MCDR-MiFLOFE/45/2023-BBS-IBM_RO_BBS INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

	Mine f	file No : ORI/IRON-BX1	./SI	JG/MCDR-2/BBS	Mine code : 300RI13023
	(i)	Name of the Inspecting Officer and ID No.	:	VÝD) VIKRAM DESHPA	NDE
	(ii)	Designation	:	Assistant Controller M	ine
	(iii)	Accompaning mine Official with Designation	:	S/Shri A.S. Mahaptra,	Agent, Abhijeet Sen, AVP(Geolog
	(iv)	Date of Inspection	:	07/07/2023	
	(v)	Prev.inspection date	:	20/07/2022	
		PAI	RT-	I : GENERAL INFORMATI	ON
1.	(a)	Mine Name	:	SAN INDPUR	
	(b)	Registration NO.	:	IBM/4585/2011	
	(c) (d) (e)	Category Type of Working Postal address State District Village Taluka Post office Pin Code FAX No. E-mail Phone Police Station	:::::::::::::::::::::::::::::::::::::::	A Mechanised Opencast ORISSA SUNDARGARH SAN INDUPUR BONAI PATAMUNDA 06767-276161 rungtas@rungtamines.cd 09437077202 Koira	Sm
	(g)	First opening date	:	01/08/1989	
2.	(h) Addre corre	Weekly day of rest ess for espondance	:	SAT SANINDPUR IRON &BUXITE VILL-SAINDPUR.PO-PATMU DIST-SUNDERGARH	MINES NDA
3.	(a) (b) (c) (d)	Lease Number Lease area Period of lease Date of Expiry	::	ORI0147 147.1 50 05/09/2035	
4.	Miner	ral worked	:	BAUXITE IRON ORE	Associated Main

l/13779/2023

5. Nam	e and Address of	the		
	Lessee	:	M/s Rungta Sons (P) Ltd Rungta House P.O. Chaisabasa SINGHBHUM (WEST) JHARKHAND Phone:(06582) 56861/56761 FAX :91 6582 56442	
	Owner	:	Hirak Muzuandar Nominated owner Rungta Office, main Road, BARBIL AT/PO- BARBIL, DIST- KEONJHAR SUNDARGARH ORISSA Phone: FAX :	
	Agent	:	A. S. Mahapatra Rungta office, Main Road Barbil Disr-Keonjhar KEONJHAR ORISSA Phone: 06767-276441 FAX : 06767-275481	
	Mining Enginee	er		
	Name Qualification Appointment/	: : :	Laxkhan Saw,Full Time AMIE (Mining) 14/04/2014	
	Termination da	ite		
	Geologist Name Qualification Appointment/ Termination da	: : : ite	D.K.Naik,Full Time MSc (Geology) 01/11/2015	
	Manager			
	Name Qualification Appointment/ Termination da	: : ite	Anil Kumar Choudhary AMIE	
6. Dat Pla	e of approval of n/Scheme of Minir	Mini	Ing : Mining Scheme rule 12 MCDR1988 09/06 Renewal under rule 24 MCR1960 14/03 Modif.of approved Mining Plan 25/03 Mining Scheme rule 12 MCDR1988 28/09 Modif.approved Mining Scheme 31/07 FMCP under 23C(1) 20/03 Mining Scheme rule 12 MCDR1988 26/03 MP modif under 17(3) MCR 2016 27/13 MP modif under 17(3) MCR 2016 18/07 MP review under 17(1) MCR 2016 14/13 MS modif under MCR 1960 01/10 Modif.approved Mining Scheme 09/04 MP review under 17(1) MCR 2016 24/08	5/2003 3/2006 2/2010 5/2010 7/2013 L/2015 2/2015 2/2016 7/2018 L/2019 0/2020 4/2021 8/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
la	Backlog of previous year	No Proposals	5 nos of core & 36 nos of non core boreholes holes are done .	
1b	Exploration over lease area for geological axis 1 or 2	G1-147.10Ha G2-Nil G3-Nil	G1-147.10Ha G2-Nil G3-Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year		M/s Geotech India (P) Ltd. M/s Gems project M/s Geo Exploration India(P)Ltd. M/s VKS Mining & Services. Total Expenditure- Rs.33,03,775.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	None	
1e	Balance reserve as on 01/04/20	As per the Mod of RMP approved on 24.08.2022 the reserve as on 01.06.2022 is 12,29,18,700. 6 & remaining resources 2,95,87,721.4 Total Resources are 15,25,06,422M T	As per the annual return the reserve as on 01.04.2023 is 11,80,44,724.06 & remaining resources 2,95,87,721.40 Total Resources are 14,76,32,445.46 MT	The reserve is updated after depletion of due to production of ore.

1f General remarks of inspecting officers on geology, exploration etc The Sanindpur Iron ore deposit forms a part of precambrian sedimentary formation known as the Iron-ore series developed in Singhbhum-Keonjhar-Bonai area. The general strike of the formation in Northern Singhbhum is NNE-SSW, but gradually changing over to NW-SE in the eastern part and in the adjoining area of Mayurbhanj. All Mineralized zone has been explored in G1 level.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	E324418.62, N2426101.58 to E325258.59, N2425697.70 and E324916.64, N2426233.44 to E324880.33, N2425967.7	E324926.70, N2426233.04 to E324891.81, N2425395.08 and E324441, N2426083.41 to E325259.09, N2425868.84	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, proposed in Mineral and OB	As per proposal	
2c	Stripping ratio or ore to OB ratio	1:0.11	1:0.10	
2d	Quantity of topsoil generation in m3	Nil	None	

2e Quantity of 1022424.865 847530 overburden generation in m3

2f General remarks of inspecting officers on development of pit w.r.t. type of deposit etc In all there is 01 pit within the lease wherein all Mining is confined to viz. C-Top Quarry. Benches have height of 6m to 9 m and 10m to 20m width.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	C-Top Quarry
3b	Quantity of ROM mineral production proposed	100,00,000MT	69,91,495.518 MT	
3с	Recovery of sailable/usable mineral from ROM production	92,11,752 MT	69,91,495.518 MT	
3d	Quantity of mineral reject generation	7,88,248 MT	None	No mineral reject generated, as the ROM is an admixute of High grade & low grade ore and due to mechanized mining operation, the ROM & mineral reject is produced as a blended Iron ore.
3e	Grade of mineral rejects generation and threshold value declared.	45%-58% Fe	45%-58% Fe	
3f	Quantity of sub grade mineral generation.	7,88,248 MT	None	

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3g	Grade of sub grade mineral generation	45%-58% Fe	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Two sets of wet beneficiation plants of 250tph throughout capacity each (total 500tph capacity) are proposed to install within the ML area.	One set of wet benefication plant of 250 tph has been running. Installation of another set of benefication plant of 250 tph is under process.
3ј	Provision of drilling and blasting in mineral benches	Yes, provision made.	Controlled blasting technique with depth 10m, spacing 3 m & burden 2.5m has been adopted. The rock breakers have been used for breaking of large boulders to avoid secondary blasting.
3k	Provision of mining machineries in mineral benches	Yes, provision made.	The width of mineral benches are kept at 9- 20m for movement of mining machineries.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of mineral/OB benches are proposed to keep adequate (Maximum 9m) for mining.	The height of mineral/OB benches are kept 9m for mining.
3m	Total area covered under excavation/pits	51.85 На	48.966На
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.10

30	Total area put in use under different heads at the end of year	119.97 На	113.011 На	
3p	Production of ROM mineral during the last five year period as applicable	Year- 2018-19- 70,00,000 tonne Year- 2019-20- 70,00,000 tonne Year- 2020-21- 70,00,000 tonne Year- 2021-22- 120,00,000 tonne Year-2022-23- 100,00,000 tonne	Year- 2018-19- 28,49,441.99 tonne Year- 2019-20- 49,08,982.360 tonne Year- 2020-21- 57,51,318.722 tonne Year- 2021-22- 69,98,567.170 tonne Year-2022-23- 69,91,495.518 tonne	
3q	General remarks of inspecting officers on method of mining etc.			The mining method adopted is opencast method by shovel-dumper combination and is same as proposed.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes, in OB, mineral reject and top soil.	As per proposal	

4b Location of Location of Location of top soil E324048.78N242559.49 topsoil, OB and top soil E323960.50N242 To E324031.24N2425523.20 mineral reject dumps 5555.87 E324008.26N2425537.84 То To E324061.83N2425584.60 E324009.90N242 5503.75 Location of OB E323951.45N242 dumps(Dump-D) 5542.25 E323615.33N2426164.90 To E323414.75N2425925.34 То E324018.86N242 E323283.36N2426078.32 To E323659.31N2426129.95 5517.35 Location of OB Location of mineral dumps(Dump-D) reject dumps(Dump-B) E323544.42N242 E324349.21N2425922.16 6174.79 To E324363.16N2425575.24 То E324159.40N2425679.71 E323400.38N242 To E324550.92N2425636.63 5913.71 E323283.06N242 6087.75 То E323673.61N242 6157.49 Location of mineral reject dumps(Dump-B) E324367.19N242 5937.04 То E324362.91N242 5575.32 E324159.40N242 5679.71 То E324528.42N242 5627.28 4c Number of dumps 03 02 within lease area and outside of lease area

2 nos of Dumps (Dump-B & Dump-D) are present. The proposed Dump-E couldn't be started due to want of tree felling permission from Forest Dept. MCDR-MiFLOFE/45/2023-BBS-IBM_RO_BBS

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4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	Outside UPL	
4e	Number of active and alive dumps.	02	01	(Dump-D),the proposed Dump-E couldn't be started due to want of tree felling permission from Forest Dept.
4f	Number of dead dumps.	01	01	Dump-B
4g	Number of dumps established.	Nil	None	
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall-1212 m X 1.5 m X 1.0 m Garland drain- 1200 m X 1.0 m X 1.0 m	Retaining wall-1492 m X 1.5 m X 1.0 m Garland drain-1200 m X 1.0 m X 1.0 m	
4j	Number of settling ponds	02	01	(At the Toe of Dump-D). The proposed settling pond at the toe of Dump-E couldn't be

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started due to want of tree

felling permission from Forest Dept. 4k

Specific comments of inspecting officer on waste dump management Dump 'E' the terraces were not properly maintained to the extent that heaps of material was found dumped over the terraces without properly levelling it. Also, in Dump 'D' it is observed that the terraces has not been done prepared all along the periphery of the dump. Violation of rule 37(5) has been pointed to the lessee on 11/07/2023.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No Proposal	None	
5b	Area under backfilling of mined out area	No Proposal	None	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	None	
5d	Total area fully reclaimed and rehabilitated	No Proposal	None	

5e	General remarks	No area is matured
	of inspecting	for reclaimed &
	officers on	rehabilitation
	backfilling and	hence no such
	reclamation etc.	proposal.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes, Submitted	
6b	Area available for rehabilitation (ha) .	3.0 ha	3.0 ha	
бс	afforestation done (ha).	3.0 ha	3.0 ha	
6d	No. of saplings planted during the year	10000	15000	
бе	Cumulative no .of plants	233222	253222	
6f	Any other method of rehabilitation	No Proposal	None	
бg	Cost incurred on watch and care during the year	10 lakh	11.55 lakh	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal	None	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	None	

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	No Proposal	None
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	None
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	None
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No Proposal	None
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No Proposal	None
бр	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly environmental monitoring	Regular monitoring the environmental parameters is being done.

6q General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.

The retaining wall and garland drain are well maintained along the dumps. The area is not matured for backfilling hence no such proposal has been made. The lessee carried out adequate plantation in the area. The lessee is regularly monitoring the environmental parameters.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	92,11,752 MT(+58% Fe) 7,88,248 MT (45-58% Fe)	CLO:- (a) Below 62% Fe (CLO any size)- 508827.771 MT (b) 62% to below 65%Fe (5-18 mm size CLO)- 932446.10 MT (c) 62% to below 65%(10- 40 mm size CLO)- 406290.527 MT (d) 62% to below 65% Fe (CLO others)-0.000 (e) 65% and above Fe(5-18mm size CLO)-45084.980 MT (f) 65% and above Fe (10-40 mm size CLO)- 33468.050 MT Fines:- (b) 51% to below 55% Fe-5335.170 MT (c) 55% to below 58% Fe- 1049136.586 MT (d) 58% to below 60% Fe- 8932.950MT (e) 60% to below 62% Fe- 2263576.089 MT (f)	

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical
7c	Different grade of mineral sorted out at mines.	92,11,752 MT (+58% Fe) 7,88,248 MT (45-58% Fe)	CLO:- (a) Below 62% Fe (CLO any size)- 508827.771 MT (b) 62% to below 65%Fe (5-18 mm size CLO)- 932446.10 MT (c) 62% to below 65%(10- 40 mm size CLO)- 406290.527 MT (d) 62% to below 65% Fe (CLO others)-0.000 (e) 65% and above Fe(5-18mm size CLO)-45084.980 MT (f) 65% and above Fe (10-40 mm size CLO)- 33468.050 MT Fines:- (b) 51% to below 55% Fe-5335.170 MT (c) 55% to below 58% Fe- 1049136.586 MT (d) 58% to below 60% Fe- 8932.950MT (e) 60% to below 62% Fe- 2263576.089 MT (f)
7d	Any beneficiation process at mines	Yes	A beneficiation Plant of 250TPH is in operation.

7e

General remarks of inspecting officer on Mineral conservation and beneficiation issues

A beneficiation Plant of 250TPH is in operation within the lease. The grade-wise material is transported via trucks to the Banaspani Railway siding and other places. For export purpose the material is transported to Paradip and Vizag Ports.

Environment:

Sl.No.	Item	Propasals	Actual	work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	None		
8b	Concurrent use or storage of topsoil	No Proposal	None		
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden and low grade stacks.	As per	proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB to be stacked in dumps which will be utilized for backfilling in future.	OB are dump-D will be back f:	stacked now in & dump-E, which e utilized for illing in future.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	None	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Total 10000 nos of plantation are proposed to be done.	Total 15000 nos of plantation has been done.	
8g	Survival rate	90%	90%	
8h	Water sprinkling on roads to control airborne dust	For dust suppression use of mobile water tanker are proposed.	3.2 km length of fixed water sprinklers and Nine nos of water tanker of 12 KL Two nos of water tanker of 18 KL has already been deployed to control dust on haul road.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The lessee has carried out plantation in the safety zone. For dust suppression regular water sprinkling is being done. Due to these efforts there is no adverse impact on the aesthetic beauty in and around the mines is observed.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of		The annual return is	
	submission of		submitted on 26.06.2023.	
	Monthly and		And monthly return is	
	Annual returns		submitted on 06.06.2023	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Mr Anil Choudhury (Mines Manager) Mr.Manoj Kumar Manaw (Mining engineer) Mr Dillip Kumar Naik (Geologist)
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area Covered under current(O/C) workings:48.96 6Ha Waste disposal:15.59 5Ha Occupied by plant, buildings, residential, welfare building sand Roads:23.479Ha Green Belt:5.503Ha Mineral Storage:10.807 Ha Tailing Pond & Beneficiation Plant:8.491Ha Storage of top Soil:0.140Ha RWH:0.030Ha	Area Covered under current(O/C) workings:48.966Ha Waste disposal:15.595Ha Occupied by plant,buildings,resident ial,welfare building sand roads:23.479Ha Green Belt:5.503Ha Mineral Storage:10.807Ha Tailing Pond & Beneficiation Plant:8.491Ha Storage of top Soil:0.140Ha RWH:0.030Ha
9d	Scrutiny of Annual return on afforestation		15000 nos. of plantation has been done.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	213945.243	213945.243

Scrutiny of Ex. Mine price Ex. Mine price :-9g Annual return on :-CLO:sale value, Ex. CLO:-(a) Below 62% Fe (CLO Mine price and (a) Below 62% any size) 5150.30MT production cost Fe (CLO any (b) 62% to below 65%Fe size) (5-18 mm size CLO) 5150.30MT 5926.66MT (b) 62% to (c) 62% to below 65%(10below 65%Fe 40 mm size CLO) (5-18 mm size 5530.13MT CLO) (d) 65% and above 5926.66MT (c) 62% to Fe(5-18mm size below 65%(10-CLO)-4952.02MT 40 mm size (e) 65% and above Fe CLO) (10-40 mm size CLO) 5530.13MT 5331.00 MT (d) 65% Fines:-(b) 51% to below 55% Fe and above Fe(5- 2788.97 MT 18mm size (c) 55% to below 58% Fe CLO)-3191.46 MT 4952.02MT (d) 58% to below 60% Fe (e) 65% and 1563.57 MT above Fe (10- (e) 60% to below 62% Fe 2998.12 MT 40 mm size CLO) 5331.00 MT (f) 62% to below 65% Fe Fines:-4058.16 MT (b) 51% to (g) 65% and above F below 55% Fe 2788.97 MT (c) 55% to below 58% Fe 3191.46 MT (d) 58% to below 60% Fe 1563.57 MT (e) 60% to below 62% Fe 2998.12 MT (f) 62% to below 65% Fe 4058.16 MT (q) 65% and above F 9h Scrutiny of 1385503780.00 Annual return on fixed assets

9k Scrutiny of Annual return on mining machineries

Excavator 37 Hyd.Excav. with Rock Breaker 6 Bull Dozer 4 Motor Grader 1 Soil Compactor- 1 Pay Loader 29 Scania 11 Bharat Benz 21 TATA Prima 8 Man 5 Bobcat S-250 1 Drill machine 2 Crusher Plant(PT) 8 Screen Plant 17 Weigh Bridge 10 Geneartor 3 Tractor Compressor 1

Details of violations observed during current inspection and compliance position of violation pointed out						
Violatior	Violation observed Show couse position					
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on		
MCDR17 Rule 31(4)	11/07/2023					
MCDR17 Rule 37(5)	11/07/2023					
Rule 45(5)	11/07/2023					

Date :

(VIKRAM DESHPANDE)

Indian Bureau of Mines