

MCDR-MiFLOFE/12/2022-BBS-IBM_RO_BBS
MCDR INSPECTION REPORT

I/33682/2024

General

S. N.	Particulars	Details
1	Name of the Mine	Roida II Iron Ore Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease Area: 74.702 Ha (as per DGPS Survey & 74.867 Ha as per RoR) Non-Forest Land: 3.802 Ha (as per DGPS Survey & 3.832 Ha as per RoR) Forest Land: 70.900 Ha (as per DGPS Survey & 71.035 Ha as per RoR)
3	Mine code	30ORI08124
3.1	Date of Inspection	10.04.2024
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4329/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Narbheram Power And Steel Private Limited Address: Narbheram Complex Opposite of Barbil Cenema Hall; Main Road; Barbil
6	Village	Tanto
7	Taluka/Mandal	Barbil
8	District	Keonjhar
9	Pin code	758035
10	State	Odisha
11	Post office	Barbil
12	Nearest police station	Barbil
13	Nearest Railway station	Barbil
14	Date of Grant of Mining Lease	29.06.2020
15	Date of Execution	29.06.2020
16	Date of opening of Mine	15.10.2020
17	Date of first Renewal, if applicable and its period & expiry	NA; Lease valid upto 28.06.2070
18	Date of second Renewal, if applicable and its period & expiry	NA; Lease valid upto 28.06.2070
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA; Lease valid upto 28.06.2070
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Vishal Atha 6th Floor; Avani Signature; 91 A/1 Park Street; Kolkata West Bengal – 700016 Phone: 9668560057 Email: npspl@athagroup.in
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Sadananda Rana Narbheram Complex Barbil Main Road; Opposite of Barbil Cenema Hall; Barbil Keonjhar; Odisha – 758035 Phone: 9937227948

		Email: npspl@athagroup.in
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Prasanta Kumar Mohanty, Narbheram Complex Barbil Main Road; Opposite of Barbil Cenema Hall; Barbil Keonjhar; Osidha – 758035 Phone: 7752011137 Email: npspl@athagroup.in
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Sanjay Samal, B.Tech – Mining Engineer; 15 years’s experience Narbheram Complex Barbil Main Road; Opposite of Barbil Cenema Hall; Barbil Keonjhar; Osidha – 758035 Phone: 8763029709 Email: npspl@athagroup.in
24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Atanu Bandopadhyay, M.Sc – Geology; 12 years’ experience. Narbheram Complex Barbil Main Road; Opposite of Barbil Cenema Hall; Barbil Keonjhar; Osidha – 758035 Phone: 9692688641 Email: npspl@athagroup.in
25	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55& carrying out their duties as per rule 56 & 57.	Yes
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved on 11.11.2020
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modified Mining Plan approved on 31.05.2021
28	Mineral(s) granted in lease and proved for mining	Iron Ore
29	Method of Mining(Open cast, Underground)	Open cast
30	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
31	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
1a	Backlog of previous year	11(22-23)	9(22-23)	
1b	Exploration over lease area for Geological axis 1 or 2.	14	13	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	5232715.310		
1d	Balance area to be explored to bring Geological axis in 1 or 2	12.190	8.30	

1e	Balance reserves as per latest approved document	20077553 T	11647965.3T	
1f	General remarks of inspecting officer on geology, exploration etc.	The area forms a part of the Bonai - Keonjhar belt of the famous "Horse Shoe Synclorium" falling in Sundergarh and Keonjhar districts. The Lease was already explored broadly in G1 & G2 by earlier lessee before auction. The exploration proposal given in last approved document is not complied.		

Development

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
2a	Location of development w.r.t. lease area	Quarry-6 N2438310- N2438040/ E33 0795-E331410 Quarry-2 N2437940- N2437750/ E331595- E331790	Broadly done within proposed area	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Benches in Top Soil-Nil Quarry-6 Mineral-13 OB-7 Quarry-2 Mineral-7 OB-2	No Benches in Top Soil-Nil Quarry-6 Mineral-11 OB-9 Quarry-2 Mineral-6 OB-2	Two Quarry i.e. Quarry-6 & Quarry-2
2c	Stripping ratio or ore to OB ratio	1:0787	1:096	
2d	Quantity of topsoil generation in m3	NIL	NIL	
2e	Quantity of overburden generation in m3	275400	305779.06	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	The quantity of development is more than proposal.		

EXPLOITATION

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N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
3a	Number of pits proposed for production	2	2	
3b	Quantity of ROM mineral production proposed	3499950	3156759.700	
3c	Recovery of salable/usable mineral from ROM production		3156759.700	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral reject generation and threshold value declared	NIL	NIL	
3f	Quantity of sub-grade mineral generation (Tons)	478440	620050	Sub-grade mineral also dispatch.
3g	Grade of sub-grade mineral generation	53.85% Fe Threshold value = 45% - 55% Fe	50.05% Fe Threshold value = 45% - 55% Fe	
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 beneficiation proposed, only blending proposed for total sub-grade mineral	Total sub-grade generated has been blended	
3j	Provision of drilling & blasting in mineral benches	Drill: 125.4 m/ day Blasting: 456480 m3 (year)	Drill: 103 m/ day Blasting: 350751 m3 (year)	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation/pits	Quarry-6 23.2569 Ha. Quarry-2 15.9911 Ha	Quarry-6 21.2480 Ha. Quarry-2 15.6970 Ha	
3n	Ore to OB ratio for the pit/ mine during the year	1:0623	1:1191	
3o	Total area put in use under different heads at the end of year Mining Mineral storage	38.470 10.871	36.945 10.046	

	Mineral Separation plant	2.000	2.000	
	Roads	3.429	3.429	
	Infrastructure (Workshop, administrative building etc.)	0.713	0.713	
	OB/waste dump	11.369	11.369	
3p	Production of ROM mineral during last six-year period, as applicable in Tons			After Auction
	2020-21	1710490.000	1526679.19	
	2021-22	3499750.000	2400428.56	
	2022-23	3499940.000	2872227.900	
	2023-24	3499950.000	3156759.700	
3q	General remarks of inspecting officer on method of Mining	The method of mining is by opencast using HEMM and deep hole blasting.		

Solid Waste management-Dumping

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	NA, as one single Dump for OB/Waste as there is no top soil	NA, as one single Dump for OB/Waste as there is no top soil	
4b	Location of topsoil, OB & mineral reject dumps	OB Dump N2437840-N2437740/E331950-E332086	Broadly as per proposal.	
4c	Number of dumps within lease area and outside lease area	1	1	
4d	Location of dumps w.r.t. ultimate pit limit	Outside UPL	Outside UPL	
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	NIL	NIL	
4g	Number of dumps stabilized	NIL	Partly stabilized	
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	NIL	17m	
4j	Number of settling ponds	Maintenance of existing 7 Settling Ponds		
4k	Specific comments of inspecting officer on waste dump management	The waste dump manage broadly as per proposal except the proposal of backfilling not complied.		

Solid Waste management-Backfilling

S.N	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
5a	Status on part or full extraction	Backfilling shall	Backfilling not	

	of mineral from mined out area before starting backfilling	be started after full extraction of mineral from mined out area	done as per proposal.	
5b	Area under backfilling of mined out area	0.76 Ha	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	NA	NA	
5d	Total area fully reclaimed & rehabilitated	1.681 Ha	1.571Ha(Cumulative)	
5e	General remarks of inspecting officer on backfilling, reclamation etc	As the area not exhausted and exploration done on that area to prove non-mineralised before backfilling therefore backfilling not done.		

Progressive Mine Closure Plan

N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	On or before 30.06.2023	Submitted on 30.06.2023	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	Nil Nil 3000 8100 - Rs. 1,50,000/-	Nil Nil 7124 23,124 - Rs.5,69,920/-	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Nil	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Nil	Nil	
6e	Compliance of			The no. of

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	Environmental monitoring (core zone & buffer zone) Ambient Air Monitoring Core: Buffer: Fugitive Air Monitoring Core: Ground Water Monitoring Core: Buffer: Surface Water Monitoring Buffer: Noise Monitoring Core: Buffer:	3 2 5 2 3 3 6 3	3 2 5 2 3 3 6 3	monitoring station mentioned.
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Broadly complied.		

Mineral Conservation

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S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	NA	NA	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	NA	NA	
7c	Different grade of mineral sorted out at mines	NA	NA	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The material above threshold being used and no subgrade major dump observed. In lessee area no beneficiation done except crushing and screening.		

Environment

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	NIL	NIL	
8b	Concurrent use or storage of topsoil	NIL	NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	All the waste (as per cutoff grade prescribed by IBM) are being dumped at designated OB Dump.		
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	1.571Ha (Cumulative) area has been back filled.		
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation of worked out benches, where ore has been exhausted.		
8f	Baseline information on existence of plantation & additional Plantation done	Plantation Register is being maintained		
8h	Water sprinkling on roads to control airborne dust	Total 98 numbers of permanent water sprinklers have been installed all along the main haulage road in the mine. In addition to that mobile water sprinklers are also used to suppress fugitive dust on haul roads and other transport roads. Regular water sprinkling are in operation at all loading & discharge points of crushing & screening units.		
8i	General remarks of inspecting officer on aesthetic beauty in and	The lessee using water sprinkler for dust suppression along the haul road.		

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Compliance of Rule 45

S.N	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto March 2024 A.R. will be submitted for the FY23-24 with in the due date.		
S.N	Item	Details given in A.R. for the year 2023-24	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes given	Shri Sanjaya Samal, Mining Engineer, Geologist Shri Atanu Bandopadhyay, Manager Shri Prasant Kumar Mohanty	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	Under Opencast working-36.945ha., Waste dumping-10.981ha., Infrastructure & Roads 4.688 ha., Mineral Storage 8.946 ha.	
9d	Scrutiny of Annual return on afforestation	6000 nos reported		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	620050 Tons. grade 52.3 %Fe & 52.50%Fe		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM-966448 Tons and graded ore stock also mentioned of various grade of Fines & CLO		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex.Mine price is mentioned of various grade of fines and lumps. In fines Ex-mine price varies from Rs600 to Rs5006/- and CLO Rs 1342 to 5759/-, COP is Rs 3967/-	The Ex-mine price not mentioned correctly and accordingly violation pointed out.	
9i	Scrutiny of Annual return on fixed assets	Yes given	Rs 443114665	
9k	Scrutiny of Annual return on mining machineries	Yes given	Shovel 3.8, 1.8 & 0.9 m ³ , front end loader, Dumper 35 tons, Drill m/c, water tanker, Dozer	

