

MCDR INSPECTION REPORT
BHUBANESWAR REGIONAL OFFICE

MINE CODE : 30ORII3017

Part-I: General

S. N.	Particulars	Details
1	Name of the Mine	Patabeda Iron & Mn Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease - 19.425Ha Non-Forest- 2.918Ha DLC Forest- 11.246 Ha KF- 5.261Ha
3	Mine code	30ORII3017
4	IBM Registration Number under rule 45	IBM/247/2011
5	Name of the lessee, Address, phone, email and fax number	M/s M G Mohanty At: Patabeda, Po: Malda, District: Sundargarh(Odisha) mgmohantybo@gmail.com
6	Village	Patabeda
7	Taluka/Mandal	Koira
8	District	Sundargarh
9	Pin code	770048
10	State	Odisha
11	Post office	Malda
12	Nearest police station	Koira
13	Nearest Railway station	Joroli
14	Date of Grant of Mining Lease	31.10.1985
15	Date of Execution	03.04.1986
16	Date of opening of Mine	25.04.1986
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Date of second Renewal, if applicable and its period & expiry	NA
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	Shree R.L. Mohanty 5A, forest Park rlmbbsr@mail.com
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri Tanuj Mohanty, 5A, forest Park, Bhubaneswar tanuj.mohanty@gmail.com
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mahendra Kumar Mohanty At: Patabeda, Po: Malda, Dist: Sundargarh Mob. No.: 7440015202 Mail id : mohanty.mahendra@gmail.com
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Saroj Kumar Shaw(Mining Engg) At: Patabeda, Po: Malda, Dist: Sundargarh Mob. No.: 7440015220 Data of Appointment : 01.11.2021

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24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Dillip Kumar Pattanaik (Geologist). At: Patabeda, Po: Malda, Dist: Sundargarh Mob. No.: 7440015245 Data of Appointment : 01.11.2021
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	BBS/SNG/Fe& Mn/MP-238, dt. 05.07.2005
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	MRMP/A/37-ORI/BHU/2021-22, dt. 16.03.2022
28	Mineral(s) granted in lease and proved for mining	Iron
29	Method of Mining(Open cast,	Open Cast
30	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
31	Captive/Non Captive	Non-Captive

Details about Mining Plan/ Mining Scheme

a) Letter No. and date of approval of mining plan	:	BBS/SNG/Fe& Mn/MP-238, dt. 05.07.2005
b) Letter No. and date of approval of Review mining Plan.	:	MRMP/A/37-ORI/BHU/2021-22, dt. 16.03.2022
c) Condition while approving the MP/ MS/ modification	:	Nil
d) Period of mining plan/ mining scheme in force :	:	Scheme Period 2022-23 to 2025-26

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1. Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining.

Exploration:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
1a	Backlog of previous year			
1b	Exploration over lease area for Geological axis 1 or 2.	6 Nos BH was proposed for the year 2021-22 Depth ward drilling is up to the end of the ore Zone.	10 Nos BH completed during the 2021-22. Total mtrs 359.00	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Departmentally	B S Mining Corporation Rs.1801145.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	3.903 Ha	The entire area has been explored under G-1 level.	
1e	Balance reserves as on 01.04.2022	111- 8231080 122- 0 221- 50775	111- 8231080 122- 0 221- 50775	
1f	General remarks of inspecting officer on geology, exploration etc.			

2. Development: (2021-22)

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
2a	Location of development w.r.t. lease area	N2426368-2426120 E331931-332111	N2426368-2426120 E331931-332111	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No proposal	Nil	
2c	Stripping ratio or ore to OB ratio	1:0.12	1:0.18	
2d	Quantity of topsoil generation in m ³	No proposal	Nil	
2e	Quantity of overburden generation in m ³	29980m ³	32473m ³	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.			

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3. Exploitation (2021-22)

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
3a	Number of pits proposed for production	One	One	Pit coordinate N2426368-2426120 E331931-332111
3b	Quantity of ROM mineral production proposed	210200tonne	179742tonne	
3c	Recovery of salable/usable mineral from ROM production	210200tonne	179742tonne	
3d	Quantity of mineral reject generation	6800m ³	7152m ³	The Mineral reject is blended with the high grade ores to meet the marketable grade.
3e	Grade of mineral reject generation and threshold value declared	+45% to -55%	+45% to -55%	
3f	Quantity of sub-grade mineral	-	-	
3g	Grade of sub-grade mineral generation	-	-	
3h	Manual / Mechanized method adopted for segregating from	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	drilling & blasting in mineral benches were proposed	As per proposal	Deep hole drilling of 110mm dia is done with 2.5m burden, 3.0m spacing and 6m high. Blasting is done with Slurry explosives of 83mm dia, Nonel and Electric detonator used.
3k	Provision of mining machineries in mineral benches	Yes	Yes	Excavator – 1.6 M ³ Excavator – 1.42 M ³ Wheel loader-1.8 M ³ Wheel loader-2.5 M ³ DTH Drill-110mm Tipper – 16tonne Tipper – 25tonne Water Tanker-9Kl Crusher plant – 120TPH Mobile Screening Plant -250TPH

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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	Pit – 7.02Ha	Pit – 6.5Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.12	1:0.18	
3o	Total area put in use under different heads at the end of year	19.425	19.425	Pit – 6.5Ha Dump –1.138Ha Other Plant, Infrastructure and road -10.497Ha Safety zone -1.29Ha
3p	Production of ROM mineral during the last Six year period as applicable. (16-17 to21-22)	2016-17- 194317 2017-18- 189459 2018-19- 195083 2019-20- 195120 2020-21- 195526 2021-22- 210200	2016-17- 144000 2017-18- 166520 2018-19- 180000 2019-20- 179500 2020-21- 178600 2020-21- 179742	
3q	General remarks of inspecting officer on method of			

4. Solid Waste Management-Dumping:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Proposed	Yes	
4b	Location of topsoil, OB & mineral reject dumps	<u>M R –Dump -1</u> N2426203- 2426376 E332195-332307 <u>M R –Dump -2</u> N2425900- 2425984 E332240-3322331 <u>Dump -3 (Dead)</u> N2426006- 2426087 E331948-332040 <u>Dump -4 (Active)</u> N2426344- N2426372 E332155- E332191	<u>M R –Dump -1</u> N2426203- 2426376 E332195-332307 <u>M R –Dump -2</u> N2425900- 2425984 E332240-3322331 <u>Dump -3 (Dead)</u> N2426006- 2426087 E331948-332040 <u>Dump -4 (Active)</u> N2426344- N2426372 E332155- E332191	
4c	Number of dumps within lease area and outside lease area	within lease area – 4 outside lease area - Nil	within lease area – 4 outside lease area - Nil	

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4d	Location of dumps w.r.t. ultimate pit limit	<u>Dump -3 (Dead)</u> N2426006- 2426087 E331948-332040 <u>Dump -4 (Active)</u> N2426344- N2426372 E332155- E332191	<u>Dump -3 (Dead)</u> N2426006- 2426087 E331948-332040 <u>Dump -4 (Active)</u> N2426344- N2426372 E332155- E332191	
4e	Number of active & alive dumps	1	1	
4f	Number of dead	1	1	
4g	Number of dumps stabilized	3	3	
4h	Whether Retaining wall or garland drain all along dumps are	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	Maintenance of the existing retaining wall and garland drain.	441m maintenance work done.	
4j	Number of settling ponds	Maintenance	3Nos	De-silted
4k	Specific comments of inspecting officer on waste dump			

5. Solid Waste Management-Backfilling:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	
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	No proposal	Nil	

6. Progressive Mine Closure Plan:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26 (2).	Yes	Yes	
6b	i)Area available for rehabilitation (ha)	NIL	NIL	

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	ii)Afforestation done (ha)	0.1	Gap plantation	
	iii)No. of saplings planted during the year	250	293	
	iv)Cumulative no. of plants		18936 nos planted as on date	
	v)Any other specific method of rehabilitation	No Proposal	Nil	
	vi)Cost incurred on watch & care during the year	No Proposal	Departmentally done	
6c	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for	No Proposal	NIL	
	(ii) Void filled by	No Proposal	NIL	
	(iii) Afforestation on the backfilled area.	No Proposal	NIL	
	(iv) Rehabilitation by making water reservoir.	No Proposal	NIL	
	(v) Any other specific means	No Proposal	NIL	
6d	Compliance of Rehabilitation of waste land within lease (i)Afforestation	No Proposal	NIL	
	(ii) Area rehabilitated (ha) Method of rehabilitation	No Proposal	NIL	
	(iii) Method of rehabilitation	No Proposal	NIL	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Core Zone- Quarry, Haul road, Crusher plant Buffer Zone – Gonua Camp Guruda Camp	Core Zone- Quarry, Haul road, Crusher plant Buffer Zone – Gonua Camp Guruda Camp	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure			

7. Mineral Conservation:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	-55% Fe 55-58% Fe 58-60% Fe 60-62% Fe 62-65% Fe +65% Fe	-55% Fe 55-58% Fe 58-60% Fe 60-62% Fe 62-65% Fe +65% Fe	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	

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7c	Different grade of mineral sorted out at mines	-55% Fe 55-58% Fe 58-60% Fe 60-62% Fe 62-65% Fe +65% Fe	-55% Fe 55-58% Fe 58-60% Fe 60-62% Fe 62-65% Fe +65% Fe	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No proposal	Nil	

8. Environment:

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation on waste dump	293 nos planted	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No proposal	Nil	
8g	Survival rate		82%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			

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9. Compliance of Rule 45

S.N.	Item	Proposals for 2021-22	Actual work during 2021-22	Remarks
9a	Status of submission of Monthly and Annual returns	Submitted	M.R. Submitted in time A.R. submitted up to 2021-22	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Geologist -1 Manager -1	Found in order	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit – 6.5Ha Dump –1.138Ha Other Plant, Infrastructure and road - 10.497Ha Safety zone -1.29Ha	Found in order	
9d	Scrutiny of Annual return on Afforestation	250	293	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	<u>Closing stock</u> ROM - 14818.000 <u>Processed Ore</u> <u>Lump</u> +65% Fe - 24.260 62-65&% Fe - 6691.110 60-62&% Fe - 15.400 <u>Fines</u> +65% Fe - 5.522 62-65&% Fe - 54.940 60-62&% Fe - 29478.130 55-58&% Fe - 51.480 -55% Fe - 13.960	Details are provided	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost etc.	<u>Ex- Mine Price</u> <u>Lump</u> +65% Fe - 8267.82 62-65&% Fe - 10252.51 <u>Fines</u> 62-65&% Fe - 6935.02 60-62&% Fe - 5474.23 55-58&% Fe - 4599.66 production cost –Rs2857.09	Details are provided	

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9h	Scrutiny of Annual return on fixed assets	Rs. 64024322.00	Found in order	
9i	Scrutiny of Annual return on mining machineries	Excavator – 1.6 M ³ Excavator – 1.42 M ³ Wheel loader-1.8 M ³ Wheel loader-2.5 M ³ DTH Drill-110mm Tipper – 16tonne Tipper – 25tonne Water Tanker-9Kl Crusher plant – 120TPH Mobile Screening Plant - 250TPH	Details are provided	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance on
33 of MCDR, 2017	06.09.2022	14.12.2022			
48 of MCDR, 2017	06.09.2022	14.12.2022			
54 (C) of MCDR, 2017	06.09.2022	14.12.2022			

Date : 25.01.2023

(Rajani Kanta Rautaray)
INDIAN BUREAU OF MINES