

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/LST-DOL/SNG/MCDR-2/BBS

Mine code : 38ORI13003

- (i) Name of the Inspecting : **K013**) **KEWAL KRISHAN**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Mr. P.K.Patra, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 26/06/2021
- (v) Prev.inspection date : 31/01/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BIRMITRAPUR**
- (b) **Registration NO.** : **IBM/4649/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : SUNDARGARH
- Village : BIRMITRAPUR
- Taluka : BIRMITRAPUR
- Post office : BIRMITRAPUR
- Pin Code : 770033
- FAX No. : 0661-2610270
- E-mail : bslcoltd.brmp@gmail.com
- Phone : 0661-2610270
- (f) Police Station : Birmitrapur
- (g) First opening date : 01/01/1922
- (h) Weekly day of rest : SUN
2. Address for : BIRAMITRAPUR LIMESTONE & DOLOMITE MINE
correspondance VILL-RAIPUR, BANUMUNDA
PO-BIRAMITRAPUR
3. (a) Lease Number : ORI0011
- (b) Lease area : 793.97
- (c) Period of lease :
- (d) Date of Expiry : 31/03/2020
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : BISRA STONE LIME CO. LTD
 BIRAMITRAPUR SUNDERGARH
 DISTRICT ORISSA SUNDARGARH
 ORISSA
 Phone:
 FAX :

Owner : Bisra Stone & lime company ltd
 Birmitrapur SUNDARGARH
 ORISSA
 Phone: 0661-610202.
 FAX :

Agent : C.S. Tripathy
 At+ Post-Birmitrapur Dist-
 Sundargarh SUNDARGARH
 ORISSA
 Phone: 0661-2610069
 FAX : 0661-261270

Mining Engineer

Name : C.R. Nayak, Full Time
 Qualification : BE(Mining)
 Appointment/ : 25/03/2002
 Termination date

Geologist

Name : Dr. A.K. Mohapatra, Full Time
 Qualification : M.sc(Geo.)
 Appointment/ : 30/12/1992
 Termination date

Manager

Name : A.K. BARIK
 Qualification : AMIE(MINING)
 Appointment/ : 14/09/1992
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	06/07/2005
		Mining Scheme rule 12 MCDR1988	12/10/2009
		Modif. approved Mining Scheme	14/09/2010
		Mining Scheme rule 12 MCDR1988	27/08/2014
		FMCP under 23C(1)	05/01/2018
		MP modif under 17(3) MCR 2016	05/04/2018
		MP review under 17(1) MCR 2016	21/02/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In the year 179 nos of boreholes are proposed to drill	Drilled during the year 01 no	issued violation under rule11(1) of MCDR 2017
1b	Exploration over lease area for geological axis 1 or 2	A total 179 numbers of vertical coring type boreholes at 200m x 200m grid pattern under G2 level.	01 no of borehole drilled during the year	A total 179 numbers of vertical coring type boreholes have been proposed to be put at 200m x 200m grid pattern in the remaining area up to the end of ore occurrence to know the depth ward continuity in a conclusive manner during the plan period. Proposed Borehole under exploration up to G2 level at 200m x 200m grid pattern.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	5.37Cr.	0.56 Lakhs Agency - Geo Exploration India, Bhubaneswar	Agency - Geo Exploration India, Bhubaneswar
1d	Balance area to be explored to bring Geological axis in 1 or 2	261.932 ha	about 261.932 area is yet to be explored	as per approved document area under G1- 415.997 Ha. G2- 68.572 Ha. G3- 48.542 Ha. Total-533.111 Ha.

1e	Balance reserve as on 01/04/20	as per last document approved on 21/02/2020 the reserve/resou rces are 111 135.305 million tonsT 121 & 122 67.185 million tonsT 333 57.865 million tons Dolomite 111 48.850 million tons 121& 122 51,971 million tons 333 65062 million tons	as on 1/4/2021 111 135.305 million tonsT 121 & 122 67.185 million tonsT 333 57.865 million tons Dolomite 111 47.519 million tons 121& 122 51,971 million tons 333 65062 million tons
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1f	General remarks of inspecting officers on geology, exploration etc	The Limestone & Dolomite deposit of the area belongs to Birmitrapur state of Gangpur series. The general strike East to west dipping towards North at an average angle of 60°. The total strike length 7.5 Km and average width of limestone & dolomite are 800 meter and 500 meter respectively.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Lst Quarry Gurpahar quarry khajurgadha quarry Duarsini quarry Dolomite Quarry Patpahar quarry Duarsini quarry Rail cutting quarry Main quarry	Dolomite Quarry Duarsini quarry Rail cutting quarry Main Dolo quarry	Limestone Quarries were not started production due to no demand. similarly Pataphar dolomite quarry was not started production due to Less demand.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	seperate benches in top soil ,overbuden and mineral	seperate benches in top soil ,overbuden and mineral	
2c	Stripping ratio or ore to OB ratio	1:0.10 in Dolomite 1:0.10 in Limestone	1:0.10 in Dolomite	no production of Limestone
2d	Quantity of topsoil generation in m3	170400	23398	issued vilation under rule 11(1) of MCDR 2017
2e	Quantity of overburden generation in m3	no such proposal	35080	For lateral development of Main dolo and Rail Cutting dolomite quarry OB.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	The development was proposed in three nos of quarries for Limstone and four nos of quarries in case of Dolomite. During the year 2020-21 only dolomite has been produced from the quarries . No production of Limestone has been made during the year because of no demand.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Dolomite 1.Patapahar Dolo Quarry 2.Duarsini Dolo Quarry 3.Main Dolo Quarry 4.Rail Cutting Dolo Quarry Limestone 1.Gurpahar Limestone Quarry 2.Duarsini Limestone Quarry 3.Khajurgadah Limestone Qry.	Dolomite: 1.Duarsini Dolo Quarry 2.Main Dolo Quarry 3. Cutting Dolo Quarry	Pataphar Dolo quarry of Dolomite has not been started for production due to Less demand and Limestone Quarries also not started production due to no demand.
3b	Quantity of ROM mineral production proposed	Limestone- 28,29,835 MT Dolomite- 24,29,440 MT	Limestone - Nil Dolomite - 11,22,195 MT	issued violation under rule 11(1) of MCDR 2017

3c	Recovery of sailable/usable mineral from ROM production	90%	as per proposal	
3d	Quantity of mineral reject generation	Limestone 282983 MT Dolomite 242944MT	nil	No limestone reject has been produced because of no mining in limestone quarry. However mining has been carried for dolomite only during the period. High grade dolomite has been blended with low grade at the site, hence no reject has been generated separately.
3e	Grade of mineral rejects generation and threshold value declared.	In case of limestone 35% CaO to 42 % In case of Dolomite 15% MgO to 19% .	In case of limestone 35% CaO to 42 % In case of Dolomite 15% MgO to 19% .	The said document has been approved before the revised threshold values of minerals. Party has been advised to consider the revised threshold limit of mineral as notified on 25th april 2018.
3f	Quantity of sub grade mineral generation.	Limestone - 2,82,983 MT Dolomite - 2,42,944 MT	Limestone - Nil Dolomite - 1,12,220 MT	No separate sub-grade stock is maintained, the sub-grade ore generated in the pit is directly blended with salable ore.
3g	Grade of sub grade mineral generation	In case of limestone 35% CaO to 42 % In case of Dolomite 15% MgO to 19% .	MgO - 17-18% SiO ₂ - 5-6.5%	No separate sub-grade stock is maintained, the sub-grade (dolomite) ore generated in the pit is directly blended with salable ore.

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	no such proposal	no such proposal	
3j	Provision of drilling and blasting in mineral benches	Deployment of DTH and Control Blasting	Deployment of DTH and Control Blasting	
3k	Provision of mining machineries in mineral benches	BLAST HOST DRILL AIR COMPRESSOR FRONT END LOADER SHOVEL (HYDRAULIC) TIPPER CRUSHER EXPLOSIVE VAN	BLAST HOST DRILL AIR COMPRESSOR FRONT END LOADER SHOVEL (HYDRAULIC) TIPPER CRUSHER EXPLOSIVE VAN	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height and width of the benches will be maintained at 8m and 10m respectively	Height and width of the benches will be maintained at 8m and 10m	Height and width of the benches will be maintained at 8m and 10m
3m	Total area covered under excavation/pits	174.932 Ha.(5 years plan)	152.473 Ha.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.10	1:0.10	

30 Total area put in use under different heads at the end of year as per approved document for the year 2020-21 to 2024-25) total area put to use at the end of plan peroid undser working 174.9321ha .Storage of top soil - 2.940Ha. Dump Area - 41.5505Ha. Mineral Storage- 5.000Ha. .Infrastucture - 14.120Ha. Road - 10.080 Ha. Rail Line - 6.640 Ha. Mineral separation plant - 7.500 Ha. Township - 17.600Ha. Plantation - 65.374 Ha. area under Workings 152.473 ha used for waste disposal 33.850 ha Occupied by plant, buildings, residential, welfare buildings & roads 54.470 ha Other Purpose 1.000 ha, as reported by lessee

3p	Production of ROM mineral during the last five year period as applicable	2015-16	2015-16
		Limestone - 2715200 MT	Limestone - 5636 MT
		Dolomite - 2417792 MT	Dolomite - 476391 MT
		2016-17	2016-17
		Limestone - 2743600 MT	Limestone - 243 MT
		Dolomite - 2425696 MT	Dolomite - 476241 MT
		2017-18	2017-18
		Limestone - 2830800 MT	Limestone - Nil
		Dolomite - 2430272 MT	Dolomite - 567122 MT
		2018-19	2018-19
		Limestone - 2830000 MT	Limestone - Nil
		Dolomite - 2429960 MT	Dolomite - 534400 MT
		2019-20	2019-20
		Limestone - 2830000 MT	Limestone - 17220 MT
		Dolomite - 2429960 MT	Dolomite - 565909 MT
			2020-21
			Limestone - nil
	Dolomite 1122195.35 MT		

3q	General remarks of inspecting officers on method of mining etc.	Mining is being carried out by opencast mechanised methods. Only dolomite production has been made by the party during the yeay 2020-21.	Mining is being carried out by opencast mechanised methods. Only dolomite production has been made by the party during the yeay 2020-21.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	seperate dumping of top soil, OB, oberbuden and mineral reject /subgrade	seperate dumping of top soil, OB, oberbuden and mineral reject /subgrade are being done	
4b	Location of topsoil, OB and mineral reject dumps	BSD-4, BSD-5, BSD-7 & BSD-16	BSD-7	issued violation under rule 11(1) of MCDR 2017

4c	Number of dumps within lease area and outside of lease area	all the dumps are proposed within the lease area only - 17 nos	all the dumps are proposed within the lease area only - 17 nos	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	dumps are proposed outside UPL	Outside UPL	
4e	Number of active and alive dumps.	04 Nos. of BSD active i.e. BSD-4, BSD-5, BSD-7 & BSD-16	one , BSD-7	No dumping has been carried out on dump no BSD 4, BSD-5 and BSD -16 . issued violation under rule 11(1) of MCDR 2017
4f	Number of dead dumps.	no such proposal	earlier existing dead dumps,13 Nos. i.e. BSD-1,2,3,6,8,9,10,11,12,13, 14, 15 & 17	earlier existing dead dumps,13 Nos. are rehabilitated by natural growth of shrubs & bushes
4g	Number of dumps established.	no such proposal	13 Nos. of BSD dead i.e. BSD-1,2,3,6,8,9,10,11,12,13, 14, 15 & 17	earlier existing dead dumps,13 Nos. are rehabilitated by natural growth of shrubs & bushes
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall and garland drain are proposed along the waste dumps	retaining wall and garland drains are constructed around the waste dumps but the same are constructed less as compare to proposal.	Issued violation under rule 11(1) of MCDR 2017
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall of 3244 m and garland drain of 4782m are proposed along the waste dumps	Only 975m of reating wall and garland drain are constructed	issued violation under rule 11(1) of MCDR 2017
4j	Number of settling ponds	03 Nos. of settling pond are proposed	03 Nos. of settling pond are proposed	

4k	Specific comments of inspecting officer on waste dump management	The dump management has been done in BSD dumps and the dead dumps are stabilized and rehabilitated by natural growth of shrubs and bushes	The dump management has been done in BSD dumps and the dead dumps are stabilized and rehabilitated by natural growth of shrubs and bushes
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Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	no such proposal	no such proposal	
5b	Area under backfilling of mined out area	no such proposal	no such proposal	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	no such proposal	no such proposal	
5d	Total area fully reclaimed and rehabilitated	no such proposal	no such proposal	
5e	General remarks of inspecting officers on backfilling and reclamation etc.		no minedout area /pit is matured for backfilling as the minewral has not been exhausted , hence no backfilling and reclamation etc are proposed.	no minedout area /pit is matured for backfilling as the minewral has not been exhausted , hence no backfilling and reclamation etc are proposed.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	submit before Ist july	submitted	Submitted on dated 09.06.2021
6b	Area available for rehabilitation (ha) .	no such proposal	no such proposal	
6c	afforestation done (ha).	1.0 ha	as per proposal	
6d	No. of saplings planted during the year	1500 nos	1500 approx	
6e	Cumulative no .of plants		3,45,000 Nos. approx	3,45,000 Nos. approx
6f	Any other method of rehabilitation	no such proposal	no such proposal	
6g	Cost incurred on watch and care during the year	not specified	Done departmentally	Done departmentally
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	no such proposal	no such proposal	no such proposal
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no such proposal	no such proposal	no such proposal
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	no such proposal	no such proposal	no such proposal

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	no such proposal	no such proposal	no such proposal
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	no such proposal	no such proposal	no such proposal
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	no such proposal	no such proposal	no such proposal
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	no such proposal	no such proposal	no such proposal
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	no such proposal	no such proposal	no such proposal
6p	Compliance of environmental monitoring (core zone and buffer zone)	periodical monitoring of environmental parameters are proposed	periodical monitoring of environmental parameters are being done	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		During the present plan period there is no proposal for reclamation and rehabilitation by backfilling.	During the present plan period there is no proposal for reclamation and rehabilitation by backfilling.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade wise sorting envisaged	grade wise sorting is being practiced	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical	mechanical	mechanical
7c	Different grade of mineral sorted out at mines.	Limestone CaO> 42% SiO2 - <7% Dolomite MgO>19% SiO2 <4%	Dolomite MgO>19% SiO2<4%	production of Limestone has not been done during the year However party is mining Dolomite only during the year .
7d	Any beneficiation process at mines .	no such proposal	no such proposal	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Party has not mined limestone during the year 2020-21. During the said peroid dolomite mining has been carriedout . The blending of dolomite and its sub grade for maintaining the quality of the ore is done mechanically in the pit itself .	Party has not mined limestone during the year 2020-21. During the said peroid dolomite mining has been carriedout only. The blending of dolomite and its sub grade for maintaining the quality of the ore is done mechanically in the pit itself .

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	272640 cum of top soil removal for resuse/spreadi ng	23398 cum top soil is generated	issued violation under rule 11(1) of MCDR 2017

8b	Concurrent use or storage of topsoil	it is proposed stacked and utilised for to be stack in afforestation the lease area and will be utilized for afforestation purposes	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	provision of dumps for overburden /waste rock , rejects is envisaged	provision of dumps for overburden /waste rock , rejects is envisaged
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	no such proposal	no such proposal
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	no such proposal	no such proposal
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 nos of sapling are propoed during the year 2020-21	carried out as per proposal approximately
8g	Survival rate	90%	80% approximately

8h	Water sprinkling on roads to control airborne dust	Water sprinkling on the dust prone areas such as haul roads, loading & unloading sites and other possible dust generation areas.	Water sprinkling on the dust prone areas such as haul roads, loading & unloading sites and other possible dust generation areas.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around the mine is good because of natural plantation and plantation carried out by the lessee and also by regular sprinkling of water on mines road to control the dust.	Aesthetic beauty in and around the mine is good because of natural plantation and plantation carried out by the lessee and also by regular sprinkling of water on mines road to control the dust.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	as per MCDR 2017, the monthly return are to be submitted before 10th day of every month in respect of the proceeding month and AR shall be submitted before the 1st day of July each year for the proceeding financial year	submitted	In the monthly return submitted for the month of May 2021 ,the ex mine price in case of 1st ore is not furnished correctly. issued violation under rule 45(7) of MCDR 2017.

- 9b Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager
 The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021.
 The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
- 9c Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.
 The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021.
 The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
- 9d Scrutiny of Annual return on afforestation
 The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021.
 The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise
- 9e Scrutiny of Annual return on mineral reject generation (Grade and quantity)
 The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021.
 The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.

- 9f Scrutiny of Annual return on ROM stock and/or graded ore The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021. The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
- 9g Scrutiny of Annual return on sale value, Ex. Mine price and production cost The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021. The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
- 9h Scrutiny of Annual return on fixed assets The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021. The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
- 9k Scrutiny of Annual return on mining machinerias The annual return for the year 2020-21 was not due for submission as on date of inspection, which has to be submitted on or before Ist july of 2021. The scrutiny of annual return for the year 2020-21 during the inspection doesnot arise.
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Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	20/07/2021			
MCDR17	Rule 45(7)(a)	20/07/2021			

Date :

(KEWAL KRISHAN)

Indian Bureau of Mines