

MCDR INSPECTION REPORT

General

S. N.	Particulars	Details	
1	Name of the Mine	KJST Iron, Manganese & Bauxite mine.	
1.1	Name of the Inspecting Officer	Rajesh Kumar Das, DCOM	
1.2	Date of Inspection	04.07.2024	
1.3	Name of official accompany inspection	Shri T.C.Sei Agent(Mines) & SK Pyar Mohammad (Mine Manager)	
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Lease Area	188.268 Ha.
		Forest Area	188.268 Ha.
		Non-forest Area	Nil
3	Minecode	30ORI13005	
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/135/2011	
5	Name of the lessee, Address, phone, email and fax number	Sri Prabodh Mohanty, Weigh Bridge Road, Post Box No.21, PO: Barbil,Pin:758035, Dist: Keonjhar, Odisha, Phone No.9437197242, E-mail:snmbbl@gmail.com	
6	Village	Jaldihi	
7	Taluka/Mandal	Koira	
8	District	Sundargarh	
9	Pincode	770048	
10	State	Odisha	
11	Post office	Dengula	
12	Nearest police station	Koira	
13	Nearest Railway station	Barsuan	
14	Date of Grant of Mining Lease	Letter no-13775 Dt.27/11/1986	
15	Date of Execution	20.01.1987	
16	Date of opening of Mine	23.03.1987	
17	Date of first Renewal, if applicable and its period & expiry	Lease has been executed over 188.268ha (as per MMDR amendment Act.2015 up to 19.01.2037	
18	Date of second Renewal, if applicable and its period & expiry	Not Applicable	
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable	
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri Prabodh Mohanty, Weigh Bridge Road, Post Box No.21, PO: Barbil,Pin:758035, Dist: Keonjhar, Odisha, Phone No.9437197242, E-mail:snmbbl@gmail.com Date of appointment:11.03.1999	
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sri T.C Sei, Weigh Bridge Road, Post Box No.21, PO: Barbil,Pin:758035, Dist: Keonjhar, Odisha, Phone No.9437062149, E-mail:snmbbl@gmail.com Date of appointment: 19.3.2005	
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	SK Pyar Mohammad, E-mail:snmbbl@gmail.com	

		Date of appointment:07.10.2008, At/Po-Koira, Sundergarh,Odisha Ph. No.:9437401313
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Brundaban Samal BE.Mining Date of appointment.20.10.2008 At/Po-Koira, Sundergarh,Odisha Ph. No.- 9439346793
24	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Manash Ranjan Parida, E-mail:snmbbl@gmail.com Date of appointment :07.07.2017 At/Po-Koira, Sundergarh,Odisha Ph. No.- 9437167501
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.	BBS/SG/Fe-Mn&Bx/MP-285 on dated-23/08/2006 Fy-2006-07 to 2010-11
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	RMP/A/17-ORI/BHU/2020- 21/1957 Date:20.10.2020
28	Mineral(s) granted in lease and proved for mining	Iron & Bauxite
29	Method of Mining(Open cast, Underground)	Open cast
30	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
31	Captive/Non Captive	Non 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	No Proposal	Nil	Total 271 bore holes drilled to convert entire area in G1.
1b	Exploration over lease area for Geological axis 1 or 2.	NA	NA	
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	Entire area already explored	
1e	Balance reserves as per latest approved document	Iron ore:50677312.50 Tones Bauxite:1577850.00 Tons		As on 01.06.2023
1f	General remarks of inspecting officer on geology, exploration etc.	The structural behavior of Iron ore and bauxite deposit exhibit a strike trend of NNE-SSW at 20 degree to 30 degree dips towards ESE. The Mineralized area in lease broadly explored in G1.		

Development

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
2a	Location of development w.r.t. lease area	139W-661W, 468N-650S	139W-656W, 468N-646S	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	NA	NA	Top soil generation is negligible
2c	Stripping ratio or ore to OB ratio	1:0.1089 (T/M ³)	1: 0.1079 (T/M ³)	

2d	Quantity of topsoil generation in m ³	373.50 m ³	373 m ³	
2e	Quantity of overburden generation in m ³	301781.81 m ³	301570 m ³	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc	The mine is not developed systematically and bench parameters are not as per proposals and many places benches are irregular, haphazard working and height of benches are not as per proposals and bench height more than 12 meters. In bottom benches the working is not systematic and selective mining done and ore is excavated in haphazard manner and not as per proposal.		

EXPLOITATION

N.	Item	Proposals for, 2023-24	Actual work during 2022-23	Remark
3a	Number of pits proposed for production	One	One	Iron-1 Nos.
3b	Quantity of ROM mineral production proposed	Iron:2799930.00 Ton, Bauxite: Nil	Iron:2794000.000 Ton Bauxite: Nil	
3c	Recovery of salable/usable mineral from ROM production	Iron:2409890.00 Ton Bauxite: NIL	Iron:2407000.000 Ton Bauxite: Nil	
3d	Quantity of mineral reject generation	Iron:390040.00 Ton Bauxite: Nil Ton	Iron:387000.00 Ton Bauxite: Nil	
3e	Grade of mineral reject generation and threshold value declared	Iron :+45% to 55%Fe Bauxite: 30% Al ₂ O ₃	Iron: 54.31% Fe. Bauxite: -30% Al ₂ O ₃	
3f	Quantity of sub-grade mineral generation	Iron:390040.00 Ton Bauxite: Nil Ton	Iron:387000.00 Ton Bauxite: Nil	
3g	Grade of sub-grade mineral generation	Iron :+45% to 55%Fe Bauxite: 30% Al ₂ O ₃	Iron: 54.31% Fe. Bauxite: -	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized method	Mechanized method	
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	Wagon drill Machinery (Dia-100m) & Blasting	Wagon drill Machinery (Dia-100m) & Blasting	
3k	Provision of mining machineries in mineral benches	Excavator: (0.9m ³ to 4.3 m ³) with ,Dumper: (25T to 35 T) combination	Excavator :(0.9m ³ to 4.3 m ³) with, Dumper: (25T to 35 T) combination	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	8 Meters	8 Meters	
3m	Total area covered under excavation/pits	40.55 Ha	39.312 Ha	
3n	Ore to OB ratio for the pit/mine during the year	1:0.1089 (T/M ³)	1: 0.1079 (T/M ³)	
3o	Total area put in use under different heads at the end of year	98.33 Ha.	90.955 Ha.	

3p	Production of ROM mineral during last six-year period, as applicable 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24	Iron (T)	Bauxite (T)	Iron (T)	Bauxite (T)	
		2000110	90012	1703214.889	0.000	2018-19
		2000110	110076	1900360.588	0.00	2019-20
		2000110	130020	1900353.511	0.00	2020-21
		2800048	30108	1970350.00	0.00	2021-22
		2800094	36010	2404600.00	0.00	2022-23
		2799930	0.00	2794000.00	0.00	2023-24
3q	General remarks of inspecting officer on method of	In modification of Review of Mining plan approved on 23.11.2023 proposals given from 01.06.2023 and quantity of ROM given 2099430 Tons & Mineral Reject mentioned 296640 Tons.				

Solid Waste management-Dumping

S.N.	Item	Proposals for, 2023-24	Actual work during 2022-23	Remark
4a	Separate dumping of topsoil, OB & mineral reject (Rule 33, 37)	Proposal for separate dumping is there	Topsoil, OB & mineral reject are separately stacked in the earmarked area as per Scheme of mining.	
4b	Location of topsoil, OB & mineral reject dumps	OB.- 424E-68E, 678N-302N Mineral Reject 802W-875W 569S-654S Top Soil- 88N-107N 1313W-1295W	OB & Mineral reject broadly as per proposal. The top soil collected has already been utilizes for plantation of 336.0 m ³ and 37m ³ is stacked in earmarked area.	
4c	Number of dumps within lease area and outside lease area	Within lease : one, outside lease : Nil	Within lease : one, outside lease : Nil	
4d	Location of dumps w.r.t. ultimate pit limit	424E-68E, 678N-302N	350E-130E, 579N-302N	
4e	Number of active & alive dumps	ONE	ONE	
4f	Number of dead dumps	NIL	NIL	
4g	Number of dumps stabilized	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Nil	Yes	
4i	Length of Retaining wall or garland drain all along dump	Nil	160X2X2 M	
4j	Number of settling ponds	No Proposal	NIL	
4k	Specific comments of inspecting officer on waste dump management	Broadly as per proposal.		

Solid Waste management-Backfilling

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
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 36)	336.15 M ³	336 M ³ is utilized for plantation	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Not matured for backfilling.		

Progressive Mine Closure Plan

S. 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).	As per Rule.	Yes	
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	NIL	
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	i) Voids available for backfilling (L X B X D) :Nil, ii) Void filled by waste/tailings: Nil, iii) Afforestation on the backfilled area : No Proposal iv) Rehabilitation by making water reservoir : No Proposal	i) Voids available for backfilling (L X B X D) : Nil, ii) Void filled by waste/tailings: NIL, iii) Afforestation on the backfilled area : Nil, iv) Rehabilitation by making water reservoir :NIL	Dump Plantation and road side safety zone plantation of 5500 nos
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposal	NIL	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of (core zone and buffer zone)	monitoring both at core zone and buffer zone	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	PMCP compliance & progressive closure operations broadly as per proposal.		

Mineral Conservation

S.N.	Item	Proposals for, 2023-24	Actual work during 2023-24	Remark
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for sorting of minerals	By dry processing using crushing & Screening unit.	

		mechanically		
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Proposal is there	Different grade of mineral are sorted size-wise by crushing and screening.	
7d	Any beneficiation process at mines	No Proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	There is no wet beneficiation but crushing and screening is done within lease area. The low grade ore of 51-55% Fe also dispatch for sale.		

Environment

S.N.	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
8a	Separate removal and utilization of topsoil (Rule 36)	373.50 M ³	The top soil collected has already been utilizes for plantation of 336.0 m ³ and 37m ³ is stacked in earmarked area.	
8b	Concurrent use or storage of topsoil	Proposed for utilisation	336 M ³ utilized for plantation & balance 37 m ³ top soil has been stacked.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Separately Stack at overburden dump.	
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	350	5500 nos.	Dump Plantation and road side safety zone plantation
8h	Water sprinkling on roads to control airborne dust	Proposal	Water Tanker static sprinkling system exist for dust suppression	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The lessee is taking care of all environmental preventive measures as per statute i.e Air, Water, Noise, ground vibration monitoring. The plantation is done and dust suppression water sprinkling is done on regular basis. There is no adverse impact observed during mine visit on aesthetic beauty in and around mines area.		

Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto May 2024 A.R. Submitted upto 2023-24	

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	Mining Engineer- Mr. B.B. Samal Geologist- Mr. M.R. Parida Manager- Mr. Sk Pyar Mohammad		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	98.33 ha	90.955 ha	
9d	Scrutiny of Annual return on afforestation	5500 nos.	5500 nos. tree planted	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	387000.00 Mt Avg. Grade-54.31%fe reported		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Fines- 51-55fe-2358.481Mt 55-585fe-16244.503Mt 58-60%fe -935.468 Mt 60-62%fe – 29598.334 Mt 62-65%fe- 1812.424 Mt CLO- -62 % Fe – 68049.90 Mt 62-65%fe- 0.167 Mt	Fines- 51-55fe-2358.481Mt 55-585fe-16244.503Mt 58-60%fe -935.468 Mt 60-62%fe – 29598.334 Mt 62-65%fe- 1812.424 Mt CLO- -62 % fe – 68049.90 Mt 62-65%fe- 0.167 Mt	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Fines- Ex. Mine price 51-55%fe – Rs.1966.37 55-585fe- Rs.3203.30 58-60%fe – Rs.3860.65 60-62%fe- Rs.3690.06 62-65%fe- Rs.4929.08 CLO- Ex. Mine price -62 %fe – Rs.3418.84 Cost of production-2054 Rs/ton	It is observed during scrutiny of annual returns of 2023-24 that the Ex-mine price of Fines of 58-60% Fe is furnished 3860.65 Rs/ton and Fines of 60-62% Fe is furnished 3690.06 Rs/ton. The Ex-mine price of Fines of lower grade is more than higher grade. It is observed during scrutiny of annual returns of 2023-24 that the Ex-mine price of Fines of 58-60% Fe is furnished 3860.65 Rs and CLO of below 62%Fe is mentioned as 3418.84 Rs which is less than fines as mentioned.	The violation pointed out.
9i	Scrutiny of Annual return on fixed assets	Rs.939386503.00 reported		
9k	Scrutiny of Annual return on mining machineries	Excavator, Dumper, Loader, Dozer, Grader, Water Tanker, etc.		

The Violations pointed out under Rule11 (1) and 45(5) © under MCDR,2017.