### File No. MCDR-MCDRFMi280/2028BBS2BBBBQCBBBQCBBSputer No. 5487) MCDR INSPECTION REPORT 1/20720/2023

Name of the Mine: Tiringpahar Iron Ore mine, of M/s OMC Ltd, 300RI08098

Name of the Inspecting Officer: Shri Sanjay Kumar Mahapatra, ACOM

Name of the accompanying official: Sri Sri Jyotiranjan Mohapatra,, Mine Manager **Date of Inspection**: 08.11.2023.

S. N.	Particulars	Details
1N.	Name of the Mine	TIRINGPAHAR IRON ORE MINES
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Non Forest Land- 0.0 Forest Land- 79.3 Ha. Total- 79.30 Ha.
3 4	Minecode IBM Registration Number under rule 45 of MCDR, 1988	30ORI08098 IBM/4269/2011
5	Name of the lessee, Address, phone, email and fax number	M/s OMC Limited, OMC House, PO Box No-34, Bhubaneswar, 751001, Khorda.
6	Village	Dalpahad
7	Taluka/Mandal	Barbil
8	District	Keonjhar
9	Pincode	758034
10	State	Odisha
11	Post office	Khandabandh
12	Nearest police station	Bamebari
13	Nearest Railway station	Jaroli
14	Date of Grant of Mining Lease	26.06.1964
15	Date of Execution	24.08.1964
16	Date of opening of Mine	31.07.2020
17	Date of first Renewal, if applicable and its period & expiry	13.08.1993, 20 Years,
18	Date of second Renewal, if applicable and its period & expiry	23.07.2013, 20 Years
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri Balawanta Singh, IAS, MD, Address- OMC House, PO Box No-34, Bhubaneswar, 751001, Khorda, Email-
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Info@odishamining.in, Sri Abanikanta Pradhan, OMC Office, At/Po- Barbil, Ps- Barbil, Dist- Keonjhar, Odisha, 758035, Email-
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	apradhan@odishamining.in, Mob-9437431943 Sri Jyotiranjan Mohapatra, At/po- Khandabandh, Ps- Bamebari, Via- Joda, Dist- Keonjhar, Odisha,758034, Email-
	1	jyoti.mohapatra@odishamining.
m eOffice	by ASHOK KUMAR PANY, AME(AKP)-IBM RO BBS, ASSISTANT MINING	ENGINE 10 DB 048574157885D 02023 03:1

File	No. MCDR-MICTORFETITE 1807 202 28 B B S 2 13 B B B O B	BBRO(CoBS)puter No. 5487)
1/20720/2023 1/20720/2023	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri Pulack Ranjan Nayak, B.tech in Mining, At/po- Khandabandh, Ps- Bamebari, Via- Joda, Dist- Keonjhar, Odisha,758034, Email- pulack.nayak@odishamining.in , Mob- 8093038822, Total experience - 5 years, DOJ- 18.01.2022
24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri Rabindra Mohanty, Msc in geology, At/po- Barbil, Ps- Barbil, Dist- Keonjhar, Odisha,758035, Email- rmohanty@odishamining.in, Mob- 8658318645 DOJ-28.03.2023
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Modified Mining Plan approval Vide letter no ;- BBS/KJR/IRON/2178/MRMP /2022/ DATED-14.09.2022
26	Mineral(s) granted in lease and proved for mining	Iron Ore
27	Method of Mining(Opencast, Underground)	Open cast.
28	Category (Fully Mechanised, Others or Manual)	Fully Mechanized.

# Exploration

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Captive/Non Captive

S.N.	Item	Proposals for,2022-23	Actual work during 2022- 23	Remark
1a	Backlog of previous year	Nil	Nil	G1 level exploration 68.96 ha
1b	Exploration over lease area for Geological axis 1 or 2.	NIL	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	•
1e	Balance reserves as per latest approved document	21.34 Milion tonne as on 31.03.2023		Reserve as on 31.03.23 was 21.343 MT + resource 15.326 MT
1f	General remarks of inspecting officer on geology, exploration etc.	There was no prothe year 2022-23. G1 level of explor on 31.03.2023 is 3	Mineralized zone ation. Reserve +	e explored to Resource as

Non Captive.

# Development

S.N	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
2a	Location of development w.r.t. lease area	2429970N- 2430250N 332550E- 332750E	i- 2430050N- 2430250N 332350E- 332480E ii- 2430060N- 2430250N 332560E- 332630E	Deviation from the proposal for which violation of rule 11(1) of MCDR pointed.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No top Soil bench Ore & OB- 20	Ore & OB- 20	OB- 04 Mineral-06 OB & Mineral-10 Total= 20
2c	Stripping ratio or ore to OB ratio	1:1.20	1:1.03	Tonne per Cubic Meter
2d	Quantity of topsoil generation in m3	8500 M <sup>3</sup>	1000 M <sup>3</sup>	Deviation from proposal
2e	Quantity of overburden generation in m3	390476 M <sup>3</sup>	340605 M <sup>3</sup>	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	However Deviation in locat Less Top soil gen	within the propose ion of Developmen erated than propose ICDR 2017 pointed	nt observed. ed. Violation
DAZDI	OTTATION	= ==(=) 01 113	Former	-

### **EXPLOITATION**

N.	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	328000 T	328000 T	
3c	Recovery of salable/usable mineral from ROM production	79%	79%	Salable ore 259160 tonne
3d	Quantity of mineral reject generation	68880 T	68840 T	
3e	Grade of mineral reject generation and threshold value declared	+45-55 % Fe	+45-55 %Fe	
3f	Quantity of sub-grade mineral generation	68880 T	68840 T	
3g	Grade of sub-grade mineral generation	+45-55 %Fe	+45-55 %Fe	
3h	Manual / Mechanised method adopted for	Mechanized	Mechanized	
<b>7</b> ;	segregating from ROM	NA	Subgrade material	
3i	Any analysis or beneficiation study	NA 3	is being blended	
m eOffic	te by ASHOK KUMAR PANY, AME(AKP)-I	-	<u> </u>	RO BBS on 05/12/2023

File 1/20720/2023 1/20720/2023	No. MCDR-M任D <b>RF</b> 型沪型80 proposed & carried out for sub-grade mineral and	17210228BBS21331	81 <u>8.08</u> 181 <u>8</u> 8.0( <u>C</u> 76)16:	Sputer No. 5487)
3 <u>j</u>	reject Provision of drilling & blasting in mineral benches	Blast holes of 115 mm diameter in both Ore & OB benches	It is being carried out.	
3k	Provision of mining machineries in mineral benches	Excavator & loading- 07 Dozer- 02 Drilling Machine- 01 Dumper -12	Excavator & loading- 06 Dozer- 01 Drilling Machine- 01 Dumper-12	
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Ht-6 m width- 10 Meter	Ht-6 m width- 10 Meter	Height of bench-6 mt and width- 10 Meter
3m	Total area covered under excavation/pits	16.0 Ha	14.0 Ha	
3n	Ore to OB ratio ( Ton per CUM) for the pit/mine during the year	1:1.20	1:1.03	
30	Total area put in use under different heads at the end of year	Mining-16.0 Ha OB Dump- 14.10 Ha Infrastructure -4.78 Ha Road-2.60 Top soil dump- 0.10Ha Mineral storage- 5.17ha	Mining-14.0 Ha OB Dump- 13.78 Ha Infrastructure - 4.78 Ha Road-2.60 Top soil dump- 0.10Ha Mineral storage- 5.17ha	•
Зр	Production of ROM mineral during last six-year period, as applicable 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23	2017-18- 3,28,000 T 2018-19- 3,28,000 T 2019-20- 3,28,000 T 2020-21- 3,28,000 T 2021-22- 3,28,000 T 2022-23- 3,28,000 T	2017-18- NIL 2018-19- NIL 2019-20- NIL 2020-21-128160 T 2021-22-3,28,000 T 2022-23-3,28,000 T 2023-24 – 238700 T (31.10.2023)	
3q	General remarks of inspecting officer on method of	Mining operation behind in developer proposed. Violation	n was commenced from the property of the was commenced from the property of the was commented from the was commenced from the was commenc	under mining than

1/20720/2023 <sup>S.N</sup>	No. MCDR- <b>MŒD&amp;FEV:1280/1210.2</b> Item	238 <b>B BS2 B BB B</b> Proposals for, 2022-23	OBMBRQCBBS Actual work during 2022-	outer No. 5487) Remark
1/20720/2023		2022 25	23	
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Topsoil- 0.10 OB Dump- 8.2 Ha Mineral Storage - 5.17 Ha	Top Soil- 0.10 Ha OB Dump- 7.88 Ha Mineral Storage- 5.17 Ha	Within the proposed area .
4b	Location of topsoil, OB & mineral reject dumps	Top Soil- Nil OB Dump- 2429710N- 2430260N, 332850E- 333220E	Top Soil- 2429747N- 2429810N, 333050E- 333126E OB Dump- 2429800N- 2430260N, 332900E- 333120E	Within the proposed area
<b>4</b> c	Number of dumps within lease area and outside lease area	Within Lease Area- 01 Outside Lease Area -Nil	Within Lease Area- 01 Outside Lease Area -Nil	
4d	Location of dumps w.r.t. ultimate pit limit			The dump is within the ultimate Pit limit.
4e	Number of active & alive dumps	1	1	
4f	Number of dead dumps	0	0	
4g	Number of dumps stabilized	0	0	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	No garland drain observed.	Violation of rule 37(2) of MCDR pointed.
4i	Length of Retaining wall or garland drain all along dump	Retaining Wall- 673 Mtr Garland Drain- 673 Mtr	Retaining Wall-673 Garland Drain- 0	No garland drain constructed.
4j	Number of settling ponds	0	8	8 nos of settling pond has been constructed during the year 2022-23.
4k	Specific comments of inspecting officer on waste dump management	re-handled for b quarry from one		Pit limit. It will be exhaustion of the drain observed.

# Solid Waste management-Backfilling

S.N	Item	Proposals for,	Actual work	Remark
•		2022-23	during 2022-	
			23	
5a	Status on part or full extraction	NA	NA	
	of mineral from mined out area			
	before starting backfilling			
5b	Area under backfilling of mined	<sub>5</sub> NA	NA	

File 1/20720/2023 <sup>5c</sup>	No. MCDR-MCDRFE/1/2807216/2 Concurrent use of topsoil for	2812 <b>12:5</b> 2 113 12:13 1	<b>B_RO(CB)BS</b> put NA	er No.	5487)
/20720/2023	restoration or rehabilitation of mined out area (Rule 36)				
5d	Total area fully reclaimed & rehabilitated	NA	NA		
5e	General remarks of inspecting officer on backfilling, reclamation etc	Mining operation was thus this is a new mir is concerned. Hence filling and there is no	ne with respect to no area is mature	o the exca d for bac	vation k

# **Progressive Mine Closure Plan**

Prog	Progressive Mine Closure Plan					
N. 6a	Item  Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	Proposals for, 2022-23	Actual work during 2022-23 Annual report on PMCP submitted along with Annual return.	Remark		
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	i) Area available for rehabilitation (ha)-NA ii) Afforestation done (ha)- 0.25HA iii) No. of saplings planted during the year- 625 iv) Cumulative no. of plants-NA v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	i) Area available for rehabilitation (ha)-NA ii) Afforestation done (ha)-0.25 iii) No. of saplings planted during the year- 1000 iv) Cumulative no. of plants - 3000			
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	NA	NA			

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I/20720/2023 I/20720/2023

i) Afforestation

ii) Area rehabilitated (ha)

iii) Method of rehabilitation

6e Compliance of Yes Yes
Environmental monitoring (Core & buffer zone)

(core zone & buffer zone)

(core & buffer Zone)

6f General remarks of inspecting officer on PMCP compliance & progressive closure operations

Area is not matured for reclamation and rehabilitation. During inspection the Plantation as carried out by the lessee was found to be satisfactory. Environmental reports checked and found that all parameters within limit.

### **Mineral Conservation**

S.N.	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes, grade- wise sorting within lease area	Grade-wise sorting within lease area being practiced.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines		Fines-60-62% Fe Fines-62-65 % Fe CLO-10x40mm- 62-65%fe	
7d	Any beneficiation process at mines	NA	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues		nat, at Tiringpahar iro iron ore is being disp	

### **Environment**

S.N.	Item	Proposals for, 2022-23	Actual work during 2022- 23	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	8500 M <sup>3</sup>	1000 M <sup>3</sup>	Less production of Top soil than proposed. Violation of rule 11(1) of MVCDR 2017 pointed.
8b	Concurrent use or storage of topsoil	Use of Top soil- 4000-M <sup>3</sup> storage of topsoil- 4500M <sup>3</sup>	Use - 1000M <sup>3</sup> storage of topsoil- NIL	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	O.B- 390476 M <sup>3</sup> 7	O.B- 340605 M <sup>3</sup> Waste	
m eOffice hy	TEJECTS AND THIES (KUIE 3/)	Waste Rock-		RRS on 05/12/2023 03

File	No. MCDR-MCFDGFET/12/80/12/80	D238B <b>BG</b> 2BB <u>BB</u> RO	D <u>B</u> MBŖQŒDBSputer No. 548	7
17 LOT LOT LOLD				
1/20720/2023 <sup>8d</sup>	Use of overburden, waste	NA	NA	
1, 20. 20, 2020	rock, rejects and fines			
	dumps for restoring the			
	land to its original use			
8e	Phased restoration,	NA	NA	
	reclamation and			
	rehabilitation of lands			
	affected by mining			
	operations (Pits, dumps			
	etc)			
8f	Baseline information on		Survival	
01				
	existence of plantation &		rate is 70%	
0.1	additional Plantation done			
8h	Water sprinkling on roads		It is being	
	to control airborne dust		carried out	
			by 1 no of	
			Water	
			Tanker.	
8i	General remarks of	The mine is ODF free and general aesthetic beauty		
	inspecting officer on	has been maintained.		
	aesthetic beauty in and			
	around mines area			
	around minics area			

# **Compliance of Rule 45**

S.N	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up		AR submitted on 28.06.2023. MR for the month of Septembers 2023 submitted on 09.10.2023.
S.N	Item	Details given in A.R. for the year 2022-23	Observation of I/ Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri Jagannath Patra, Manger Shri Pulak Ranjan Nayak, Mining Engg- Shri Rabindra Mohanty, Geologist	As per AR Shri Jag the Manager and or inspection Sri Jyotin Mines Manager was Patra Superannuated Notice of termination has been submitted. Nayak, Mining Engg & Shr Mohanty, Geologist were presinspection.	n the date of ranjan Mohapatra present as Shri from Service. n and appointment Shri Pulak Ranjan ri Rabindra
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Pit- 14 ha, Dump- 13.78, Plant5 building & infra, Road etc- 12.55 ha, Top Soil Stacking – 0.1 Ha 8	As per Annual Retu	ırn.

File 1/20720/2023 1/20720/2023 <sup>9e</sup>	Scrutiny of Annual return on mineral reject generation (Grade &	<b>180/P10.238B B\$21B B</b> planted 68840 tonne 52.3 % Fe	MBBOBMBBQ(CBBSputer No. 5487) 70% 68840 tonne
9f	quantity) Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock- Nil Production - 328000 Tonne Closing stock- nil	Opening Stock- Nil Production -328000 Tonne Closing stock- nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of Production Rs 3584.75.  Ex-Mine price- Fines- 60% to 62 % Fe- Rs 4134.15 Fines- 62% to 65% Fe- Rs 5079.00 CLO: 62% to 65 % Fe Rs 8171.58  Sale value: 60% to 62 % Fe- Rs 4134.15 Fines- 62% to 65% Fe- Rs 5079.00 CLO: 62% to 65 % Fe- Rs 5079.00 CLO: 62% to 65 % Fe Rs 8171.58	As per Annual Return.
9i	Scrutiny of Annual return on fixed assets	Fixed Asset value Rs 165324478	As per Annual Return.
9k	Scrutiny of Annual return on mining machineries	Back Hoe- 1.6 CUM – 3 nos, Dumper 25T-7, Dumper 30 T-5, Dozer-1, wheel Loader-01, Water tanker-01	Deployed in the mines.

10. Drone Survey Information and data thereof:- Submitted on dated 13.06.2023