

MCDR-MiFLOFE/13/2022-BBS-IBM RO_BBS
MCDR INSPECTION REPORT

1/12309/2023

Name of the Mine: KJST Iron, Manganese & Bauxite mine, of Sri Prabodh Mohanty,
30ORI13005

Name of the Inspecting Officer : Shri B L Gurjar, RCOM &
Shri Sanjay Kumar Mahapatra, AME

Name of the accompanying official: Sri Prabodh Mohanty, Mine Owner

Date of Inspection: 22.06.2023.

S. N.	Particulars	Details
1	Name of the Mine	KJST Iron, Manganese & Bauxite mine.
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	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 for 50 years) 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

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 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
27	Mineral(s) granted in lease and proved for mining	Iron & Bauxite
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Non Captive

Exploration

S.N.	Item	Proposals for,2022-23	Actual work during 2022-23	Remark
1a	Backlog of previous year	50 for the year 2021-22	Total 55 boreholes completed in this FY-2022-23.	Exploration completed.
1b	Exploration over lease area for Geological axis 1 or 2.	G-1	G-1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specified.	Gemco-Kati Exp.- Rs.5264511.00	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No	Entire area already explored	Entire area already explored
1e	Balance reserves as per latest approved document	27069036 Tones	2404600 Tones production during 2022-23	
1f	General remarks of inspecting officer on geology, exploration etc.	Entire area already explored		

1/12309/2023 **Development**

S.N	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
2a	Location of development w.r.t. lease area	628W-258W, 434N-571S & 00- 440E 290N-750N & Bauxite Quarry in Southern Part of the Lease.	640W-256W, 441N-600S	During inspection it is observed that one quarry is developed.. Other 02 quarries were not operated during the year 2022-23.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	-	-	Separate bench for Top soil not there as thin layer in the top is available.
2c	Stripping ratio or ore to OB ratio	1:0.22 (T/M ³)	1: 0.15 (T/M ³)	
2d	Quantity of topsoil generation in m ³	5810 m ³	2010 m ³	
2e	Quantity of overburden generation in m ³	617940 m ³	378369.13 m ³	
2f	General remarks of inspecting 1. officer on development of pit w.r.t. type of deposit etc	Violation letter was issued vide letter No : MCDR-MiFLOFE/13/2022-BBS-IBM_RO_BBS dated 28.06.2023 as it was proposed for production from Three (03) nos of pits (quarry) during the year 2022-23. During inspection it is observed that the entire production carried from one quarry. Other 02 quarries were not operated during the year 2022-23		

EXPLOITATION

Sl no	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
3a	Number of pits proposed for production	Three (Bxt-1No. Iron-2 Nos)	One	During inspection it is observed that one quarry is developed. Other 02 quarries were not operated

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3b	Quantity of ROM mineral production proposed	Iron:2800094.00 Tones, Bauxite:36010 Tones	Iron:2404600.00 0 Tones Bauxite: Nil
3c	Recovery of salable/usable mineral from ROM production	Iron:2266394.000 Tones Bauxite:34008 Tones	Iron:2214600.000 Tones Bauxite: Nil
3d	Quantity of mineral reject generation	Iron:533700.000 Tones Bauxite:2002 Tones	Iron:190000.000 Tones Bauxite: Nil
3e	Grade of mineral reject generation and threshold value declared	Iron :+45% Fe Bauxite: 30% Al ₂ O ₃	Iron: 54.31% Fe. Bauxite: -
3f	Quantity of sub-grade mineral generation	Iron:533700.000 Tones Bauxite:2002 Tones	Iron:190000.000 Tones Bauxite: Nil
3g	Grade of sub-grade mineral generation	Iron :+45% Fe Bauxite: 30% Al ₂ O ₃	Iron: 54.31% Fe. Bauxite: -
3h	Manual / Mechanised 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 3.3 m ³) with ,Dumper: (25T to 35 T) combination	Excavator :(0.9m ³ to 3.3 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	Yes
3m	Total area covered under excavation/pits	42.56 Ha	36.74 Ha
3n	Ore to OB ratio for the pit/ mine during the year	1:0.22 (T/M ³)	1: 0.15 (T/M ³)
3o	Total area put in use under different heads at the end of year	87.84Ha	77.639Ha
3p	Production of ROM mineral during last six-year period, as applicable	Iron (T) Bauxite (T)	Iron (T) Bau xite (T)
	2016-17	1950130 50076	1896148.8 0.00
	2017-18		09 0
	2018-19	2000110 70044	1950069.1 0.00
			58 0
			2016-17
			2017-18

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	2020-21			89	0	
	2021-22	2000110	110076	1900360.5	0.00	2019-20
	2022-23			88		
		2000110	130020	1900353.5	0.00	2020-21
		2800048	30108	1970350.0	0.00	2021-22
		2800094	36010	2404600.00	0.00	2022-23
3q	General remarks of inspecting officer on method of	1. Violation letter was issued vide letter No : MCDR-MiFLOFE/13/2022-BBS-IBM_RO_BBS dated 28.06.2023 as it was proposed for production from Three (03) nos of pits (quarry) during the year 2022-23. During inspection it is observed that the entire production carried from one quarry. Other 02 quarries were not operated during the year 2022-23. Bauxite production is NIL during the year 2022-23.				

Solid Waste management-Dumping

S.N	Item	Proposals for, 2022-23	Actual work during 2022-23
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.- 157E-438E, 556N-280N Mineral Reject 613W-744W 586S-471S Top Soil- 88N-107N 1313W-1295W	OB- 181E-323E, 528N-277N Mineral Reject 653W-879W 679S-458S Top Soil- 88N-107N 1313W-1295W
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	157E-438E, 556N-280N	181E-323E, 528N-277N
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	Yes	Yes
4i	Length of Retaining wall or garland drain all along dump	240X2X2 M	318X2X2 M
4j	Number of settling ponds	No Proposal	NIL
4k	Specific comments of inspecting officer on waste dump management	Retaining wall or garland drain all along dumps has been carried and maintained properly.	

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Solid Waste management-Backfilling

S.N	Item	Proposals for, 2022-23	Actual work during 2022-23	Remark
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	0.353 Ha	Nil	Violation issued vide letter dated 28.06.2023
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)	5810 M ³	2010M ³ is utilized for plantation	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc			

Progressive Mine Closure Plan

6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2).	Is there	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) :0.353 ha, ii) Void filled by waste/tailings: 0.120, iii) Afforestation on the backfilled area : No Proposal iv) Rehabilitation by making water	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	

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6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Proposal No Proposal	
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	Violation letter was issued vide letter No : MCDR-MiFLOFE/13/2022-BBS-IBM_RO_BBS dated 28.06.2023 as it was proposed for backfilling of 0.353 ha during the year 2022-23. However during inspection it is observed that, no backfilling has been carried out within the proposed backfilling area.	

Mineral Conservation

7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for sorting of minerals mechanically	By crushing & Screening
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	Different grade of mineral are sorted size-wise by crushing and screening.	

Environment

S.N.	Item	Proposals for, 2022-23	Actual work during 2022-23
8a	Separate removal and utilization of topsoil (Rule 36)	5810 M ³	The top soil collected has already been utilizes for plantation of 2010 m ³
8b	Concurrent use or storage of topsoil	-	2010 M ³ utilized for plantation & 120 m ³ balance stacked

1/12309/2023	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	Separate Stacking	
	8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	No rehabilitated area has been disturbed.	
	8f	Baseline information on existence of plantation & additional Plantation done	No Proposal	5500 nos.	Gap plantation in safety zone
	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		Environmental protection by plantation carried.	

Compliance of Rule 45

S.N	Item	COMMENTS
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2023 in time. A.R. for 2022-23 was not due for submission on date of inspection. Hence no scrutiny carried during inspection.

10. Drone Survey Information and data thereof. Drone data submitted in the on-line portal. To be scrutinized after 07.07.2023 after activation for downloading of the submitted drone data.

Rule No	Nature of violations observed
<u>Rule 11(1)</u>	<p>Mining operations in the mining lease are not being carried out in accordance with as per the proposal given in approved Modification of review of Mining plan dated 20.10.2020 to the extent given below;</p> <p>i) It has been proposed for production from Three (03) nos of pits (quarry) during the year 2022-23. However during inspection it is observed that the entire production carried from one quarry. Other 02 quarries were not operated during the year 2022-23.</p> <p>ii)It has been proposed for 34008 tons of Bauxite production during FY 2022-23, However during inspection it is observed that, Bauxite production is NIL during the year 2022-23.</p> <p>iii)It has been proposed for backfilling of 0.353 ha during the year 2022-23. However during inspection it is observed that, no backfilling has been carried out within the proposed backfilling area.</p>

(B L GURJAR)
Regional Controller of Mines