

MCDR INSPECTION REPORT 2021-22

General:

Sl .No.	Particulars	Details
1	Name of the Mine	Dongarbor Iron Ore Mine
2	Date of Inspection:	07/03/2023
3	Name of Inspecting Officer	Prasant Kumar Sahu, Assistant Mining Engineer
4	Name of official accompanying inspection	Shri Neeraj Thakur, Mine Agent and Shri Sant Das, Geologist
5	Last date of Inspection & Officer	Date of Inspection – 27.08.2022 Shri Dayanand Upadhyay Senior Assistant Controller of Mines
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	Padbharri, Jakke, Boria
11	Taluka/Mandal	Manpur
12	District	Mohla-Manpur- Ambagarh Chowki (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, Mine agent and Head 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	Mining Plan approved vide letter no. RNG/Fe/MPLN-625/NGP dated

	approval letter, if any.	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. 2. Rs. 70,50,000/- vide Bank Guarantee no. 73360IGL0007621 valid up to 31.03.2023.

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	No proposal	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal	Nil	
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	No proposal	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	No proposal	Potentially mineralized area drilled under G1 level	
1e	Balance reserves as on 01.04.2022	Under (111)-7.052 Million Tonne Under (121)- 0.100 Million Tonne		As per RMP approved and AR submitted for the year 2021-22
1f	General remarks of Inspecting officer on geology, exploration etc.	No exploration has been proposed in the approved Review of Mining Plan during F.Y. 2021-22. However, potentially mineralized area is explored 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 proposed	Topsoil: NIL Separate benches in OB & mineral maintained	
2c	Stripping ratio or ore to OB ratio	1:0.68 t/m ³	1:3.19 t/m ³	
2d	Quantity of topsoil generation in m ³	No proposal	Nil	
2e	Quantity of overburden generation in m ³	905720 m ³	955620 m ³	OB/waste generated more due to intercalated waste encountered
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Production & development was carried out within the proposed grids as per the approved plans.		

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	
3b	Quantity of ROM mineral production proposed	1319640	299042.16	
3c	Recovery of Salable/usable mineral from ROM production	100%	100%	The produced ROM Ore is being processed through dry crushing/screening and by wet beneficiation
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Nil	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	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	Mechanised crushing/screening & wet scrubbing for beneficiation is carried out	
3j	Provision of drilling & blasting in mineral benches	Deep hole drilling and Blasting proposed in mineral benches	Deep hole drilling and blasting is carried out in mineral benches as proposed	Drilling & blasting by Hole 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	Yes, HEMMs	HEMMs deployed	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes, Benches of 3 to 9 meter in limestone and 3	Bench height and width have been maintained as per proposal	Bench height is suitably matched with the excavator

		to 7 meter in overburden		
3m	Total area covered under excavation /pits	17.50 Ha. Up to end of review period 2022-23	15.45 Ha. Upto 2021-22	
3n	Ore to OB ratio for the pit/mine during the year	1:0.68 t/m3	1:3.19 t/m3	OB/waste generated more due to intercalated waste encountered
3o	Total area put in use under different heads at the end of year	Pit- 17.50 Ha. Waste/reject- 7.50 Ha. Others-11.906 Ha. Upto 2022-23	Pit- 15.45 Ha. Waste/reject- 7.5 Ha. Others-9.75 Ha. Upto 2021-22	
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	Yr- 2017-18: 1460800.00 Yr- 2018-19: 1099915.00 Yr- 2019-20: 1106126.00 Yr- 2020-21: 1322936 Yr- 2021-22: 1322936	Yr- 2017-18: 455377.91 Yr- 2018-19: 422699.75 Yr- 2019-20: 348230.60 Yr- 2020-21: 263553.96 Yr- 2021-22: 299042.16	All units in MT
3q	General remarks of inspecting officer on method of mining etc	Open cast working is being carried out by deployment of HEMM with the help of deep-hole drilling & blasting.		

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 topsoil, OB & mineral reject has been proposed	Being carried out as per proposal	
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 dumping being carried out as proposed.	

4c	Number of Dumps within lease area and outside lease area	01 no. (OB/Waste dump)	01 no. (OB/Waste dump)	Within lease area
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Proposed beyond ultimate pit limit	Being done as per proposal	
4e	Number of Active & Alive dumps	Active dump 01 no.	Active dump 01 no.	
4f	Number of dead dumps	No proposal	Nil	
4g	Number of dumps established	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	Proposed to repair retaining wall and garland drain	Retaining wall and garland drain maintained	
4j	Number of settling ponds	No proposal	Existing ponds repaired and maintained	
4k	Specific comments of inspecting officer on waste dump management	Protection measures for waste dump in form of garland drain and retaining wall have been provided, However, not undertaken adequately and the same has been indicated in the Order of Suspension of Mining Operations dated 29.03.2023.		

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	No proposal	Nil	No area is mined out fully for backfilling
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Mineral has not been exhausted fully & thus no proposal given for backfilling.		

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)	To be submitted before 01st July	PMCP report received in time	Annual return submitted on 25.06.2022

		every year		
6b	Management of worked/mined out benches	No proposal	Nil	
	Area available for rehabilitation (Ha)	No proposal	Nil	
	Afforestation done (ha)	2.00 during plan period	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	As per Annual Return
	Cumulative no. of plants	Not specified	Nil	
	Any other specific method of rehabilitation	No proposal	Nil	
	Cost incurred on watch & care during the year	Not specified	Cost incurred on watch & care approximately Rs. 3.8 Lakh	
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	No proposal	Nil	Area is not fully matured for reclamation and rehabilitation
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	No proposal	Nil	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Environmental monitoring of air, water & noise proposed	Environmental monitoring of air, water & noise was carried out as per the proposal	All values of environment monitoring are within permissible limits.
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Annual PMCP report has been submitted. Plantation has been carried out as per proposal. Mineral has not been exhausted fully & thus no proposal given for backfilling.		

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 proposed	Grade wise sorting is being carried out	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized method proposed	Mechanized method adopted	
7c	Different grade of mineral sort out at mine	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 proposed	Being done as per proposal	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The run of mine ore is fed to crushing/screening for sizing of different grade of mineral and for the purpose of beneficiation wet scrubbing is being used.		

8.0 Environment:

S.N.	Item	Proposals (2021-22)	Actual Work (2021-22)	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	No top soil generated	
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	No proposal	Nil	Area is not matured for reclamation and rehabilitation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	1500 nos.	2800 nos. during	As per Annual Return
8g	Survival rate	Not specified	Survival rate 80 %	
8h	Water sprinkling on roads to control airborne dust	Proposal has been given in the approved document for water sprinkling on roads through water tanker	Continuous water sprinkling done on haul roads to suppress the dust generated	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in & around the mine area was good as the lessee had carried out afforestation & environmental protection measures as per the proposal.		

9.0 Compliance of Rule 45:

Sl. No.	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	MR being regularly submitted AR Submitted up to 2021-22		
SN	Item	Details Given in A.R.	Observation of I/Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager- Niwas Thakur Mining Engg.- Ramanand Geologist- Sant Das	Employed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Total area 33.70 Ha. up to 2021-22	Total area 33.70 Ha. up to 2021-22	
9d	Scrutiny of Annual return on afforestation	Within lease area: 2800 @ 80% survival rate	Within lease area: 2800 @ 80% survival rate	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	No generation of mineral rejects reported	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	ROM: in Tonne Opening-70227.740 Production-299042.160 Closing-15089.450	ROM: in Tonne Opening-70227.740 Production-299042.160 Closing-15089.450	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex mine price- Rs. 2108/Ton Cost of Production- 1594.00 Sale value-0	Ex mine price- Rs. 2108/Ton Cost of Production- 1594.00 Sale value-0	
9i	Scrutiny of Annual return on Fixed assets	Rs. 54850223 including land, machinery & building	Rs. 54850223 including land, machinery & building	
9k	Scrutiny of Annual return on mining Machineries	Backhoe-05 Tipper-33, Wheel loader-04, Water tanker-03	Being deployed	

10- Status of compliance of MCDR, 2017 including therewith the rectification of outstanding violation of the rules.

Date of last inspection	Violation pointed out	Compliance reported
27.08.2022	Rule 11(1) of MCDR,2017 on dated 23.09.2022, subsequently show cause notice was issued on 28.11.2022	In reference to the violation of Rule 11(1) of MCDR, 2017 observed during last site inspection carried out by Shri Dayanand Upadhyay, Sr. ACOM and the reply/compliance submitted by the lessee has been checked and verified by the undersigned during the site inspection and it is observed that the violations are not complied with for which Order of Suspension of Mining Operations was issued on 29.03.2023.

No any serious violations observed during current inspection.

Date: 21.06.2023

प्रशान्त कुमर साहू / Prasant Kumar Sahu
सहायक खनन अभियंता / Assistant Mining Engineer
भारतीय खान ब्यूरो, रायपुर / Indian Bureau of Mines, Raipur