

MCDR INSPECTION REPORT 2020-21

1.0 GENERAL:

SN	Particulars	Details
1	File no	CHG/DRG/LST-38CHG 05024
2	Name of inspecting office & designation	Shri. D.Dash , Senior Mining Geologist Indian Bureau of Mines, Raipur
3	Accompany with Mine Officials	Mr. Deepak Kumar (Manager) Mr. Subramani Venkatesh(Mining Engineer) Mr. Shisir Gour (Geologist)
4	Date of inspection	19.01.2022
5	Name of the Mine	Nandini Kundini Limestone Mines
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land- Nil Non Forest Land- 53.57 Ha Total Lease area- 53.57 Ha
7	Mine Code	38CHG05024
8	IBM Registration Number under rule 45 of MCDR, 1988	IBM/18805/2014
9	Name of the lessee, Address, phone, email and fax number	M/s ACC Limited, Address: Jamul Cement Works, PO Jamul Bhilai C.G, Mobile no. 7024136362, Phone: 7882285581-84, Fax: 7882382585, Email: pinaki.pandey@acclimited.com
10	Village	Nandini Kundini
11	Taluka / Mandal / District	Dhamdha, Durg
12	State	Chhattisgarh
13	Post office & PIN	490036
14	Nearest police station	Nandini
15	Nearest Railway station	Power House Bhilai
16	Date of Grant of Mining Lease	Govt. letter no. F 18/2004/12 dated 05.02.2008 granted for 30 Years
17	Date of Execution	Executed: 02/12/2008 Lease granted for a period 02/12/2008 to 01/12/2038 Supplementary lease agreement made on 21/12/2016 up to 01/12/2058 (50 years) as per MMDR act 2015.
18	Date of opening of Mine	20/09/2016
19	Weekly day of rest	Sunday
20	Date of first Renewal, if applicable and its period & expiry	NA
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	Name: Mr. Sridhar Balakrishnan Designation : CEO of ACC Limited DOA: 21.02.2020, b.sridhar@acclimited.com, Address: 121, Maharshi Karve Road

		Mumbai - 400 020, India , Phone: 02241593507 Fax: 02266317431
24	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Name: Mr. Vaibhav Dixit Designation: Director Plant DOA:01-07-2018 Address: ACC Jamul Cement Works Bhilai Durg C.G- 490024 Vaibhav.dixit@acclimited.com Phone: 7882285581-84, Fax: 7882282585
25	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Deepak Kumar, Designation: Manager Mines DOA:01.07.2021, Address: ACC Jamul Cement Works Nandini Kundini Mines, Dhamdha, Durg C.G-490036, Mob: 9752099803, deepak.kumar@acclimited.com
26	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Subramani Venkatesh Designation: Mining Engineer, Qualification: BE Mining DOA:28.09.2019, Work Experience: 15+ Years Address: ACC Jamul Cement Works, Nandini Kundini Mines, Dhamdha, Durg C.G-490036, Mob: 7471116120 Subramani.venkatesh@acclimited.com
27	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Mr. Shishir Gaur, Designation: Geologist, Qualification: Msc Geology, DOA:20.09.2016, Address: ACC Jamul Cement Works Nandini Kundini Mines, Dhamdha, Durg C.G-490036 Mob: 7738368632, shishir.gour@acclimited.com
28	Date of Approval 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.	NA
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
34	Existing EC Limit and validity	1.03 Mio.T up to 01/12/2058
35	Status of Financial Assurance as per rule 27 of MCDR, 2017	BG No.: 1637617BG0000792 dated 07/10/2017 Amount: Rs. 80,25,000/- Enhanced BG amount Rs. 53,50,000/- dated 03/12/2021 Total Amount of BG:- 1,33,75,000/-

1.0 Exploration:

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
1a	Back log of previous year	2018-19: Nil 2019-20: Nil 2020-21: Nil	2018-19: Nil 2019-20: Nil 2020-21: Nil	Entire lease of 53.57 ha area is reported as explored under G1 Category.
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Nil	Entire lease area is explored under G1 Category at grid interval of 100x200m with 33 no. boreholes and maximum depth of borehole is 84.5m - NK/C/05/02/11
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	.Not envisaged in approved M.P.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	NA
1e	Balance reserves as on 01.04.2021 (in Million Tonnes)	111: -42.219832 211: 8.95	111: 42.882331 211: 8.95	Reserves figures of 111 reserves is furnished incorrectly in Annual Return. Violation of Rule 45 of MCDR, 2017 is pointed out.
1f	General remarks of inspecting officer on geology, exploration etc.	The limestone deposit is of tabular stratified deposit of regular type. The exploration carried out is adequate to cover the entire lease area under G1 scale of exploration.		

2.0 Development:

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	From UTM Coordinates: 2364168 N, 539908 E & 2364244 S 540182 W to between section SL1 to SL1	From UTM Coordinates: 2364416N 539964E to 2364245S, 540093W	Development of quarry is less compared to proposal due to lack of demand from captive plant.
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	OB Bench: 3m Lst Bench: 7m	OB Bench: 2m Lst Bench: 6-7m	Thin layer of OB encountered than anticipated bench varies from 0.5 to 2m
2c	Stripping ratio or ore to OB ratio	1:0.15	1:0.16	As proposed
2d	Quantity of topsoil generation	Nil	Nil	Very thin layer of

	in m3			topsoil available which cannot be quantified. However, top soil is scarped prior to mining and used for plantation purpose.
2e	Quantity of overburden generation in m3	72384	35824	OB generation is less due to less development.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development of quarry is less compared to proposal due to lower scale of mining operations due to less demand from captive cement plant.		

3.0 Exploitation:

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	507009MT	140198.39MT	Less production due low demand from Jamul Plant affected during Covid-19 Pandemic
3c	Recovery of salable/usable mineral from ROM production	100%	100%	As proposed.
3d	Quantity of mineral reject generation	0 MT	0 MT	Not envisaged in approved M.P.
3e	Grade of mineral reject generation and threshold value declared	NIL	NIL	Not envisaged in approved M.P.
3f	Quantity of sub-grade mineral generation	NIL	NIL	Not envisaged in approved M.P.
3g	Grade of sub-grade mineral generation	NIL	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Not proposed	Not done	Not envisaged in approved M.P.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Beneficiation not proposed.	Not done.	Beneficiation is not required.
3j	Provision of drilling & blasting in mineral benches	Yes Wagon Drill Dia:115mm Spacing:3.0m Burden: 2.5-3m Depth:7.0m	Yes Wagon Drill Dia:115mm Spacing:3.0m Burden: 2.5-3m Depth:6-7.0m	Done as per proposal.
3k	Provision of mining machineries in mineral benches	Backhoe-02 Dozer-01 Drilling Machine-01 Tippers-15	Backhoe-02 Breaker-01 Loader-01 Drilling Machine-01	Done as per proposal.

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3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes OB/Top soil-Nil Mineral-6m to 7m	Yes OB/Top soil-Nil Mineral-6m to 7m	Top Soil is scraped with dozer/loader
3m	Total area covered under excavation/pits	19.49 Ha upto the end of plan period 2022-23.	14.801 Ha upto period 2020-21	Less area degradation due to less development & production.
3n	Ore to OB ratio for the pit/mine during the year	1:0.15	1:0.16	As proposed.
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 up to 2022-23	Pit-14.801 Ha OB/Dump-2.963Ha Infra/road-0.48Ha Other- 0.962 Ha Up to 2020-21	Less area degradation due to less development
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	2015-16:150535 2016-17: 1030000 2017-18: 1030000 2018-19: 506519 2019-20: 505522 2020-21-507009	2015-16:NIL 2016-17: 31.70 2017-18:31537.5 2018-19:263966 2019-0:453473 2020-21-140198.39	Less production during the year 2020-21 affected due to Covid-19
3q	General remarks of inspecting officer on method of mining etc.	Production is on lower side due less demand from the lessee's captive cement plant during the year.		

4.0 Solid Waste Management-Dumping:

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Top soil generated is of meagre quantity which shall be utilized for plantation purpose, over the OB dump.	Top soil generated is of meagre quantity which is utilized for plantation purpose, over the OB dump.	Done as proposed.
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	Along the lease boundary between pillar no. 34 to 37 21 ⁰ 23'6.88" & 81 ⁰ 23'13.81" to 21 ⁰ 23'8.24" & 81 ⁰ 23'17.02"	(i) Along the lease boundary between pillar no. 34 to 37 21 ⁰ 23'6.88" & 81 ⁰ 23'13.81" to 21 ⁰ 23'8.24" & 81 ⁰ 23'17.02" (ii) area south of lease boundary between pillar no. 68 to 73 between 21 ⁰ 22'56.83" & 81 ⁰ 22'58.77" and 21 ⁰ 22'45.64" & 81 ⁰ 23'8.67" (iii) area north of lease boundary between pillar no. 29 to 32 between 21 ⁰ 23'09.75"	Violation of Rule 11(1) of MCDR, 2017 is pointed out for site deviation in respect of waste development.

			& 81°23'8.67" and 21°23'8.40" & 81°23'3.49"	
4c	Number of dumps within lease area and outside lease area	WML-Active dump-01 OML-Nil	WML-Active dump-03 OML-Nil	Violation of 11(1) of MCDR, 2017 is pointed out.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Outside UPL	Two dumps are developed within UPL	Violation of 11(1) of MCDR, 2017 is pointed out.
4e	Number of active & alive dumps	01	03	As above.
4f	Number of dead dumps	Nil	Nil	No area is matured.
4g	Number of dumps stabilised	Nil	Nil	All dumps are active.
4h	Whether Retaining wall or garland drain all along dumps are there	Drainage and parapet wall proposed	Not done as proposed.	Violation of 11(1) of MCDR, 2017 is pointed out.
4i	Length of Retaining wall or garland drain all along dump	No specific proposal	Not done.	Violation of 11(1) of MCDR, 2017 is pointed out.
4j	Number of settling ponds	Not proposed.	Not done.	
4k	Specific comments of inspecting officer	Against proposal of waste dumping on northern side along lease boundary, waste dumping have been carried out on northern and southern side. No protective measures as drainage and parapet wall have been made as proposed. Violation of 11(1) of MCDR, 2017 is pointed out.		

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	Nil	Nil	No proposal during the proposed year.
5b	Area under backfilling of mined out area	Nil	Nil	No area is matured for backfilling
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Top soil to be used for plantation over the bund along the periphery of mine lease boundary for green belt development.	Being done	Top soil is used for development of plantation.
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	No area is matured.
5e	General remarks of inspecting officer on backfilling, reclamation etc	No area is matured for backfilling. Backfilling is proposed in conceptual stage.		

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 Plantation proposal for the year (2020-21)-300 nos(WML)	Not submitted	Violation of Rule 26 (2) of MCDR, 2017 is pointed out for non submission PMCP report.
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	1) NA 2) 1.12Ha upto 2022-23 3) 300 nos 4) - 5) NA 6) -	1) Nil 2) Achieved 0.962Ha upto 2020-21 3) 356 4) 4249 nos 5) NA 6) F.Y. 2020-21: 4.56/- Lakh	Plantation carried out over the bund along the periphery of the lease boundary.
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	Not proposed. No area is matured.	Not done.	No area is matured.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Plantation of 300 saplings proposed.	Plantation 356 psaplings done.	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposal has been given in the approved document for regular monitoring of Ambient air, water quality and noise vibrations..	Being done as per proposal.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP annual report is not submitted. Violation Rule 26 of MCDR, 2017 is pointed out.		

7.0 Mineral Conservation:

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease	ROM mineral dispatch	Direct ROM mineral dispatch from mines	Run of mine ore is sized prior to

	area		pit without sorting.	its use in captive cement plant in outside lease area.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No mineral sorting done; Mechanical-ROM dispatch	No mineral sorting done; Mechanical-ROM dispatch	Same as above.
7c	Different grade of mineral sorted out at mines	NA	NA	Not required for limestone.
7d	Any beneficiation process at mines	No	No	As above.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The run of mine ore after blasting is sent outside lease area for consumption in captive cement plant. Sizing is done outside lease area prior to its use in plant.		

8.0 Environment :

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	Top soil to be used for plantation over the dump along the periphery of mining lease, non mining zone.	Being carried out as proposed.	Top soil is use for plantation
8b	Concurrent use or storage of topsoil	To be used for plantation along the boundary within non mining zone.	Being carried out as proposed.	No separate storage is envisaged. Top soil spread on waste dump for plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Overburden to be utilized for dump towards the northern part of the lease as per mine plan.	Against proposal of dumping on northern part of lease along lease boundary, dumping have been done on north western and south eastern side of the lease area.	Violation of Rule 11(1) of MCDR, 2017 is pointed out.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not envisaged at this stage.	Not done.	No area is matured for such action.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not envisaged at this stage.	Not done.	No area is matured for such action.
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	Cumulative plantation upto 31 st March 2020:- 2100 nos 2020-21-300 no.	Cumulative plantation done upto 31 st March 2020:-3893nos.	Done as proposed.

		Plantation on WML has been proposed in the mining plan for the year 2020-21	2020-21:- 356 no. Plantation has been carried out during the year 2020-21 along the lease boundary..	
8g	Survival rate	80-85%	~86%	Appears to be correct.
8h	Water sprinkling on roads to control airborne dust	Yes	Dust suppression by water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The lessee as per proposal is carrying out environment protection measures i.e. plantation, water sprinkling for dust suppression, monitoring of Air, water, noise, etc as proposed.		

9.0 Compliance of Rule 45:

S.N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – Dec 2021 A.R. submitted upto -- 2020-21	

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	Mines manager Shri. Deepak Kumar, Mining Engineer: Shri. Subramani Venkatesh, Geologist: Shri Shishir Gaur, Geologist.	Mines manager Shri. Deepak Kumar Mining Engineer: Shri. Subramani Venkatesh, Geologist: Shri Shishir Gaur, Geologist.	Notice of appointment of Geologist not submitted. Violation of Rule 46(a) of MCDR, 2017 is pointed out.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-14.801 Ha OB/Dump-2.963Ha Infra/road-0.48Ha Other- 0.962 Ha Up to 2020-21	Pit-14.801 Ha OB/Dump-2.963Ha Infra/road-0.48Ha Other- 0.962 Ha Up to 2020-21	Appears to be correct.
9d	Scrutiny of Annual return on Afforestation	WML- 300 Nos. For 2020-21	WML-356 nos. For 2020-21	Appears to be correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	No generation
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	No stock observed
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production is Rs.277.08/mt	Cost of production is Rs.277.08/mt	Appears to be correct
9i	Scrutiny of Annual return	Fixed asset under	Fixed asset under	Appears to be correct.

	on fixed assets	Capital structure (Part II A):- 35896654/-	Capital structure (Part II A):- 35896654/-	Mostly land, residential, machinery have been accounted for.
9k	Scrutiny of Annual return on mining machineries	Details of backhoe, rock drill, wheel loader, water tanker, jeep and tractors furnished.	The machinery were found in operations during the visit.	The figures furnished appears to be correct.

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

During the current inspection, following violations are pointed out:

नियम	उल्लंघन के प्रकार का ब्यौरा
11(1)	<p>Following violations are observed against proposals in approved Modifications of Mining Plan for the period from 2018-19 to 2022-23 approved letter no. Durg Chup/Kyo-1114/2017-Raipur dated 17/10/2017:</p> <p>(i) Against proposal to carry out waste dumping in a single location between boundary pillars 34 to 37, waste dumping have been carried out in additional two locations between area north of boundary pillars 68 to 73 (between 21°22'56.83" & 81°22'58.77" and 21°22'45.64" & 81°23'8.67") and area, south of boundary pillars 29 to 32 (21°23'09.75" & 81°23'8.67" and 21°23'8.40" & 81°23'3.49")</p> <p>(ii) Against proposal of parapet wall and drainage around waste dump, no work has been carried out.</p>
26 (2)	A yearly report as per the format specified by Indian Bureau of Mines, before 1st day of July every year setting forth the extent of protective and rehabilitate works carried out has not been submitted for the year 2020-21.
45(5)(c)	Quantity of mineral reserves figure of 111 is furnished incorrectly in submitted Annual Return for the year 2020-2021
46(a)	Notice of appointment of Geologist is not submitted

Date of previous Inspection by Shri. R.K Dash Senior Asst Controller of Mines on 19.01.2021, violations of Rule 45(5)(c)(i) and 55 of MCDR, 2017 were pointed out. The violations have been rectified.

Date: 02.02.2022

(Debadurllav Dash)

Senior Mining Geologist