0	Approx 500m & 120 m SW of SRP 0.0	
4c	Number of dumps within lease area and outside lease area	01 no.	01 no.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Approx 500m & 120 m SW of SRP 0.0 outside of UPL	Approx 500m & 120 m SW of SRP 0.0 outside of UPL	
4e	Number of active & alive dumps	01 no.	01 no.	
4f	Number of dead dumps	Not proposed in the approved document	Not applicable	
4g	Number of dumps stabilised	Not proposed in the approved document	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Construction of parapet wall surrounding dump has been proposed.	Construction of parapet wall surrounding dump has not been done.	Deviation has been pointed out.
4i	Length of Retaining wall or garland drain all along dump	Not proposed in the approved document	Not applicable	
4j	Number of settling ponds	Not proposed in the approved document	Not applicable	
4k	Specific comments of inspecting officer	NIL		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Area not matured for backfilling.	Not applicable as the area has not matured.	
5b	Area under backfilling of mined out area	Area not matured for backfilling.	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Not proposed the approved document.	Not applicable	
5d	Total area fully reclaimed & rehabilitated	Area not matured reclamation and	Not applicable	

		rehabilitation		
5e	General remarks of inspecting officer on backfilling, reclamation etc	NIL		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23. 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 0.25 1000	Nil 0.25 1000	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Area not matured reclamation and rehabilitation	Not applicable	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Area not matured reclamation and rehabilitation	Not applicable	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	NIL		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Not proposed in the approved document	Not applicable	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed in the approved document	Not applicable	
7c	Different grade of mineral sorted out at mines	Not proposed in the approved document	Not applicable	
7d	Any beneficiation process at mines	Not proposed in the approved document	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	NIL		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	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 37)	Waste Dumping: South-west part of the lease area.	Waste Dumping: South-west part of the lease area.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed in the approved document	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed in the approved document	Not applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	Yes	Yes	
8g	Survival rate	Not proposed in the approved document	Approx 70 %	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	NIL		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – September 2017 A.R. submitted upto – 2016 -17	

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	Mining Engg: Shri Amitabh Choudhry Geologist: Shri Yogesh Banwade Manager: Shri Radhe Shyam Ray	NIL	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 12.0 Ha Waste:0.230 Ha Others: 1.437 Ha	NIL	-
9d	Scrutiny of Annual return on afforestation	1000 Nos of sapling with 70% Survival rate	NIL	-
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NIL	NIL	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	NIL Stock.	NIL	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine price: Rs. 185.71 Production Cost: Rs. 346.46	NIL	-
9i	Scrutiny of Annual return on fixed assets	Rs. 0.0	NIL	-
9k	Scrutiny of Annual return on mining machineries	Provided in the annual returns	NIL	-

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

Date of Last Inspection, Name and Designation of the Inspecting Officer:

Shri Suresh Prasad, DCOM, IBM, Nagpur

Date of Inspection: 14/12/2016

No outstanding violations.

Details of the Violations Pointed-out during Inspections:

नियम	उल्लंघन के प्रकार का विस्तृत ब्यौरा
Rule 11(1)	The following deviations have been found in the mine from the approved Scheme of Mining vide 314(3)/2012/MCCM(CZ)/MPLN-42 Nagpur dated 04/10/2013 for the period of 2013-14 to 2017-18: <u>Protective Measures:</u> There was a proposal given for construction of parapet wall of sufficient height to prevent any erosion and runoff from waste dumps, the same has not been constructed.
Rule 14 (3)	The overburden and waste material obtained during mining operations has been mixed with Limestone and found dump with waste material..
Rule 35	Soft copy of the high resolution satellite image obtained from CARTOSAT-2 satellite LISS-IV sensor on the scale of cadastral map, as on the 31st day of March for the Financial year 2016-17, covering the mining lease and an area of two kilometres have not been submitted.

:

(Shaival Kartikeya)
Jr. Mining Geologist
IBM, Raipur