

MCDR INSPECTION REPORT 2020-21

1.0 GENERAL

Sl .No.	Particulars	Details
1	Name of the Mine	Nandini Khundini Limestone Mine
2	Date of Inspection:	13/11/2021
3	Name of Inspecting Officer	Prasant Kumar Sahu, Asst. Mining Engineer
4	Name of official accompanying inspection	Shri Gamliel Kachhap, Mine Manager
5	Last date of Inspection & Officer	27.06.2019 & Shri S. Kartikeya, Jr. Mining Geologist
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest: NIL Non-forest: 6.46 Ha. Total Lease Area: 6.46 Ha.
7	Mine code	38MPR13041
8	IBM Registration Number under rule 45 of MCDR,1988	IBM/5683/2011
9	Name of the Lease, Address, Phone, email and fax number	Shri Hemant Kumar Sahu S/o Shri Jageshwar Sahu, Village: Chikhali, P.O. Jewara Sirsa, District: Durg (Chhattisgarh) – 491001 Phone: +91 (0) 9424100567 Email: hksgurg@gmail.com
10	Village	Nandini Khundini
11	Taluka/Mandal	Dhamdha
12	District	Durg
13	Pin code	490036
14	State	Chhattisgarh
15	Post Office	Nandini Nagar
16	Nearest Police Station	Nandini Nagar
17	Nearest Railway Station	Durg
18	Date of Grant of Mining Lease	26/11/1980 to 25/11/1990 (10 years)
19	Date of Execution	26/11/1980
20	Weekly day of rest	Sunday
21	Date of opening of Mine	26/11/1980
22	Date of First Renewal, if applicable and its period & expiry	26/11/1990 to 25/11/2000 (10 years)
23	Date of Second Renewal, if applicable and its period & expiry	26/11/2000 to 25/11/2010 (10 years) 26/11/2010 to 25/11/2020 (10 years)
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Supplementary lease deed executed for extended period up to 25/11/2030.
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Not appointed

26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Not appointed
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Gamliel Kachhap Address: Village: Chikhali, P.O. Jewara Sirsa, District: Durg (Chhattisgarh) – 491001 Phone: +91 (0) 9424100567 Email: hksgurg@gmail.com Date of appointment: 01/09/2014
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Gamliel Kachhap Qualification: B.E. (Mining) Experience: +18 years Address: Village: Chikhali, P.O. Jewara Sirsa, District: Durg (Chhattisgarh) – 491001 Phone: +91 (0) 9424100567 Email: hksgurg@gmail.com Date of appointment: 01/09/2014
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Gamliel Kachhap- Mining Engineer Shri Naveen Kumar Tamrakar- Geologist
30	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-86/NGP Nagpur dated 06/07/2001, Proposal Period: 2001-02 to 2005-06 Modified Mining Plan approved vide letter no.DRG/LST/MPLN-1084/2017-RPR Raipur dated 15/05/2017, Proposal Period: 2017-18 to 2020-21 Lapse Period: 2016-17 (1 year)
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	Scheme of Mining approved vide letter no. DRG/LST/MPLN-86/NGP Nagpur dated 17/02/2009, Proposal Period: 2006-07 to 2010-11 Scheme of Mining approved vide letter no.DRG/LST/MPLN-86/NGP Nagpur dated 31/10/2012, Proposal Period: 2011-12 to 2015-16 Review of Mining Plan approved vide letter no.DRG/LST/MPLN-1274/2020-Raipur, dated 31/10/2012, Proposal Period: 2021-22 to 2025-26
32	Mineral(s) granted in lease and approved for Mining	Limestone
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Category-A, Mechanized
35	Captive/Non-Captive	Non-Captive
36	Present EC Status	60000 Metric Tonnes per year.
38	Status of Financial Assurance	1. Rs. 19,22,700/- vide BG No. 734GT0117107001 dated 10.05.2021 valid up to 31.03.2026 2. Rs. 12,45,800/- vide BG No. 734GT01220390001 dated 08.02.2022 valid up to 31.03.2026

1.0 Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Not applicable	
1b	Exploration over lease area for Geological axis 1 or 2.	G1-6.46 ha	G1-6.46 ha	Entire lease area of 6.46 ha explored under G1 category up to 247 mRL through two vertical boreholes and quarry development.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	No proposal	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	The entire area has been explored in G1 level.	Not applicable	Entire lease area of 6.46 ha explored under G1 category
1e	Balance reserves as on 01.04.2021	Under (111): 1239713 Tonnes Under (211): 1416500 Tonnes		
1f	General remarks of inspecting officer on geology, exploration etc.	The entire lease area of 6.46 ha explored under G1 category up to 247 mRL through two vertical boreholes and quarry development.		

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)	In between local coordinates 1.S35 to N13 and W22 to W58 2.N05 TO N80 and W05 TO W160	In between local coordinates 1.S35 to N13 and W22 to W58 2.N05 TO N80 and W05 TO W160	As per proposal
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	Topsoil: NIL OB/SB: NIL Mineral/Ore: 04 nos.	Separate benches maintained in topsoil/OB and Mineral	
2c	Stripping ratio or ore to OB ratio	1:0.00	1: 0.00	No generation OB, working restricted with in ore zone
2d	Quantity of topsoil generation in m3	No Proposal	Nil	No topsoil generated during the plan period
2e	Quantity of overburden generation in m3	No Proposal	Nil	No overburden generated during the plan period
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The actual development is less in comparison to proposal for lack of market demand. Quarry development is within the proposed area.		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	01 no.	01 no.	As per proposal
3b	Quantity of ROM mineral production proposed	32475.00 Metric Tonnes.	2809.00 Metric Tonnes	Within the proposal limit and less production due to lack of market demand
3c	Recovery of salable/usable mineral from ROM production	100%	100%	No generation of OB/MR
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not mentioned in the approved document.	Not applicable.	No generation of mineral rejects
3f	Quantity of sub-grade mineral generation	No proposal	Not applicable	Nil
3g	Grade of sub-grade mineral generation	Not mentioned in the approved document.	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised crushing and screening proposed	Mechanised crushing and screening adopted	Done as proposed
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study proposed	No such study carried out	Not required for limestone mineral
3j	Provision of drilling & blasting in mineral benches	Dia: 80 mm Depth: 3.0 m Spacing: 2.5 m Burden: 2.0 m	Dia: 80 mm Depth: 3.0 m Spacing: 2.5 m Burden: 2.0 m	Done as proposed
3k	Provision of mining machineries in mineral benches	<ol style="list-style-type: none"> 1. 01 no. of DTH Drill Machine with 80 mm dia. 2. 01 no. of Jack Hammer with 32 mm dia. 3. 01 no. of excavator with 1.25 CuM bucket 4. 01 no. of Hydraulic rock breaker 5. 02 nos. of Dumpers with 10 tonnes capacity 6. 01 no. of Water Tanker with 10000 liters 	<ol style="list-style-type: none"> 1. 01 no. of DTH Drill Machine with 80 mm dia. 2. 01 no. of Jack Hammer with 32 mm dia. 3. 01 no. of excavator with 1.25 CuM bucket 4. 01 no. of Hydraulic rock breaker 5. 02 nos. of Dumpers with 10 tonnes capacity 6. 01 no. of Water Tanker with 10000 liters 	Done as proposed

		capacity 7. 01 no. of Water Pump with 5.0 HP capacity 8. 01 no. of Jeep/Pool Car	capacity 7. 01 no. of Water Pump with 5.0 HP capacity 8. 01 no. of Jeep/Pool Car	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB: 1.0 Meters Mineral/Ore: 6.0 meters	Mineral/Ore: 6.0 to 8.0 meters	The bench height and width are not maintained as per proposals and at some places the widths of the benches are from 3 to 4 meters only. Violation under Rule 11(1) is pointed out.
3m	Total area covered under excavation/pits	6.030 Ha. up to the end of plan period	5.680 Ha. up to 2020-21	As per proposal
3n	Ore to OB ratio for the pit/mine during the year	1:0.00	1: 0.0	No generation of waste
3o	Total area put in use under different heads at the end of year	Pit- 6.030 Ha. Waste/reject-0.254 Ha. Others- 0.125 Ha. (up to end of plan period)	Pit- 5.680 Ha. Waste/reject-0.0 Ha. Others- 0.125 Ha. (up to end of 2020-21)	Workings within proposed area
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	2016-17: Nil 2017-18:32475 T 2018-19: 32475 T 2019-20: 32475 T 2020-21: 32475 T	2016-17: 32249 2017-18:6573 T 2018-19: 2577 T 2019-20: 1993 T 2020-21: 2809 T	Actual production within proposed limit
3q	General remarks of inspecting officer on method of mining etc.	Mining operation is in low scale. The production is less in comparison to proposal due to lack of market demand.		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Not envisaged in the approved document	Not applicable	No top soil and OB generated during the year
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	No proposal	Not applicable	No topsoil generated
4c	Number of dumps within lease area and outside lease area	No Proposal	Not applicable	No dumps have been observed within lease area
4d	Location of dumps w.r.t.	No proposal	No dumps have been	

	ultimate pit limit (Rule 14)		observed within lease area.	
4e	Number of active & alive dumps	No Proposal	No dumps have been observed within lease area.	
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	Not proposed in the approved document.	Not applicable.	
4i	Length of Retaining wall or garland drain all along dump	Not mentioned 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	No top soil and OB generated during the year as the mining operation restricted to mineral zone only.		

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	Proposal for full extraction of mineral/ore has been given before conceptual pit limit.	Not applicable as on date.	Area is not matured for back filling
5b	Area under backfilling of mined out area	Not proposed in the approved document.	-do-	Mineral has not been completely mined out from the quarry.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	Concurrent use of topsoil has been given for plantation purpose.	No topsoil has been generated during the year	
5d	Total area fully reclaimed & rehabilitated	No proposal for reclamation and rehabilitation has been given.	Not applicable	Area is not matured for reclamation and rehabilitation.
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposal for back filling and reclamation in the plan period as the area is not matured for backfilling.		

6.0 Progressive Mine Closure Plan

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2). Details	PMCP report to be	PMCP report not submitted	Violation of Rule 26 (2) is

	should be given in the format as given in Annexure-20	submitted		pointed out
6 b	Management of worked/mined out benches	No proposal	Nil	No area is mined out
	Area available for rehabilitation (Ha)	No proposal	Nil	
	Afforestation done (ha)	No proposal	Nil	
	No. of saplings planted during the year	No proposal	Nil	
	Cumulative no. of plants	No proposal	Nil	
	Any other specific method of rehabilitation	No proposal	Nil	
	Cost incurred on watch & care during the year	No proposal	Nil	
6c	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling (L*B*D) Void filled by waste/tailings Afforestation on the backfilling Rehabilitation by making water reservoir Any other specific means	No proposal	Nil	No area is matured for backfilling
6 d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	No proposal	Nil	No waste dump within the lease area
6e	Compliance of Environment monitoring (core zone & buffer zone)	Proposed environmental monitoring in core and buffer zone	Environmental monitoring is carried out	Done as proposed
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	PMCP report for this financial year was not submitted. Violation of Rule 26 (2) is pointed out.		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Mechanised crushed and sorted ore/mineral will be dispatched.	Being done as per proposal.	Done as proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not envisaged in the approved document.	Not applicable	Not required for Limestone
7c	Different grade of mineral sorted out at mines	No proposal	Not applicable.	Not required
7d	Any beneficiation process at mines	Mechanised Crushing and Screening	Being done as per proposal.	Done as proposed
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The excavated run of mine is being fed to the crushing and screening plant for size reduction i.e. 40 mm, 20 mm, 12 mm, 6 mm and -6 mm.		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	No proposal	Not applicable	The entire development has been done within the mineral zone.
8b	Concurrent use or storage of topsoil	No proposal	Not applicable	Nil generation of topsoil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	No proposal	Not applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not applicable	No area is matured for reclamation.
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	No proposal	Within lease area-150	As per AR
8g	Survival rate	No proposal	40%	As per AR
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling through water tanker.	Water tanker deployed to control airborne dust	Done as proposed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The entire development is proposed within the mineral zone and the mine area is not matured for reclamation and rehabilitation.		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto – January 2022 A.R. submitted upto- F.Y. 2020-21	NIL

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 Engineer: Shri G. Kachhap Geologist: Shri Naveen Kumar Tamrakar Manager: Shri G.	Geologist: Intimation of appointment of Geologist not submitted	Violation under Rule 46 of MCDR, 2017 is pointed out

		Kachhap		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 12.144 Ha. OB/Waste: NIL Others: 0.199 Ha.	Pit- 5.680 Ha. Waste/reject-0.0 Ha. Others- 0.125 Ha.	Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out
9d	Scrutiny of Annual return on afforestation	Within lease area- 150	Survival rate is less than 10%	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No mineral reject has been Generated during F.Y. 2020-21	No rejects found in the mine	Not envisaged in approved document
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening-21175 T Production-2809 T Closing-17971 T	Stock is reportedly temporarily stacked at crushing and screening plant.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale Value: Rs. 3368190.00 Ex. Mine Price: Rs. 533.00 Per Metric Tonne Cost of Production: Rs. 400.00 Per Metric Tonne	Appears to be correct	
9i	Scrutiny of Annual return on fixed assets	Fixed Asset: Rs. 50000.00	As per estimated market value	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	01 no. of Drill 80 mm dia. 01 no. of Rock Drill with 32 mm dia. 01 no. of excavator with 1.25 CuM bucket 02 nos. of Dumpers with 10 tonnes capacity 01 no. of Water Tanker with 10000 liters capacity 01 no. of Water Pump with 2500 L/PM 01 no. of Jeep/Tractor with 93.7 HP	Observed in mine	Used as per the proposal

10- (a) Details of violations observed during current inspection:- 11(1), 26(2), 45(5)(b)(i), 45(5)(c)(i), 35(4) and 46.

(b) Compliance position of earlier violation pointed out: - During the last inspection on 27/06/2019, violation of Rule 11(1), 26 (2), 33,40,41,42, 45(5)(7) and 55 of MCDR, 2017 were pointed out. The violations have been rectified.

Date: 21/03/2022

Name: Prasant Kumar Sahu,
Designation: Assistant Mining Engineer