

MCDR INSPECTION REPORT (2023-24)

S. N.	Particulars	Details
1	Name of the Mine	Amalgamated Sankalapuram Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non-Forest area (Revenue Land): 111.09 Ha Forest area: Nil
3	Mine code	30KAR03065
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/154/2011
5	Name of the lessee, Address, phone, email and fax number	Rai Bahadur Seth Shreeram Narasingdas Private Limited D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id - office@rbssn.com
6	Village	Sankalapuram
7	Taluk/Mandal	Hospet
8	District	Vijayanagara
9	Pin code	583201
10	State	Karnataka
11	Post office	Kariganur
12	Nearest police station	Rural Police Station, Hospet
13	Nearest Railway station	Hospet railway Station
14	Date of Grant of Mining Lease	23.06.1956 (for a period of 30 Years)
15	Date of Execution	1956
16	Date of opening of Mine	Commencement of Mining Operations in 1956
17	Date of first Renewal, if applicable and its period & expiry	Date of 1st Renewal with effect from: 23.06.1986 Period: 20 Years Date of Expiry: 22.06.2006
18	Date of second Renewal, if applicable and its period & expiry	Date of 2nd Renewal: 23.06.2006 Period: 20 Years Date of Expiry: 22.06.2026
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Name of Nominated Owner: Shri Ajay Saraf D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id - office@rbssn.com
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Name of AGENT: S.Kandaswamy D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id:office@rbssn.com Date of Appointment: 05.10.2016
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Name of Mines Manager: Gopal Joshi D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id - office@rbssn.com Date of Appointment: 15.08.2017

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Pradyumna. R. B.Tech (Mining Engineering) D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id - office@rbssn.com Date of Appointment: 15.08.2017 Total Experience: 15 Years
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Pradyumna.R.Urs B.Tech (Mining Engineering) D/No. 1499/1, PO Box No. 38, Kariganur Post, HOSAPETE -583201, Vijayanagara District Phone No-08394 266011, 265825 Fax-08394 265424, Email Id - office@rbssn.com Date of Appointment: 15.08.2017 Total Experience: 15 Years
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Mining Engineer is appointed. The Geologist is Appointed – Palle Ganesh Kumar Reddy. Date of Appointment - 03.12.2020 .
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	2023-24 to 2024-25 - Modifications to the Approved Mining Plan along with PMCP – Approval Letter No. MCDR-MPC0FE/10/2023-BNG-IBM_RO_BNG dated 07/11/2023
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modifications to the Approved Mining Plan along with PMCP – Approval Letter No. MCDR-MPC0FE/10/2023-BNG-IBM_RO_BNG dated 07/11/2023
27	Mineral(s) granted in lease and proved for mining	Hematite
28	Method of Mining(Opencast, Underground)	Opencast
29	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
30	Captive/ Non captive	Non-Captive
31	Date of inspection	19.08.2024
32	Name of accompanying mine officials with designation	Mr. G. Lakshminarayana, Senior General Manager Mr. Gopal Joshi – Mine Manager Mr. Pradyumna.R.Urs – Mining Engineer Mr. P. Ganesh- Geologist.

1. Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	
1b	Exploration over lease area for Geological axis 1 or 2.	FY 2023-24 – 45 Holes Meterage – 415 Mts	FY 2023-24 – 47 Holes (02 No.'s DTH Holes using Lessee's own equipment and 45 No.'s Core Drilling.)	Area under G1/G2/G3 as per approved mining plan dated 07/11/2023 G1: 52.22Ha G2: 15.16Ha G3: 2.7Ha Area proved as non-

			Meterage – 495 Mts	mineralized : 41.01Ha
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Lessee	Exploration Agency-Lessee. Expenditure: Rs. 264110	Actual figures as per AR 2023-24
1d	Balance area to be explored to bring Geological axis in 1 or 2	17.86Ha	17.86Ha	Based on the exploration data, in the draft Mining plan document submitted, lessee proposed for updation of level of exploration and Reserve/resources.
1e	Balance reserves as on <u>01.04.2024</u>	Reserves : 2.828 MMT as on 01.08.2023	Reserves : 2.560 MMT as on 01.04.2024	
1f	General remarks of inspecting officer on geology, exploration etc.	The lease area hosts Iron ore deposit (hematite) in the southern portion of the lease with a strike of N70W-S70E direction with dip of around 75 degree towards south. From the updated Geological plan and sections it is observed that only about 30Ha of the lease area is mineralized and remaining area is non-mineralized. Most part of the float ore in the lease area is already mined out. In the draft Mining plan document submitted, lessee proposed for updation of level of exploration and Reserve/resources.		

2. Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Lat: 15:13:58.58 to 15:14:12.24 Long: 76:25:14.29 to 76:25:25.69	Lat: 15:13:58.58 to 15:14:12.24 Long: 76:25:14.29 to 76:25:25.69	Development carried out within the proposed extent.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Top Soil	No Top Soil	Development is in the broken-up area.
2c	Stripping ratio or ore to OB ratio	1:0.18 (T:T) Ore: 2,43,000 tons OB: 42,184 Tons @1.5BD	1:0.19 (T:T) Ore: 2,42,949 tons OB: 44175 Tons @1.5BD	Ore and OB achieved as per previously approved Mining Plan and current Mining plan dated 07/11/2023 considered for calculation.
2d	Quantity of topsoil generation in m3	Nil	Nil	Development is in the broken-up area.
2e	Quantity of overburden generation in m3	28122.85 CuM	29450 CuM	
2f	General remarks of inspecting officer on development of pit w.r.t.	The Iron ore deposit under mining is of reef of ore deposit of regular habit and partly float ore the working has been proposed accordingly. However, benches not maintained as proposed in		

type of deposit etc.	the Mining plan in Pit No. P-4 between section lines S-14 and S-15. For the same violation under Rule 11(1) of MCDR, 2017 has been pointed out.
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3. Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Reef: Pit No. 4	Reef: Pit No. 4	
3b	Quantity of ROM mineral production proposed	2,43,000 MT	2,42,949 MT	
3c	Recovery of salable/usable mineral from ROM production	2,43,000 MT	2,42,949 MT	
3d	Quantity of mineral reject generation	No proposal	Nil	No mineral Rejects generated during the year.
3e	Grade of mineral reject generation and threshold value declared	No Proposal	Nil	There is an old sub-grade stock in the lease area, which lessee is transporting to Beneficiation plant as per CEC order. As reported in the AR, lessee has sold 2,40,000 tons of Sub-grade ore during the year.
3f	Quantity of sub-grade mineral generation	No Proposal	Nil	
3g	Grade of sub-grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	Lessee is having a beneficiation plant within the lease area. Lessee is procuring the ore for processing in the plant.
3j	Provision of drilling & blasting in mineral benches	DTH Drill, 115 mm diameter – 2 No.'s	The drilling and blasting was carried out for Reef Ore	
3k	Provision of mining machineries in mineral benches	Excavators, Dumpers, Ripper Dozer, DTH Drills, Water Sprinklers	Excavators, Dumpers, Ripper Dozer, Water Sprinklers	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed In reef Ore Bench Height – 7 Mts	In reef Ore Bench Height – 7 Mts	

3m	Total area covered under excavation/pits	48.09 Ha	48.09 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.18 (T:T) Ore: 2,43,000 tons OB: 42,184 Tons @1.5BD	1:0.19 (T:T) Ore: 2,42,949 tons OB: 44175 Tons @1.5BD	
3o	Total area put in use under different heads at the end of year	111.09 Ha	111.09 Ha	
3p	Production of ROM mineral during last five-year period, as applicable	2019-20: 294779 MT 2020-21: 2,42,999 MT 2021-22: 2,42,998 MT 2022-2023: 2,43,000 MT 2023-24: 2,43,000 MT	2019-20: 2,43,000 MT 2020-21: 2,43,000 MT 2021-22: 2,37,780 MT 2022-2023: 2,43,000 MT 2023-24: 2,42,949 MT	
3q	General remarks of inspecting officer on method of mining etc.	Lessee has carried out the production as per approved Mining Plan. However, benches not maintained as proposed in the Mining plan in Pit No. P-4 between section lines S-14 and S-15. For the same violation has been pointed out under Rule 11(1) of MCDR, 2017.		

4. Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Top soil – Nil Mineral Reject – Nil OB dumped in Waste Dump (AD1) located in SE of the Lease area.	Top soil – Nil Mineral Reject – Nil OB dumped in Waste Dump (AD1) located in SE of the Lease area.	Dumping has been carried out as per proposal.
4b	Location of topsoil, OB & mineral reject dumps	Top soil – NA Mineral Reject – NA OB - Dump (AD1) located in SE of the Lease area	Top soil – NA Mineral Reject – NA OB dumped in Waste Dump (AD1) located in SE of the Lease area.	
4c	Number of dumps within lease area and outside lease area	Within Lease are – 04 Outside Lease are – Nil	Within Lease are – 04 Outside Lease are – Nil	ID-1, ID-2, CID-1 and AD-1
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	Active Dumps -01	Active Dumps - 01	AD-1
4f	Number of dead dumps	Dead Dumps-03	Dead Dumps-03	
4g	Number of dumps stabilized	Nil	03 (ID-1, ID-2 and CID-1)	During inspection observed that 03 dumps stabilized with plantation cover.

4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	Total length of all retaining walls - 1645 Mts
4i	Length of Retaining wall or garland drain all along dump	No Proposal for extension or construction of new Retaining Walls	Nil	Total length of all retaining walls - 1645 Mts completed in FY 2018-19
4j	Number of settling ponds	No proposal	Nil	Totally 2 Ponds (Settling & Water Ponds) are there in the lease area.
4k	Specific comments of inspecting officer on waste dump management.	Lessee has taken efforts to stabilize the old in-active dumps by covering with plantation and by construction of retaining wall and garland drain along the toe of the dump. In the mining plan scrutiny it was advised to propose a toe wall along the south western part of the Active dump where Retaining wall not constructed.		

5. Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	Part of float ore area, mineral is fully exhausted.
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	Lessee has reclaimed the part float ore mined out area of 4.31Ha by concurrent backfilling and carried out plantation on the backfilled area.		

6. Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	The Annual Report on PMCP to be submitted by 30 th June 2024	Submitted within stipulated time	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	Proposed to develop a green belt within the safety zone of the core area (0.79Ha area) by planting 1,580 plants	The proposed plantation at the specified location was not carried out.	Violation pointed out under Rule 11(1) of MCDR, 2017

6d	No. of saplings planted during the year	Plantation of 1580 Saplings on Safety Zone of Core Zone area	The proposed plantation at the specified location was not carried out.	Violation pointed out under Rule 11(1) of MCDR, 2017
6e	Cumulative no. of plants	No proposal	6405 no. of plants	Actual as reported in Annual return
6f	Any other specific method of rehabilitation	No Proposal	Nil	
6g	Cost incurred on watch & care during the year	No Proposal	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	No proposal	NA	Lessee has reclaimed the part float ore mined out area of 4.31Ha by concurrent backfilling and carried out plantation on the backfilled area.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	Nil	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	No proposal	NA	Lessee has reclaimed the part float ore mined out area of 4.31Ha by concurrent backfilling and carried out plantation on the backfilled area.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No proposal	NA	
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No proposal	NA	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	No proposal	NA	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	NA	
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Air, water & Noise within Core Zone & Buffer Zone	PM 2.50 & PM 10 Air Monitoring, Water and Noise Monitoring carried out in Core and Buffer	Carried out by MoEF recognized Lab- MSV Analytics. Results are within permissible limits.

		Zones.	
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Lessee has reclaimed the part float ore mined out area of 4.31Ha by concurrent backfilling and carried out plantation on the backfilled area. The proposed plantation at the specified location was not carried out. Hence, violation pointed out under Rule 11(1) of MCDR, 2017.	

7. Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise Sorting	Grade wise sorting is done and dispatched in grade wise Lots.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	The grade wise ROM is fed to the Crushing, Screening and Conveying system thus ensuring grade wise Lot formation of Lumps & Fines	
7c	Different grade of mineral sorted out at mines	Lumps & fines	Lumps: 51% to below 55% Fe 55% to below 58% Fe 60% to below 62% Fe 62% to below 65% Fe Fines: 45% to below 51% Fe 55% to below 58% Fe 58% to below 60% Fe 60% to below 62% Fe	
7d	Any beneficiation process at mines	Yes	Yes	The Iron Ore Beneficiation Plant of lessee operating within the Mine Lease area has produced upgraded iron ore during through feed iron ore procured from this lease i.e. ML No. 2682 and other mines
7e	General remarks of inspecting officer on Mineral conservation &	The different ore size and grade sorted in the lease by crushing and screening. There is no issue of beneficiation. The Iron Ore Beneficiation Plant of		

	beneficiation issues	lessee operating within the Mine Lease area has produced upgraded iron ore during through feed iron ore procured from this lease i.e. ML No. 2682 and other mines
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8. Environment

S.N	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate Dumps for OB: Waste Dump (AD1)	Separate Dumps for OB: Waste Dump (AD1)	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Lessee has reclaimed the part float ore mined out area of 4.31Ha by concurrent backfilling and carried out plantation on the backfilled area.
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)			
8g	Survival rate		70%	
8h	Water sprinkling on roads to control airborne dust	Water Tankers	Water Tankers on roads and Atomized Mist sprayer in Ore stacking areas	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is good.		

9. Compliance of Rule 45

S.N	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	For FY 2023-24: M.R. Submitted up to March 2024 2023.	AR 2023-24 submitted

		A.R. 2023-24 submitted					
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	Mr. Gopal Joshi – Mines Manager. Mr. Pradyumna.R Urs – Mining Engineer Geologist – Palle Ganesh Kumar Reddy.		All were present during the day of inspection			
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under O-C Workings – 48.09 Ha Reclaimed-rehabilitated – 0.00 Ha Used for waste disposal – 14.64 Ha Occupied by Plant Building Roads – 15.37 Ha Used for other purpose (Engineering Structures, Mineral Storage area, Unused area) – 32.99 Ha		Appears to be correct			
9d	Scrutiny of Annual return on afforestation	9150 Saplings planted within Mine lease area		Plantation not done at proposed location	Violation pointed out under Rule 11(1) of MCDR, 2017		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	No mineral Reject generation and same has been furnished in the A.R					
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM OS: 108501 CS: 1001 Dump working OS: 2201226 CS: 1966114.8		Production & Dispatch not reported correctly	Showcause issued under Rule 45(7) of MCDR, 2017		
	Graded Ore:						
		In Tonnes		LUMPS		FINES	
			OS	CS	OS	CS	
	45% to below 51% Fe	4000.01	4000.01	21780	38258		
	51% to below 55% Fe	0	27999	519.94	19.94		
	55% to below 58% Fe	16019.99	20	4000.22	35250.22		
	58% to below 60% Fe	0.19	0.19	0	12000		
	60% to below 62% Fe	4000	28000	288.81	26288.82		
	62% to below 65% Fe	13645.77	21641.35	15.61	15.61		
	65% and above Fe	38593.81	23128.64	0	0		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost Production Cost: Rs. 1441/-	Ex mine Price (Rs.)		Lumps	Fines	Royalty, DMF, NMET etc. considered	
	45% to below 51% Fe			0	1117.52	Showcause issued under Rule 45(7) of MCDR, 2017	

	51% to below 55% Fe	4172	4097	for Cost of Production are not tallying with the reported dispatch at PART-VI	
	55% to below 58% Fe	4069.92	4184		
	58% to below 60% Fe	0	3908		
	60% to below 62% Fe	6810.71	6057.14		
	62% to below 65% Fe	7013.31	0		
	65% and above Fe	11769.98	0		
9i	Scrutiny of Annual return on fixed assets	Rs. 325723842		Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	BACK HOE 3 nos. Dumper 6 nos. Truck 11 nos. Loader 5nos. Dozer 1 nos. Crusher 1 no. Water Tanker 2 nos.		Appears to be correct	

Details of violations observed during current inspection and compliance position of violation pointed out					
<u>Violation observed</u>			<u>Show cause position</u>		
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance on
11(1) of MCDR	26/08/2024	18/02/2025	45(7) of MCDR	26/08/2024	22/10/2024

डॉ. सुधाकर टी.एल. / Dr. Sudhakara T. L.)
वरिष्ठ खनन भूविज्ञानी / Senior Mining Geologist