

**MCDR INSPECTION REPORT
BHUBANESWAR REGIONAL OFFICE**

MINE CODE: 30ORI08122

Part-I: General

1) Name of Inspecting officer:	Shri Rajesh Kumar Das	
2) Designation	Deputy Controller of Mines	
3) Accompanying mine official with designation	Shri Govind Chandra Bhoi(Mine Manager) & Shri C.B.Das, QP	
4) Date of Inspection	13/12/2024	
SL. No.	Particulars	Details
1	Name of the Mine	Jururi Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	73.413 Ha. (Forest Area-67.437 Ha., Non- Forest 5.976 Ha.)
3	Mine code	30ORI08122
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/23090/2020
5	Name of the lessee, Address, phone, email and fax number	M/s. Jagat Janani Services Private Limited. At-Nambira, PO-Bamebari, Dist-Keonjhar, PIN -758034, Odisha, Mob-8599057844, E-mail- sanatanmahakud485@gmail.com
6	Village	Jalahari
7	Taluka/Mandal	Barbil
8	District	Keonjhar
9	Pincode	758034
10	State	Odisha
11	Post office	Jajang
12	Nearest police station	Joda
13	Nearest Railway station	Jaroli
14	Date of Grant of Mining Lease	18-03-2020
15	Date of Execution	04-07-2020
16	Date of opening of Mine	16-08-2020
17	Date of expiry	03-07-2070
18	Name of the Nominated Owner with	SANATAN MAHAKUD

	Address, phone, email, fax number and date of appointment	AT-NAMBIRA,P.O-BAMEBARI, DIST-KEONJHAR-758034,ODISHA, Mob - 8599057844
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	BISWAMITRA MAHAKUD AT-NAMBIRA,PO-BAMEBARI, DIST-KEONJHAR-758034, ODISHA, Mob - 8599057844 Date of Appointment-01/08/2020
20	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	GOVINDA CHANDRA BHOI JURURI IRON ORE BLOCK AT-JALAHARI, P.O-JAJANG, VIA- JODA, DIST-KEONJHAR, PIN-758034, ODISHA, Mob - 9437451971 Date of Appointment-01/09/2021
21	Name of the Mining Engineer, Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	GOVINDA CHANDRA BHOI Degree (Mining) FCC (Metal) JURURI IRON ORE BLOCK AT-JALAHARI, PO-JAJANG, VIA- JODA DIST-KEONJHAR, PIN-758034, ODISHA, Mob - 9437451971 Date of Appointment-20/01/2021
22	Name of the Geologist, Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	B.N. MOHANTY JURURI IRON ORE BLOCK AT-JALAHARI, PO-JAJANG, VIA- JODA DIST-KEONJHAR, PIN-758034, ODISHA, Mob -7008741494 Date of Appointment-07/11/2020
23	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	MP/A/28-ORI/BHU/2020-21/2249, Dated-03-12-2020
24	Mineral (s) granted in lease and proved for mining	IRON
25	Method of Mining(Open cast, Underground)	Open cast
26	Category (Fully Mechanised, Others or Manual)	OTFM
27	Captive/Non Captive	Non captive

Exploration: ---

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposal	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	No Proposal	Nil	
1e	Balance reserves as per approved Mining Plan dated 03.12.2020	<u>As on 31.10.2020</u> Reserve-2.97 MT Resources- 0.62 MT	<u>As on 31.03.2024</u> Reserve-2.316 MT Resources- 0.62MT	
1f	General remarks of inspecting officer on geology, exploration etc.	The local stratigraphy of the Joruri Iron ore mine as per the observation from the existing mine faces is as follows. Soil and Alluvium Float Iron ore and laterite Iron ore(Soft Laminated Iron ore, Lateritic Iron ore) Banded Iron ore Formation Basic rock Litho-Units of the area are described below. a)Soil & Alluvium. In the Top pit, the strike of the ore body/ host rock is NE-SW dipping at an angle of 35 to 55 degree due East and in the Tata pit the strike of the ore body is NE-SW dipping due east at angle of 32 to 45degree.The lease area broadly explored in G1.		

Development:--

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
2a	Location of development w.r.t. lease area	Top Pit & Tata Pit 2428766N to 2428888N 335343E to 336227E	Work in Top Pit & Tata Pit has been carried out broadly within the approved limit.	
2b	Separate benches in topsoil, overburden and mineral	Top soil bench: Nil Top Pit Overburden bench: 3 Mineral bench :2 Tata Pit Overburden bench: 2 Mineral bench :2	Top soil bench: Nil Top Pit Overburden bench: 3 Mineral bench :2 Tata Pit OB bench: 2 Mineral bench :2	
2c	Stripping ratio or ore to OB ratio	1:0.15 T/cum	1:0.32 T/cum	
2d	Quantity of topsoil generation in m3	No proposal	NIL	
2e	Quantity of overburden generation in m3	122200	68698	Less mineral production due to less demand and caused less overburden generation

2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	During mine visit it was observed that that bench parameters are not as per proposal. The benches not developed as per proposal. The maximum height of bench was proposed 6.0 meter and minimum width 6 meter but bench height in many places in both the pits(Top pit between BP-I to BP-J,BP-K1 to BP-J & Tata pit between BP-K3 to BP-L2) 15-20 meter(benches collapsed) and width also less than proposal.
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Exploitation:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	Two	Two	
3b	Quantity of ROM mineral production proposed	515987	210900	Due to lack of area as the materials of the previous lessee are yet to be shifted from nearby proposed quarry and less demand.
3c	Recovery of salable/usable mineral from ROM production	394419 Tonnes	52110 Tonnes	
3d	Quantity of mineral reject generation	121568 Tonnes	158790 Tonnes	
3e	Grade of mineral reject generation and threshold value declared	45% FE TO -55% FE	45% TO -55 % FE	
3f	Quantity of sub-grade mineral generation	121568	158790	
3g	Grade of sub-grade mineral generation	45% FE TO -55% FE	45% TO -55 % FE	
3h	Manual / Mechanized method adopted for segregating from ROM	MECHANICAL	MECHANICAL	
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	Controlled Blasting (Deep Hole Blasting)	Drilling & Blasting are being carried out as per approved	

			proposal	
3k	Provision of mining machineries in mineral benches	Dumper-10 Drill Machine-3 Excavator-5 MobileCrusher-1 Mobile screen-1 Loader-3 Water Tanker-3	Dumper-6 Drill Machine-1 Excavator-3 MobileCrusher-1 Mobile screen-1 Loader-2 Water Tanker-2	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The height of benches are proposed to be maintained as 10m.	More or less as per approved proposal	
3m	Total area covered under excavation/pits	2.197 Ha	1.680 Ha	
3n	Ore to OB ratio for the pit/ mine during the year	1:0.21	1:0.32	
3o	Total area put in use under different heads at the end of year	Mining -2.19 ha OB Dump - 1.952 Mineral Storage- 0.374 MSP Infra & Others- 2.131	Mining -1.68 ha OB Dump - 0.645 Mineral Storage-0.3 MSP Infra & Others- 1.480	
3p	Production of ROM mineral during last four-year period, as applicable (t) 2020-21 2021-22 2022-23 2023-24	 700263 1000200 600218 515987	 71690.00 214683.920 156310.000 210900.000	
3q	General remarks of inspecting officer on method of Mining	The method of mining is by opencast method by using HEMM and deep hole drilling and blasting. The mining activity by fully mechanized method with shovel and dumper combination.		

Solid Waste Management-Dumping: --

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	TS-NIL OB-122200 cum Mineral reject- 121568 t	Nil OB-68698 t Mineral reject- 158790.000 t	
4b	Location of topsoil, OB & mineral reject dumps	TS- NIL Mineral Reject-	NIL Mineral reject-	

		2429197N to 2429267 336508E to 336562E OB- 2429158N to 2429266N & 335955E to 336081E	2429197N to 2429267 336508E to 336562E OB-2429158N to 2429266N & 335955E to 336081E	
4c	Number of dumps within lease area and outside lease area	Within lease area: 2 Outside lease area: NIL	Within lease area: 1 Outside lease area: NIL	
4d	Location of dumps w.r.t. ultimate pit limit	2429158N to 2429266N & 335955E to 336081E	2429158N to 2429266N & 335955E to 336081E	
4e	Number of active & alive dumps	2	1	
4f	Number of dead dumps	2	2	
4g	Number of dumps stabilised	2	2	
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	No proposal	Nil	
4j	Number of settling ponds	NIL	3	
4k	Specific comments of inspecting officer on waste dump	The dumping was not done as per proposal in 2023-24. The dumping was proposed in flat area between BP-G1 and existing backfilled/waste dump area in northern side of ML.		

Solid Waste Management-Backfilling:--

SL.No	Item	Proposals (FY 2023-24)	Actual work	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	No proposal	Nil	

5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposal of backfilling.		

Progressive Mine Closure Plan: ---

SL. N.	Item	Proposals (FY 2023-24)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	Yes	Submitted in time	
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	No proposal 0.291 Ha. 466 1457 --	Nil 0.3 Ha. 500 2100 35,000/-	
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	No proposal	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation	466	500	

	ii) Area rehabilitated (ha) iii) Method of rehabilitation	0.29 By plantation	0.3 By plantation	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring in Core zone and buffer zone will be as per MOEF& CC and SPCB guidelines.	Environmental monitoring in Core zone and buffer zone was carried out as per the proposals and parameters are within the limit.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Broadly as per proposal.		

Mineral Conservation: ---

SL. No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area.	As per approved proposal	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	(45 to 55) & +55 % Fe	(45 to 55) & +55 % Fe	
7d	Any beneficiation process at mines	No Proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The blending of low grade with high grade done to get the desire grade.		

Environment:--

SL.No.	Item	Proposals (FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No Proposal	Nil	
8b	Concurrent use or storage of topsoil	No Proposal	Nil	
8c	Separate dumps for	Separate	Carried out as per	

	overburden, waste rock, rejects and fines	dumping of OB wastes and Mineral Rejects	approved proposals	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
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	450 nos. saplings plantation	During year 23-24, 500 nos. of saplings planted within ML and cumulative 2100 nos of saplings planted within ML	
8g	Survival rate	75%	72%	
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on Haul roads, manual sorting site using Water tankers to suppress the dust	As per proposal	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	During mine visit no adverse impact on aesthetic beauty within lease observed.		

Compliance of Rule 45

SL.No	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	Monthly returns and Annual return submitted		
S.N.	Item	Details given in A.R.	Actual in field	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Govinda Chandra Bhoi Geologist: Bichitra Nanda Mohanty Manage: Govinda Chandra Bhoi		

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited and abandoned by opencast (O-C) mining-26 ha. Covered under current (O.C) mining: 1.680 Ha. Waste Disposal: 6.606 Ha. Mineral storage/processing: 6.228 Ha.		
9d	Scrutiny of Annual return on afforestation	500 nos. within mining lease		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	158790 Tonnes Average Grade-52.5 % Fe		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Lumps (55% to below 58% Fe): 7080 Tonnes Fines (51% to below 55% Fe):300642.620 Tonnes Fines (55% to below 58% Fe):23530 Tonnes Fines (58% to below 60% Fe):10246.380 Tonnes Fines (60% to below 62% Fe):4000 Tonnes CLO Below 62% Fe (CLO any size):117111.310 Tonnes		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Fines (51% to below 55% Fe) Ex. Mine price : Rs. 3339.25 per Tonne Fines (55% to below 58% Fe) Ex. Mine price Rs. 4294.00 per Tonne Fines (58% to below 60% Fe) Ex. Mine price: Rs. 4294.00 per Tonne CLO Below 62% Fe (CLO any size) Ex.		

		Mine price : Rs. 6600 per Tonne, production cost-Rs 3205/-		
9i	Scrutiny of Annual return on fixed assets	Rs. 3062400/-		
9k	Scrutiny of Annual return on mining machineries	Dumper-6 Drill Machine-1 Excavator-3 MobileCrusher-1 Mobile screen-1 Loader-2 Water Tanker-2		

During the mine visit violations under Rule 11(1) found violated and violation pointed out accordingly.