

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR INSPECTION REPORT
Bhubaneshwar Regional Office

Mine file No: Mine code: 38ORI13003

Name of the Inspecting Officer and ID No.: Jitendriya Pradhan

Designation: Assistant Mining Engineer, IBM

(iii)Accompanying mine Official with Designation: Mr. S.N.Mohapatra, Mines Manager; Mr.C.R.Nayak, Mining Engineer; Mr.S.K.Behera, Surveyor.

(iv)Date of Inspection: 15.03.2024

(v)Previous Inspection Date: 11.02.2023

PART-I : GENERAL INFORMATION

S. N.	Particulars	Details	
1	a	Mine Name	Biramitrapur Limestone and Dolomite Mine
	b	Registration Number	IBM/4649/2011
	c	Category	FM-A
	d	Type of Working	Opencast
	e	Postal Address	The Bisra Stone Lime Company Limited
		State	Odisha
		District	Sundargarh
		Village	Birmitrapur
		Taluka	Birmitrapur
		Post Office	Birmitrapur
		Pin Code	770033
		Fax Number	NA
		Email	Email _bscoltd.brmp1@gmail.com
Phone		9437083925	
f	Police Station	Biramitrapur	
g	First Opening Date	10.10.1910	
h	Weekly day of rest	Sunday	
2	Address for Correspondence	The Bisra Stone Lime Company Limited AT/PO- Biramitrapur, Dist- Sundargarh -770033	
3	a	Lease Number	Lease registration No. 1732000587 dated 30.06.2020
	b	Lease Area	793.043 Ha.
	c	Period of Lease	20 Years
	d	Date of Expiry	31.03.2040
4	Mineral Worked	Limestone & Dolomite	
5	Name and Address of the:		
	Lessee	The Bisra Stone Lime Company Limited AT/PO- Biramitrapur, Dist- Sundargarh -770033	
	Owner	Mr.D.K.Mohanty, Managing Director RINL,Vishakhapatnam, Phone No: 0674-2430237 Email - dcdkm@vizagsteel.com,	

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

	Agent	Mr.S.K.Patel B.S.L.Co.Ltd. At/Po- Biramitrapur, Sundargarh Email – sanjay_patel352@yahoo.com
<u>Mining Engineer</u>		
	Name	Mr.C.R.Nayak, B.S.L.Co.Ltd. At/Po- Biramitrapur, Sundargarh Mobile No. 8455951562 Email – crnayak1965@gmail.com
	Qualification	Degree in Mining, FMCC
Appointment/: Termination date		Date of appointment – 10.01.2010
<u>Geologist</u>		
	Name	Mr.V.Dungdung B.S.L.Co.Ltd. At/Po- Birmitrapur, Sundargarh
	Qualification	M.Sc. (Geology)
Appointment/: Termination date		Date of appointment: 30.12.1992
<u>Manager</u>		
	Name	Mr.S.N.Mohapatra B.S.L.Co.Ltd. At/Po- Birmitrapur, Sundargarh Mobile No.-9437502625 Email – sachidanandam7@gmail.com
	Qualification	Diploma in Mining, FMCC
Appointment/: Termination date		Date of Appointment: 01.03.2024
6	Date of Approval of Mining Plan/Scheme of Mining	RMP/A/42-ORI/BHU/2019-20/1365 dated 21.02.2020

Exploration:

Sl.N	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	178	Nil	M/s Geo-Exploration India Pvt. Ltd. was awarded the job of exploration work but the agency failed to complete the job. For completion of the exploration work tendering process is going on. Violation issued.
1b	Exploration over lease area for geological axis 1 or 2	(Lease Area- 793.043 Ha) Unexplored Area - 259.932 Ha.	G1- 415.997 Ha. G2- 68.572 Ha. <u>G3- 48.542 Ha.</u> Total-533.111 Ha.	Violation issued.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Rs 5.34 Cr.	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G2 – 310.474	Nil	
1e	Balance reserve as on	As on 27/11/2019 (As per Mining Plan) Limestone UNFC Code 111-135.322 121 & 122 – 67.185 333- 57.865 Total- 260.372 Dolomite 111- 48.851 121 & 122 – 51.971 333- 65.062 Total- 165.884	As on 01/04/2023 Limestone UNFC Code 111-135.185 121 & 122 – 67.185 333- 57.865 Total- 260.235 Dolomite 111- 45.295 121 & 122 – 51.971 333- 65.062 Total- 162.328	
1f	General remarks of inspecting officers on geology, exploration etc			Violation issued for nil Exploration.

Development:

Sl.N	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Dolomite Patapahar Dolo Quarry Duarsini Dolo Quarry Main Dolo Quarry 4. Rail Cutting Dolo Quarry Limestone: 1.Gurpahar Limestone Quarry	Within the Proposal	Pataphar Dolo quarry & Rail Cutting Dolo Quarries were not started production due to less demand and in Limestone only Gurpahar Limestone Quarry was operated and other Quarries were not started production due to less demand.

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

		2.Duarsini Limestone Quarry 3.Khajurgadah Limestone Qry.		
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Dolomite Patapahar Dolo Quarry Mineral Benches - 4 Duarsini Dolo Quarry Mineral Benches - 4 Main Dolo Quarry Mineral Benches -5 Rail Cutting Dolo Quarry Mineral Benches - 4 Limestone 1.Gurpahar Limestone Quarry Mineral Benches - 5 2.Duarsini Limestone Quarry Mineral Benches - 4 3. Khajurgadah Limestone Qry. Mineral Benches - 2	Dolomite 1.Main Dolo Quarry Mineral Benches -6 Limestone 1.Gurpahar Limestone Quarry Mineral Benches - 6	
2c	Stripping ratio or ore to OB ratio	1:0.10 in Dolomite 1:0.10 in Limestone	Within the proposal	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	Nil	27,635 Cum	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			For lateral development of Main Dolo OB was removed and kept in the earmarked active dump.

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

1/30082/2024 Exploitation:

Sl.N	Item	Proposals	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.Main Dolo Quarry Limestone: 1.Gurpahar Limestone Quarry	Pataphar Dolo quarry & Rail Cutting Dolo Quarries were not started production due to less demand and in Limestone only Gurpahar Limestone Quarry was operated and other Quarries were not started production due to less demand.
3b	Quantity of ROM mineral production proposed	Limestone- 28,29,570 MT Dolomite- 24,29,960 MT Total- 52,59,530 MT	Limestone- 52,760.160 MT Dolomite- 10,48,664.870 MT Total- 11,01,425.03 MT	100% Saleable
3c	Recovery of saleable/usable mineral from ROM production	Limestone – 25,46,613 MT Dolomite – 21,86,964 MT Total – 47,33,577 MT (90%)	Limestone- 52,760.160 MT Dolomite- 10,48,664.870 MT Total- 11,01,425.03 MT	100% Saleable
3d	Quantity of mineral reject generation	Limestone – 2,82,957 MT Dolomite – 2,42,996 MT Total – 5,25,953MT (10%)	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	Dolomite SiO2 more than 6% MgO less than 15%	NIL	
3f	Quantity of sub grade mineral generation.	Nil	Nil	Directly blended in the Pit
3g	Grade of sub grade mineral generation		NIL	
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	No	
3j	Provision of drilling and blasting in	Deployment of DTH and Control Blasting	Deployment of DTH and Control Blasting	

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

	mineral benches			
3k	Provision of mining machineries in mineral benches	Mining machineries have been deployed as per fully mechanized mine & as per provision mentioned in mining plan		
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Mineral benches will be 8M width and the OB will be dumped in the active dumps (BSD-4, BSD-5, BSD-7 & BSD-16) the average slope of the trace will be 28°	27,635 Cum OB has been dumped in active BSD No. 7 & 16	
3m	Total area covered under excavation/pits	174.932 Ha.(5 years plan)	153.150 Ha.	
3n	Ore to OB ratio for the pit/mine during the year	1:0.10 in Dolomite 1:0.10 in Limestone	Within the proposal	
3o	Total area put in use under different heads at the end of year	(5 Years plan from 2020-21 to 2024-25) 1. Storage of top soil – 2.940Ha. 2. Dump Area - 41.5505Ha. 3. Mineral Storage- 5.000Ha. 4. Infrastructure – 14.120Ha. 5. Road – 10.080 Ha. 6. Rail Line – 6.640 Ha. 7. Mineral separation plant – 7.500 Ha. 8. Township – 17.600Ha. 9. Plantation – 65.374 Ha.	Within the proposal	
3p	Production of ROM mineral during the last five year period as applicable	<u>2018-19</u> Limestone – 2830000 MT Dolomite – 2429960 MT <u>2019-20</u> Limestone – 2830000 MT Dolomite - 2429960 MT <u>2020-21</u> Limestone – 2830000 MT Dolomite - 2429960 MT <u>2021-22</u> Limestone – 2830000 MT Dolomite - 2429960 MT <u>2022-23</u> Limestone- 28,29,570 MT Dolomite- 24,29,960	<u>2018-19</u> Limestone – Nil Dolomite – 534400 MT <u>2019-20</u> Limestone – 17220 MT Dolomite – 565909 MT <u>2020-21</u> Limestone – Nil Dolomite – 1,122,195.35 MT <u>2021-22</u> Limestone – 66,694.65 MT Dolomite – 1,175,558.59 MT <u>2022-23</u> Limestone- 52,760.160 MT Dolomite- 10,48,664.870 MT	

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

1/30082/2024

3q	General remarks of inspecting officers on method of mining etc.			Mechanized open cast mining is done.
----	---	--	--	--------------------------------------

Solid Waste Management - Dumping:

Sl.N	Item	Proposals (2022-23)	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Nil	27,635 Cum (OB)	
4b	Location of topsoil, OB and mineral reject dumps	BSD-4, BSD-5, BSD-7 & BSD-16	BSD-7 & BSD-16	
4c	Number of dumps within lease area and outside of lease area	17 BSD within lease hold area	BSD-7 & BSD-16	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	BSD -4 (Near Patpahar Limestone quarry) 267434E to 267785E 2480330N to 2480671N BSD -5 (Near Gulpahar Limestone quarry) 266266E to 266801E 2480000N to 2480228N BSD -7 (Near Duarsini Limestone quarry) 264356E to 264599E 2480537N to 2480763N BSD -16 (Near Kansbahal Limestone quarry) 262123E to 262494E 2480048N to 2480339N	Within the proposal	
4e	Number of active and alive dumps.	04 Nos. of BSD active i.e. BSD-4, BSD-5, BSD-7 & BSD-16	BSD-7 & BSD-16	
4f	Number of dead dumps	13 Nos. of BSD dead i.e. BSD-1,2,3,6,8,9,10,11,12,13,14, 15 & 17	13 Nos. of BSD dead i.e. BSD-1,2,3,6,8,9,10,11,12,13,14, 15 & 17	
4g	Number of dumps established.	Nil	Nil	Already in existing
4h	Whether Retaining wall or garland drains all along dumps are there.	04 Nos. of BSD i.e. BSD-4, BSD-5, BSD-7 & BSD-16	Retaining wall and garland drain at BSD-4 Garland drain at BSD-7	Maintained
4i	Length of Retaining wall or garland drain all along dumps	BSD-4 Retaining wall – 470M Garland drain – 1741M BSD-5 Retaining wall – 1050M Garland drain – 616M BSD-7 Retaining wall – 820M	BSD-4 Retaining wall – 470M Garland drain – 500M BSD-7 Retaining wall – 505M Garland drain – 1630M	Maintained

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

		Garland drain – 1376M BSD-16 Retaining wall – 904M Garland drain – 1049M		
4j	Number of settling ponds	Maintenance	01 Nos. of settling pond in BSD –7 and maintenance of other settling pond.	
4k	Specific comments of inspecting officer on waste dump management			The dump management has been done in Active BSD and the dead dumps are stabilized and rehabilitated by natural growth of shrubs and bushes

Solid Waste Management - Backfilling:

Sl.N	Item	Proposals (2021-22)	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Nil	Nil	
5b	Area under backfilling of mined out area	Nil	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Nil	Nil	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Ore bodies are continuing in the depth, Hence no back filling has been done so far

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024 Progressive Mine Clousre Plan:

Sl.N	Item	Proposals (2022-23)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted on dated 31/05/2023. the details format enclosed	
6b	Area available for rehabilitation (ha).	Nil	Nil	
6c	afforestation done (ha).	1.000	1.000	
6d	No. of saplings planted during the year	1500	1500	
6e	Cumulative no .of plants	7500	3,48,000	
6f	Any other method of rehabilitation	No	No	
6g	Cost incurred on watch and care during the year	Rs10,000/-	Rs 2,01,030/-	Plantation through out-sourcing which includes watch & care
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No	No	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No	No	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No	No	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No	No	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No	No	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No	No	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No	No	
6o	Compliance of	No	No	

I/30082/2024

	rehabilitation of waste land within lease (iii)Method of rehabilitation			
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	
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. The same will be carried out at the end of the life of the mine when the mine reaches its ultimate pit limit.

Mineral Conservation:

Sl.N	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Limestone CaO> 42% SiO ₂ – <7% Dolomite MgO>19% SiO ₂ <4%	Limestone CaO> 42% SiO ₂ – <7% Dolomite MgO>19% SiO ₂ <4%	Sub-grade ore is blending in the pit and 100% ROM is saleable
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines.	Limestone CaO> 42% SiO ₂ – <7% Dolomite MgO>19% SiO ₂ <4%	Limestone CaO- 36-42% SiO ₂ – <12% Dolomite MgO> 17 to 19% SiO ₂ <4 to 5.00%	Blending is done itself at the mine pit.
7d	Any beneficiation process at mines	Available of crusher plant for making sizing as per the requirement of buyers	Available of crusher plant for making sizing as per the requirement of buyers	Different sizes are produced in the crusher plants
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Systematic blending ore and sub grade for maintaining the quality of the ore is done mechanically in the pit itself

Environment:

Sl.N	Item	Proposals (2021-22)	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	No generation

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

8b	Concurrent use or storage of topsoil	BSD-4,5,7 &16	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	BSD-4,5,7 &16	BSD-7 &16	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	BSD-4,5,7 &16	BSD-7 &16	Stacked
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No	No	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1500 Nos.	348,000 Nos.	Within lease hold area
8g	Survival rate	80%	80%	
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.	Done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation inside the lease hold area.

Compliance of Rule 45:

Sl.N	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	To be submitted in due time	Submitted timely	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	C.R. Nayak, Mining Engineer V.Dungdung, Geologist P.K Patra, Manager	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc	As on 27/11/2019 (As per Mining Plan) Excavation Area- 151.473 Ha. Dump Area – 33.850 Ha. Reclaimed area - Nil Others (Infrastructure, Residential, Road etc) – 54.470 Ha.	As 01/04/2023 Excavation Area- 153.150 Ha. Dump Area – 32.010 Ha. Reclaimed area - Nil Others (Infrastructure, Residential, Road etc) – 55.970 Ha.	
9d	Scrutiny of Annual return on afforestation	1500	1500	Main Dolo Area
9e	Scrutiny of Annual	Limestone- 282,970		

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

	return on mineral reject generation (Grade and quantity)	MT Dolomite – 242,990 MT	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	Processed ore
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		BF Grade Limestone – Rs 546/- BF Grade Dolomite – Rs 797/-	
9h	Scrutiny of Annual return on fixed assets		Land, Industrial Building, Residential building, Plants, Machineries, preproduction exploration, development etc – Rs 5,38,71,937	
9i	Scrutiny of Annual return on mining machineries	Air compressor, Blast hole drill, crushers, dumpers, Explosive van, Front End loader, Shovel (Hydraulic) etc are used for mining.		

Details of violations observed during current inspection.

Rule No.	Proposed as per Mining Plan/ Rule Position	Violation
11(1)	(i) As per the Review of Mining Plan approved vide letter No. RMP/A/42-ORI/BHU/2019-20, dated 21.02.2020, it was proposed to drill 178 nos. of exploratory bore holes in the year 2022-23. (ii) The Approved production quantity of ROM Limestone- 28,29,570 MT Dolomite- 24,29,960 MT Total- 52,59,530 MT. (iii) Height of the bench = 8 mt	(i) During inspection it was observed that no bore hole has been drilled during the year 2022-23. (ii) Actual production of ROM during the year 2022-23 is Limestone- 52,760.160 MT Dolomite- 10,48,664.870 MT Total- 11,01,425.03 MT. (iii) Height and width of benches are not maintained.
12(4)	In the case of existing mining leases, detailed exploration (G1 level) over the entire potentially mineralised area under the mining lease shall be carried out in the manner specified in the Minerals (Evidence of Mineral Contents) Rules, 2015 or the Atomic Minerals Concession Rules, 2016, as the case may be, within a period of five years from the date of commencement of these rules.]	During inspection it was observed that, 259.932 ha. of the lease area has not been explored till date.
35(2)	Every holder of a mining lease shall monitor his mining and allied activities as per the template of star rating in the format specified in this behalf by the	During Inspection it is observed that Star Rating templates has been submitted on 05.07.2023.

MCDR-MiFLOLST/1/2023-BBS-IBM_RO_BBS

I/30082/2024

	Indian Bureau of Mines from time to time, and shall submit online its self-assessment report before the 1st day of July every year for the previous financial year.	
55(1)(C)	For the purpose of carrying out mining operations in accordance with MCDR 2017 rules a whole time Mining Engineer and Geologist to be employed in the mines.	During Inspection, it is observed that no Geologist have been appointed.

SIGNATURE -

NAME - JITENDRIYA PRADHAN

DATE- 19.04.2024