

MCDR INSPECTION REPORT 2021-22

General:

Sl .No.	Particulars	Details
1	Name of the Mine	Dongarbor Iron Ore Mine
2	Date of Inspection:	27.08.2022
3	Name of Inspecting Officer	Shri D. Upadhyay Senior Assistant Controller of Mines Indian Bureau of Mines
4	Name of official accompanying inspection	Shri Neeraj Thakur, Head Iron Ore Mines
5	Last date of Inspection & Officer	Date of Inspection – 10.03.2022 Shri Rudra N. Mishra (Senior Mining Geologist)
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest: 80.71 Ha. Non Forest: NIL Total Lease Area: 80.71 Ha.
7	Mine code	30CHG15001
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/485/2011
9	Name of the Lease, Address, Phone, email and fax number	M/s Sarda Energy & Mineral Limited 73-A, Central Avenue, Nagpur Pin Code: 440018 (Maharashtra) Phone: 0771- 2216100 Fax No.:0771- 2216198 Email: pkjain@seml.co.in Correspondence Address: M/s Sarda Energy & Mineral Limited, Industrial Growth Center, Phase –I, Siltara Raipur, Chhattisgarh – 493111 Phone: 0771- 2216100 Fax No.:0771- 2216198 Email: pkjain@seml.co.in
10	Village	Nearby Village Padbharri, Jakke, Boria
11	Taluka/Mandal	Manpur
12	District	Rajnandgaon
13	Pin code	491229
14	State	Chhattisgarh
15	Post Office	Khadgaon
16	Nearest Police Station	Khadgaon
17	Nearest Railway Station	Dalli Rajhara
18	Date of Grant of Mining Lease	15/05/2002 to 14/05/2032 (30 years)
19	Date of Execution	02/01/2003
20	Weekly day of rest	Sunday
21	Date of opening of Mine	17/04/2003
22	Date of First Renewal, if applicable and its period & expiry	Not Applicable

23	Date of Second Renewal, if applicable and its period & expiry	Not Applicable
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri P. K. Jain, Whole Time Director & Nominated Owner, B-501, Ashoka Ratna, New Vidhan Sabha Marg, Raipur Chhattisgarh – 492007 Phone: +91-9752090007 Fax: 0771- 2216198 Email Id: pkjain@seml.co.in. Date of Appointment: 01/06/2016
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Neeraj Thakur, Head Iron Ore Mines, E-104, Ramniketan Society, Saddu, Raipur (Chhattisgarh) – 492014 Phone: +91-7747013700 Fax: 0771- 2216198 Email: nthakur@seml.co.in Date of Appointment: 01/10/2014
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Srinivas Thakur, Boria Colony, Post Khadgaon, Tehsil: Manpur, District: Rajnandgaon, Chhattisgarh – 491229 Phone: +91 – 8825170248 Fax: 0771- 2216198 Email: sthakur@seml.co.in Date of Appointment: 01/05/2017
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Ramanand Boria Colony, Post Khadgaon, Tehsil: Manpur, District: Rajnandgaon, Chhattisgarh – 491229 Phone: +91 – 7747013704 Fax: 0771- 2216198 Email: rmand@seml.co.in Date of Appointment: 01/05/2017 Qualification: B.E. Mining Experience: +12 years
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Sant Das Boria Colony, Post Khadgaon, Tehsil: Manpur, District: Rajnandgaon, Chhattisgarh – 491229 Phone: +91 – 7089347893 Fax: 0771- 2216198 Email: sant.d@seml.co.in Date of Appointment: 02/07/2012 Qualification: M.Sc. Geology Experience: +9 years
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. RNG/Fe/MPLN-625/NGP dated 11/06/1998 Proposal Period: 2003-04 to 2007-08 for 100.0 Ha. area Modified Mining Plan approved vide letter no. RNG/FE/MPLN-625/NGP

		dated 12/09/2005 Proposal Period: 2005-06 to 2007-08 for 80.71 Ha. Area
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. RNG/Fe/MPLN-625/NGP dated 25/05/2009 Proposal Period: 2008-09 to 2012-13 Scheme of Mining approved vide letter no. RNG/Fe/MPLN-625/NGP dated 06/08/2013 Proposal Period: 2013-14 to 2017-18 Review of Mining Plan approved vide letter no. RNG/FE/MPLN-1126/2017-RPR Raipur dated 14/12/2017 Proposal Period: 2018-19 to 2022-23
32	Mineral(s) granted in lease and approved for Mining	Iron Ore
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Category 'A' Fully Mechanised
35	Captive/Non-Captive	Captive
36	Present EC Status	Iron Ore Production 1.5 Million Tonnes Per Annum obtained from Ministry of Environment and Forest, Government of India, vide letter no. J-11015/195/2006-IA.II(M) New Delhi dated 21/05/2007 valid up to 14/05/2032
37	Status of Financial Assurance	1. Rs. 1,05,75,000/- vide Bank Guarantee no. 32700IGL00003617 valid up to 31/03/2023.Rs. 2. 70,50,000/- vide Bank Guarantee no. 73360IGL0007621 for period valid upto 31.03.2023 towards Differential Financial Assurance.

Scientific Mining: Compliance of proposals of approved Mining Plan/Review of Mining Plan:

1.0 Exploration:

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
1a	Backlog of previous year Proposals	Not Proposed	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	Not proposed.	Nil	Nil
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not proposed	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Not proposed	Potentially mineralized area drilled under G1 level.	Potentially mineralized area drilled under G1 level.
1e	Balance reserves as on 01.04.2022	Reserves as on 01.04.22- 7.15 Million Tonnes		
1f	General remarks of Inspecting officer on geology, exploration etc.	Potentially mineralized area is explored under under G1 level of exploration..		

2.0 Development:

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
2a	Location of Development w.r.t. lease area	2021-22: N1612 to N1914 and E1700 to E2180 Bottom RL 655	2021-22: N1578 to N1954 and E1736 to E2213 Bottom RL 655	Development is as per proposal.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Topsoil: NIL Separate benches in OB & mineral.	Topsoil: NIL Separate benches in OB & mineral.	Topsoil: NIL Separate benches in OB & mineral.
2c	Stripping ratio or ore to OB ratio	1:1.45 t/m3	1:1.5 t/m3	1:1.5 t/m3
2d	Quantity of topsoil generation in m ³	Not Proposed	Nil	Nil
2e	Quantity of overburden generation in m ³	905720 cu.m	955620 cu.m	OB/waste generated more due to intercalated waste.
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is carried out as per proposal.		

3.0 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 ROM mineral production proposed	1319640	299042.16	
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	All the ROM Ore is processed through dry screens and wet beneficiation 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/Mechanized method adopted for segregation from ROM	Mechanised	Mechanised	Mechanised
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Wet scrubbing proposed in the approved document.	Mechanised screening & Wet scrubbing for Beneficiation	Mechanised screening & Wet scrubbing for Beneficiation
3j	Provision of drilling & blasting in mineral benches	Proposed drilling & blasting	Drilling & blasting by Dia.: 100 mm Depth: 5.0 m Burden: 2.0 m Spacing: 3.0 Explosive: Nitrate Mixture in cartridge form	Drilling & blasting by Dia.: 100 mm Depth: 5.0 m Burden: 2.0 m Spacing: 3.0 Explosive: Nitrate Mixture in cartridge form
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	17.50 Ha. Up to end of review period.	15.45 Ha.	Area covered under pits 15.45 Ha.
3n	Ore to OB ratio for the pit/mine during the year	1:1.45 t/m3	1:1.5 t/m3	1:1.5 t/m3
3o	Total area put in use under different heads at the end of year	Pit- 17.50 Ha. Waste/reject- 7.50 Ha.	Pit- 15.45 Ha. Waste/reject- 7.5 Ha.	Pit- 15.45 Ha. Waste/reject- 7.5 Ha.

		Others-11.906 Ha.	Others-9.75 Ha.	
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	Yr- 2016-17: 1454400.00 Metric Tonnes Yr- 2017-18: 1460800.00 Metric Tonnes Yr- 2018-19: 1099915.00 Metric Tonnes Yr- 2019-20: 1106126.00 Metric Tonnes Yr- 2020-21: 1322936 Metric Tonnes	Yr- 2016-17: 174269.36 Metric Tonnes Yr- 2017-18: 455377.91 Metric Tonnes Yr- 2018-19: 422699.75 Metric Tonnes Yr- 2019-20: 348230.60 Metric Tonnes Yr- 2020-21: 263553.96 Metric Tonnes	ROM production is utilized to its own 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.		

4.0 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. Mineral reject not proposed.	Separate dumping of OB. Mineral reject not proposed.	Separate dumping of OB. Mineral reject not proposed.
4b	Location of topsoil, OB & mineral reject dumps	Waste/OB/IB: N2430 to N2844 and E1480 to E1700 Fines Dump: N1804 to N1864 and E920 to E1030.	Waste/OB/IB: N2402 to N2756 and E1432 to E1862 Fines Dump: N1810 to N1926 and E926 to E1050.	Waste/OB/IB: N2402 to N2756 and E1432 to E1862 Fines Dump: N1810 to N1926 and E926 to E1050.
4c	Number of Dumps within lease area and outside lease area	01 no. (OB/Waste dump)	01 no. (OB/Waste dump)	01 no. (OB/Waste dump)
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Beyond ultimate pit limit.	Beyond ultimate pit limit.	Beyond ultimate pit limit.
4e	Number of Active & Alive dumps	Active dump 01 no.	Active dump 01 no.	Active dump 01 no.
4f	Number of dead dumps	Not proposed	Nil	Nil
4g	Number of dumps established	Not proposed	Nil	Nil
4h	Whether Retaining wall or garland	Yes available	Yes available	Yes available

	drain all along dumps are there	along the dump periphery	along the dump periphery	along the dump periphery
4i	Length of Retaining wall or garland drain all along dump	Repairing Retaining wall and garland drain	Retaining wall and garland drain maintain.	Retaining wall and garland drain maintain.
4j	Number of settling ponds	Not proposed	Existing ponds repaired and maintained	Existing ponds repaired and maintained
4k	Specific comments of inspecting officer on waste dump management	Retaining wall and garland drain are maintained along the dump.		

5.0 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	Nil
5b	Area under backfilling of mined out area	Not proposed	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	Not proposed	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area is not matured for reclamation and rehabilitation.		

6.0 Progressive Mine Closer Plan:

S. N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2)	As per provision of MCDR 2017.	Annual report on PMCP submitted.	Annual report on PMCP submitted.
6b	Management of worked/mined out benches	Not proposed	Nil	Nil
	Area available for rehabilitation (Ha)	Not proposed	Nil	Nil
	Afforestation done (ha)	2.00 during plan period	0.72 area covered under plantation at the end of year.	0.72 area covered under plantation at the end of year.
	No. of saplings planted during the year 2021-22	1500 nos.	1800 nos. during 2021-22	1800 nos. during 2021-22
	Cumulative no. of plants	Not specified.	Cumulative no. of plants 7450 nos.	Cumulative no. of plants 7450 nos.
	Any other specific method of rehabilitation	Not proposed	Nil	Nil

	Cost incurred on watch & care during the year	Not specified.	Cost incurred on watch & care Rs 380,000/-	Cost incurred on watch & care Rs 380,000/-
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 backfilling 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 rehabilitation (ha) iii. Method of rehabilitation	Not proposed	Nil	Nil
6e	Compliance of Environment monitoring (core zone & buffer zone)	Quarterly monitoring	Quarterly monitoring	Quarterly monitoring
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Area is not matured for reclamation and rehabilitation. Plantation is carried out as per proposal.		

7.0 Mineral Conservation:

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Grade wise sorting	Grade wise sorting	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 sort out at mine	45% Fe -55% and up to 62 %	45% Fe -55% and up to 62 %	45% Fe -55% and up to 62 %
7d	Any beneficiation process at mines	Mechanical screening and wet scrubbing process at mines proposed.	Mechanical screening and wet scrubbing is practicing at mines.	Mechanical screening and wet scrubbing is practicing at mines.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	In beneficiation process Mechanical screening and wet scrubbing is practicing at mines		

8.0 Environment:

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
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8a	Separate removal and utilization of topsoil (Rule32)	Not Proposed	NIL	NIL
8b	Concurrent use or storage of topsoil	Not proposed	No top soil generated	NIL
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumps for OB/ waste	Separate dumps for OB/ waste maintained.	Separate dumps for OB/ waste maintained.
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.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	1500 nos.	1800 nos. during 2021-22	1800 nos. during 2021-22
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not specified.	Cumulative no. of plants 7450 nos.	Cumulative no. of plants 7450 nos.
8g	Survival rate	Not specified.	Survival rate 80 %	Survival rate 80 %
8h	Water sprinkling on roads to control airborne dust	Water tanker	Water tanker used to control airborne dust	Water tanker used to control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in and around mines area is maintained by plantation.		

9.0 Compliance of Rule 45:

SN	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	AR & MR submitted regularly.	
SN	Item	Details Given in A.R.	Observation of I/Officer
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	(i) Already exploited & abandoned by opencast (O/C) mining – 15.45 Ha. (ii) Used for waste disposal – 7.50 Ha. (iii) Reclaimed/Rehabilitated – 0.00 Ha. (iv) Used for waste disposal – 7.5 Ha. (v) Occupied by plant building, residential, welfare building & road – 7.50 Ha. (vi) Other purpose (Mineral storage) – 3.250 Ha. (vii) Work done under progressive	Found in order.

		mine closure plan during the year. – 0.00 Ha.																								
9d	Scrutiny of Annual return on afforestation	<table border="1"> <thead> <tr> <th>Details</th> <th>(a) Within lease area</th> <th>(b) Outside lease area</th> </tr> </thead> <tbody> <tr> <td>(i) Number of trees planted during the year</td> <td>2800</td> <td>800</td> </tr> <tr> <td>(ii) Survival rate in percentage</td> <td>80</td> <td>85.63</td> </tr> </tbody> </table>	Details	(a) Within lease area	(b) Outside lease area	(i) Number of trees planted during the year	2800	800	(ii) Survival rate in percentage	80	85.63	Found in order.	Found in order.													
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9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Nil	Nil																						
9f	Scrutiny of Annual return on ROM stock and/or grade ore	<p>Grade-wise closing stock of processed Ore</p> <table border="1"> <thead> <tr> <th>(i) Grade (% of Fe Content)</th> <th>Closing Stock at mine head (in Tonne)</th> </tr> </thead> <tbody> <tr> <td>1. Lumps – Below 55 %</td> <td>636.66</td> </tr> <tr> <td>2. Lumps – 55% to below 58 %</td> <td>534.34</td> </tr> <tr> <td>3. Lumps – 58 % to Below 60%</td> <td>312.74</td> </tr> <tr> <td>4. Lumps – 60% to Below 62 %</td> <td>215.76</td> </tr> <tr> <td>5. Lumps – 62% to Below 65 %</td> <td>718.75</td> </tr> <tr> <td>1. Fines – Below 55 %</td> <td>3269.44</td> </tr> <tr> <td>2. Fines – 55% to below 58 %</td> <td>5568.83</td> </tr> <tr> <td>3. Fines – 58 % to Below 60%</td> <td>2774.24</td> </tr> <tr> <td>4. Fines – 60% to Below 62 %</td> <td>390.22</td> </tr> <tr> <td>5. Fines – 62% to Below 65 %</td> <td>668.46</td> </tr> </tbody> </table>	(i) Grade (% of Fe Content)	Closing Stock at mine head (in Tonne)	1. Lumps – Below 55 %	636.66	2. Lumps – 55% to below 58 %	534.34	3. Lumps – 58 % to Below 60%	312.74	4. Lumps – 60% to Below 62 %	215.76	5. Lumps – 62% to Below 65 %	718.75	1. Fines – Below 55 %	3269.44	2. Fines – 55% to below 58 %	5568.83	3. Fines – 58 % to Below 60%	2774.24	4. Fines – 60% to Below 62 %	390.22	5. Fines – 62% to Below 65 %	668.46	Found in order.	Found in order.
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		Content)	Tonne)		
		1. Lumps – Below 55 %	2108.00		
		2. Lumps – 55% to below 58 %	2108.00		
		3. Lumps – 58 % to Below 60%	2108.00		
		4. Lumps – 60% to Below 62 %	2108.00		
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		4. Fines – 60% to Below 62 %	2108.00		
		5. Fines – 62% to Below 65 %	2108.00		
9i	Scrutiny of Annual return on Fixed assets	Rs 54850223		Rs 54850223	Rs 54850223
9k	Scrutiny of Annual return on mining Machineries	Type of Machinery	Capacity of each unit	No. of unit	Found in order.
		Shovel (hydraulic)	2.7 Cum	1	
		Shovel (hydraulic)	1.6 Cum	2	
		Shovel (hydraulic)	1.27 Cum	1	
		Shovel (hydraulic)	0.65 Cum	1	
		Wheel loader	1.70 Cum	4	
		Tipper	14.69 Cum	33	
		Water tanker	12000 liter	3	

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

During current inspection violation of Rule 11(1) is pointed out.

Date: 23/09/2022

Signature:
Name: Dayanand Upadhyay
Designation: Sr. ACOM