

MCDR INSPECTION REPORT 2021-22

GENERAL:

S.N	Particulars	Details
1	File no	
2	Name of the Mine	Nandini Kundini Limestone Mines
3	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease area - 53.57 Ha Forest Land - Nil Non Forest Land – 53.57 Ha
4	Mine code	38CHG05024
5	Date of Inspection & Name of Inspecting Officer	10/10/2022 D. Upadhyay, Sr. ACOM
6	Name of official accompanying inspection	Shri. Deepak Kumar (Manager) Shri. Subramani Venkatesh (Mining Engineer) Shri. Shisir Gour (Geologist)
7	IBM Registration Number under rule 45 of MCDR, 1988	IBM/256/2011
8	Name of the lessee, Address, phone, email and fax number	ACC Limited Cement House, 121, Maharshi Karve Road, Mumbai - 400020 Phone: 2233024321 Fax No: 02266317407 Email: b.sridhar@acclimited.com
9	Village	Nandini Kundini
10	Taluka/Mandal	Dhamdha
11	District	Durg
12	Pincode	490036
13	State	Chhattisgarh
14	Post office	Medesara
15	Nearest police station	Nandini
16	Nearest Railway station	Durg
17	Date of Grant of Mining Lease	02.12.2008 for 30 years
18	Date of Execution	02.12.2008
19	Date of opening of Mine	20.09.2016
20	Date of first Renewal, if applicable and its period & expiry	Extension of ML in light of MMDR Amendment Act 2015, from 02/12/2038 to 01/12/2058.
21	Date of second Renewal, if applicable and its period & expiry	NA
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	Shri. Sridhar Balakrishnan (Nominated owner) Designation: MD & CEO ACC Limited Cement House, 121, Maharshi Karve Road, Mumbai - 400020 Phone: 7738147500 Fax No: 02266317407 Email: b.sridhar@acclimited.com DOA: 21/02/2020

24	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Name: Shri. Vaibhav Dixit Designation: Director Plant Address: Jamul Cement Works ACC Limited, Bhilai, Durg, C.G- 490024 vaibhav.dixit@acclimited.com Phone: 7882285081-83 Fax: 7882282585 DOA:01-07-2018
25	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri. Deepak Kumar Designation: Manager Mines Qualification: Diploma in Mining and Mine Surveying Address: Jamul Cement Works ACC Limited, Bhilai, Durg, C.G- 490024 Mob: 9752099803 Email: deepak.kumar@acclimited.com DOA: 01.07.2021
26	Name of the Mining Engineer & Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri. Subramani Venkatesh Designation: Mining Engineer Qualification: BE Mining Address: Jamul Cement Works ACC Limited, Bhilai, Durg, C.G- 490024 Mob: 7471116120 Email: subramani.venkatesh@acclimited.com DOA: 28.09.2019 Shri. Shishir Gaur Designation: Geologist Qualification: M.Sc (Geology) Address: Jamul Cement Works ACC Limited, Bhilai, Durg, C.G- 490024 Mob: 7738368632 Email: shishir.gour@acclimited.com DOA: 20-09-2016
27	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
28	Date of Approval of Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Modified Mine plan approval letter no: Durg/Chup/Kyo-1114/2017-Raipur dated 17/10/2017 For the period :2018-19 to 2022-23
29	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	
30	Mineral(s) granted in lease and proved for mining	Limestone
31	Method of Mining(Opencast, Underground)	Opencast
32	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
33	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/Review of mining -

1. Exploration

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
1a	Backlog of previous year	Not proposed	Nil	No Backlog
1b	Exploration over lease area for Geological axis 1 or 2.	Not proposed	Nil	Entire lease area 53.57 ha is explored under G1 Category
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not proposed	Nil	Entire lease area 53.57 ha is explored under G1 Category
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed	Nil	Entire lease area 53.57 ha is explored under G1 Category
1e	Balance reserves as on 01.04.2022	As per Modification of Mining Plan approved on 17/10/2017. Under (111): 43.73 Million Tonnes Under (211): 8.95 Million Tonnes	Balance reserves as on 01.04.2022: Under (111): 42.3 Million Tonnes Under (211): 8.95 Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	Entire lease area 53.57 ha is explored under G1 Category		

2. Development

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
2a	Location of development w.r.t. lease area	539833E, 2364275N to 540025E, 2364516 N	539833E, 2364275N to 540045E, 2364411 N	Developmental is carried out within approved proposal.
2b	Separate benches in topsoil, overburden and mineral (Rule 15) m ³ /T	Separate bench proposed. OB Bench:2-3m Lst Bench: 6-7m	Separate benches in OB & Ore are maintained as per proposal.	Separate benches in OB & Ore are maintained as per proposal.
2c	Stripping ratio or ore to OB ratio	1:0.14cu.m/T	1:0.17cu.m/T	
2d	Quantity of topsoil generation in m ³	Nil	Nil	Topsoil not proposed.
2e	Quantity of overburden/waste	74034cu.m	75344cu.m	Due to inter

	generation in m ³			burden of clayish material waste quantity varies.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Developmental is carried out within approved proposal.		

3. Exploitation

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
3a	Number of pits proposed for production	01 Pit	01 Pit	01 Pit
3b	Quantity of Limestone production proposed	507009 MT	426651.18 MT	ROM production is consumed to its captive plant.
3c	Recovery of salable/usable mineral from ROM production	100%	100%	Total ROM is usable to its Plant.
3d	Quantity of mineral reject generation	Not proposed	NIL	NIL
3e	Grade of mineral reject generation and threshold value declared	Not proposed	NIL	NIL
3f	Quantity of sub-grade mineral generation	Not proposed	NIL	NIL
3g	Grade of sub-grade mineral generation	Not proposed	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Not proposed	NIL	NIL
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	NIL	NIL
3j	Provision of drilling & blasting in mineral benches	Drilling and blasting is proposed,	Drilling and blasting is carried out as per proposal.	Drilling and blasting is carried out as per proposal.
3k	Provision of mining machineries in mineral benches	Shovel and dumper combination	Shovel and dumper combination	Excavator, Loader and Dumper are equipped to winning out the mineral.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation/pits	19.49 Ha upto the end of plan period	16.810 Ha upto 2021-22	16.810 Ha upto 2021-22

		2022-23		
3n	Ore to OB ratio for the pit/mine during the year	1:0.14	1:0.17	
3o	Total area put in use under different heads at the end of year	Pit -19.49 Ha OB/Dump - 5.66 Ha Infra/road-0.48Ha Other (plantation) - 1.12 Ha Total: 26.75 Ha upto the end of plan period 2022-23	Pit -16.810 Ha OB/Dump - 3.640 Ha Infra/road-1.220Ha Other (plantation) - 1.250 Ha Total: 22.92 Ha upto 2021-22	Total area put in use under different heads at the end of year are as per proposal
3p	Production of ROM mineral during last five-year period, as applicable	F.Y. 2017-18: 1030000 MT F.Y. 2018-19: 506519 MT F.Y. 2019-20: 505522 MT F.Y. 2020-21: 508095 MT F.Y. 2021-22: 507009 MT	F.Y. 2017-18: 31537.37 MT F.Y. 2018-19: 263966 MT F.Y. 2019-20: 453473 MT F.Y. 2020-21: 140198.39 MT F.Y. 2021-22: 426651.18 MT	ROM production is consumed to its captive plant.
3q	General remarks of inspecting officer on method of mining etc.	The ROM production has been carried out from single pit as per proposal.		

4. Solid Waste Management-Dumping

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of OB. No Top soil and Reject proposed.	Being done as per proposal	Being done as per proposal
4b	Location of topsoil, OB & mineral reject dumps	No top soil proposed. Location of OB: 540228E, 2364876N to 540389, 2364788N OB dumping only	No top soil generated. Location of OB: 540228E, 2364876N to 540389, 2364788N	Being done as per proposal
4c	Number of dumps within lease area and outside lease area	Within Lease :1 Outside Lease: Nil	Within Lease :1 Outside Lease: Nil	Being done as per proposal
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Towards North part of the lease.	Towards North part of the lease.	Being done as per proposal
4e	Number of active & alive dumps	1	1	01 active dump.

4f	Number of dead dumps	Not proposed	NIL	
4g	Number of dumps stabilized	Not proposed	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	Not proposed	NIL	Retaining wall is made all along dump.
4j	Number of settling ponds	Not proposed	NIL	
4k	Specific comments of inspecting officer on waste dump management	Separate dumping of OB is maintained as per proposal. Retaining wall is made all along dump.		

5. Solid Waste Management-Backfilling

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not proposed	NIL	Area is not matured for reclamation and rehabilitation.
5b	Area under backfilling of mined out area	Not proposed	NIL	--do--
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	NIL	--do--
5d	Total area fully reclaimed & rehabilitated	Not proposed	NIL	--do--
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area is not matured for reclamation and rehabilitation.		

6. Progressive Mine Closure Plan

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	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.	As per provision of MCDR 2017.	Annual report on PMCP submitted	Annual report on PMCP submitted
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	Not proposed	NIL	Area is not matured for reclamation and rehabilitation.

	v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year			
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L * B * D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Not proposed	NIL	Area is not matured for reclamation and rehabilitation.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not proposed	NIL	NIL
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring	Quarterly monitoring	Quarterly monitoring
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.		

7. Mineral Conservation

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM generated is cement grade and proposed to directly supply to Captive Cement Plant Jamul Cement Works.	ROM Generated is directly supplied to Captive cement plant Jamul cement works.	ROM Generated is directly supplied to Captive cement plant Jamul cement works.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed	NIL	--do--
7c	Different grade of mineral sorted out at mines	Not proposed	NIL	--do--
7d	Any beneficiation process at mines	Not proposed	NIL	--do--
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	ROM Generated is directly supplied to Captive cement plant Jamul cement works.		

8. Environment

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	NIL	Topsoil not proposed.
8b	Concurrent use or storage of topsoil	Not proposed	NIL	Topsoil not proposed.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Overburden dump towards the northern part of the lease as per mine plan.	Being done as proposed in mine plan	Being done as proposed in mine plan
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	Nil	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Nil	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Plantation proposed during 2021-22 : 300 nos.	Plantation done during 2021-22 : 700 nos. Total plantation done 4949 nos upto 31/03/2022	
8g	Survival rate	80%	80%	Survival rate 80%
8h	Water sprinkling on roads to control airborne dust	water tanker	One water tanker of 2KL deployed.	One water tanker of 2KL deployed.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is maintained by plantation.		

9. Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	AR & MR submitted regularly.		AR & MR submitted regularly.
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	Mining engineer, Geologist employment	Mining engineer,	Mining engineer,

	Manager	is furnished	Geologist are employed in the mine.	Geologist are employed in the mine.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use pattern furnished in AR.	Found in order.	Found in order.
9d	Scrutiny of Annual return on afforestation	Plantation 700 no.	Plantation 700 no.	Plantation 700 no.
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	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production is ₹ 243.35/mt	Cost of production is ₹ 243.35/mt	Cost of production is ₹ 243.35/mt
9i	Scrutiny of Annual return on fixed assets	Fixed asset under Capital structure (Part II A) : ₹ 34841563/-	Fixed asset under Capital structure (Part II A): ₹ 34841563/-	Fixed asset under Capital structure (Part II A): ₹ 34841563/-
9k	Scrutiny of Annual return on mining machineries	Machineries furnished in AR.	Found in order.	Found in order.

10- Details of violations observed during inspection and the compliance status.

No violation was observed during inspection.

Date: 23/12/2022

Signature:

Name: D. Upadhyay

Designation: Sr. ACOM