

MCDR INSPECTION REPORT 2022-23

General:

S.No	Particulars	Details
1	Name of the Mine	Aridongri Iron Ore Mine of M/s Chhattisgarh Mineral Development Corporation Limited
2	Date of Inspection:	28.06.2023
3	Name of Inspecting Officer	Mr. D.Dash Regional Mining Geologist IBM Raipur
4	Name of official accompanying inspection	Mr. Deepak Kumar Gupta, Mine Manager
5	Last date of Inspection & Officer	03.11.2022 Mr. Deepak Chinchkhede Assistant Controller of Mines IBM Raipur
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	166.8 ha. Reserve Forest Land
7	Mine code	30CHG08010
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/8239/2011
9	Name of the Lease, Address, Phone, email and fax number	Aridongri Iron Ore Mine Village Kachche Teh – Bhanupratappur , Dist- Uttar Bastar Kanker C.G. email- cmdcbhanupratappur@gmail.com
10	Village	Kachche
11	Taluka/Mandal	Bhanupratappur
12	District	Uttar Bastar Kanker
13	Pin code	494669
14	State	Chhattisgarh
15	Post Office	Bahnupratappur
16	Nearest Police Station	Kachche
17	Nearest Railway Station	Bhanupratappur
18	Date of Grant of Mining Lease	23.08.2018
19	Date of Execution	01.09.2018
20	Weekly day of rest	Sunday
21	Date of opening of Mine	31.05.2020
22	Date of First Renewal, if applicable and its period & expiry	NA
23	Date of Second Renewal, if applicable and its period & expiry	NA
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA
25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Jay Prakash Maurya, Sector 24 Atal Nagar Nawa Raipur Chhattisgarh , Date of Appointment- 08-06-2021, Mob- 97554-49925 Email Id-cmdcraipur@gmail.com
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. Shushil Kumar Chandrakar, Sector 24 Atal Nagar Nawa Raipur Chhattisgarh, Date of Appointment- 19-03-2019, Mob- 79743-35022

		Email Id-cmdcraipur@gmail.com
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Deepak Kumar Gupta, Regional Office Bhanupratappur, Date of Appointment-19-03-2019, Mob- 70241-39741 Email Id-cmdcbhanupratappur@gmail.com
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Mr. Parth Basu, Second Class Mine Manager Certificate Holder 15 year experience, Date of Appointment- 18-05-2021, Mob-70002-57995 Email Id-cmdcraipur@gmail.com
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes Geologist: Mr. Jayant Kumar Pashine
30	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	Mining plan alongwith progressive mine closure plan is approved vide letter no kanker/Lauh/khayo-167/Nag/33-Raipur/148 Dated 12.07.2016 for the period 2018-19 to 2022-23
31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	N.A.
32	Mineral(s) granted in lease and approved for Mining	Iron ore (Magnetite)
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Fully Mechanized
35	Captive/Non-Captive	Non-Captive
36	Present EC Status	5 lakh metric tonne per annum
37	Status of Financial Assurance	Not Applicable because MDPA has been signed between CMDC & Collector Uttar Bastar Kanker & Performance security of an amount equal to INR 10,43,09,862.00 submitted.

Scientific Mining: Compliance of proposals of approved Mining Plan/Review of Mining Plan:

1.0 Exploration:

S.N	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
1a	Backlog of previous year Proposals	Nil	Nil	There is no backlog. Total 33 nos. of boreholes have been drilled during the year 2020-21 & 2021-22
1b	Exploration over lease area for Geological axis 1 or 2.	G1 level	G1 level	G1 level of exploration.

1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not specified	In house drilling	
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Not specified	Potentially mineralized area drilled under G1 level.	Potentially mineralized area drilled under G1 level.
1e	Balance reserves as on 01.04.2022	121: 1384800 tonnes		
1f	General remarks of Inspecting officer on geology, exploration etc.	31 bore holes were proposed during 2018-19, 2019-20 & 2020-21 in the approved Mining Plan, against which the lessee has drilled total 33 no. of boreholes during 2020-21 & 2021-22 with total meterage of 3510 meter.		

2.0 Development:

S.N	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
2a	Location of Development w.r.t. lease area	E506680-506940 & N 2260100-2260280	E506620-506860 & N 2255380-2255040	Development is as per proposal.
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate benches in topsoil & OB	Separate benches in topsoil & OB are maintained.	Separate benches in topsoil & OB are maintained.
2c	Stripping ratio or ore to OB ratio	1:0.77/Cu.m	1:0.88/Cu.m	Due to irregular nature of ore body, waste handling is on slightly higher side.
2d	Quantity of topsoil generation in m ³	27690.00 cu.m	11200.00 cu.m	Proportionate to development done.
2e	Quantity of overburden generation in m ³	3,70,710.00cu.m	1,30,000 cu.m	Waste handling is in proportionate to low production done during the year.
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development is carried out as per proposal. However, mining operations have been temporarily discontinued from 09.11.2022 due to local problem due to which development is on lower side.		

3.0 Exploitation:

S.N	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	4,84320 T	1,47,888.49 T	Mining operation &

				others activity is temporary discontinued due to local issue and others reasons
3c	Recovery of Salable/usable mineral from ROM production	484320 T	147888.49 T	
3d	Quantity of mineral reject generation	Not proposed	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not proposed	Nil	
3f	Quantity of sub-grade mineral generation	Not proposed	Nil	
3g	Grade of sub-grade mineral generation	Not proposed	Nil	
3h	Manual/Mechanized method adopted for segregation from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Nil	
3j	Provision of drilling & blasting in mineral benches	Drilling and blasting is proposed,	Drilling and blasting is carried out as per proposal.	
3k	Provision of mining machineries in mineral benches	Shovel and dumper combination	Shovel and dumper combination	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation /pits	10.90 ha during plan period	7.150 ha	The mine is temporarily discontinued due to which quarry development is lower side.
3n	Ore to OB ratio for the pit/mine during the year	1:0.71/Cu.m	1: 0.88/Cu.m	Slightly on higher side.
3o	Total area put in use under different heads at the end of year	32.38 ha during plan period	24.55 ha	
3p	Production of ROM mineral during last five-years period, as Applicable (tonne)	2020-21:343200T	2020-21:173570T	ROM production started

		2021-22 :373440 T 2022-23 :484320 T	2021-22 :151481.3 T 2022-23 :147888.49T	from 2020-21. Mining & other activities have been stopped from dated 09.11.2022
3q	General remarks of inspecting officer on method of mining etc	The ROM production has been carried out from single pit as per proposal. However, mining operations have been temporarily discontinued from 09.11.2022 due to local problem due to which development is on lower side.		

4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Yes	Yes	As per proposal.
4b	Location of topsoil, OB & mineral reject dumps	N E of lease area, NE of lease area and no dump proposed for rejects	Yes	-do-
4c	Number of Dumps within lease area and outside lease area	03	03	-do-
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	NE of lease area	NE of lease area	-do-
4e	Number of Active & Alive dumps	Top soil-01 BHQ/BMQ-01 Metapellite-01	01 01 01	All dumps are active
4f	Number of dead dumps	NA	Nil	
4g	Number of dumps stablished	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	Nil	Nil	Retaining wall and garland drain are maintained.
4j	Number of settling ponds	Nil	01	-
4k	Specific commends of inspecting officer on waste dump management	Separate dumping of topsoil, OB are maintained. Retaining wall and garland drain are maintained along the dump.		

5.0 Solid Waste Management-Backfilling:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not proposed	Nil	Nil

5b	Area under backfilling of mined out area	Not proposed	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	Not proposed	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	Area is not matured for reclamation and rehabilitation.		

6.0 Progressive Mine Closer Plan

S. N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2)	As per provision of MCDR 2021	Annual report on PMCP Submitted	Annual report on PMCP Submitted
6b	Management of worked/mined out benches	Not proposed.	Area is not matured for reclamation and rehabilitation	Area is not matured for reclamation and rehabilitation.
	Area available for rehabilitation (Ha)			
	Afforestation done (ha)			
	No. of saplings planted during the year			
	Cumulative no. of plants			
	Any other specific method of rehabilitation			
6c	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling (L*B*D) Void filled by waste/tailings Afforestation on the backfilling Rehabilitation by making water reservoir Any other specific means	Not proposed.	Area is not matured for reclamation and rehabilitation	Area is not matured for reclamation and rehabilitation.
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	Nil	2200 during the year and cumulative 8200 with 85% survival rate	
6e	Compliance of Environment monitoring (core zone & buffer zone)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	The mining activities in the lease area is in initial stage. So, no area is mined out.		

7.0 Mineral Conservation:

S.N.	Item	Proposals (2022-23)	Actual Work (2022-23)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Grade wise Sorting	Grade wise sorting	As proposed.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Mechanical
7c	Different grade of mineral sort out at mine	+45% Fe	+45% Fe	+45% Fe
7d	Any beneficiation process at mines	Not proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Grade wise sorting and sizing is being done by mobile crushing and screening plant of 220TPH capacity with -10mm grizzly.		

8.0 Environment:

8a	Separate removal and utilization of topsoil (Rule32)	Yes	Yes	Separate removal and utilization of topsoil is carried out.
8b	Concurrent use or storage of topsoil	storage proposed.	Top soil is being used for Plantation purpose.	
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumping of topsoil, OB .	Separate dumping of topsoil, OB are maintained.	Separate dumping of topsoil, OB are maintained.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Nil	Area is not matured for reclamation and rehabilitation.
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Nil	2200 during the year and cumulative	-
8g	Survival rate	Not specified	Survival rate 85%	Survival rate 85%

8h	Water sprinkling on roads to control airborne dust	Water tanker	Water tanker used to control airborne dust	Water tanker used to control airborne dust
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Separate top soil stack is maintained and top soil is utilized for plantation purpose. During the year 2022-23, 2200 saplings have been planted.		

9.0 Compliance of Rule 45:

S N	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	AR & MR submitted reguraly.		AR & MR submitted reguraly.
S N	Item	Details Given in A.R.	Observation of I / Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer, geologist employment is furnished	Mining engineer, geologist are employed in the mine.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O-C) Workings: 7.15ha, Used for waste disposal: 7.29 ha, Occupied by plant, buildings, residential, welfare buildings and roads: 3.56 ha, Used for any other purpose (specify) Safety zone: 4.35 ha	Appears to be correct.	
9d	Scrutiny of Annual return on afforestation	2200 saplings planted with 85% survival with cumulative plantation of 8200.	Appears to be correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Not observed in the mine.	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Opening stock: nil, Closing stock: nil, production: 147888.490 tonnes	Appears to be correct.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex mine price: 55% to below 58% Fe fines : Rs 2836, 58% to below 60% Fe fines: Rs 2956, 60%	-do-	

		to below 62% Fe: Rs 4448, 62% to below 65% Fe: rs 5005		
9i	Scrutiny of Annual return on Fixed assets	Rs 2784866	Appears to be correct.	
9k	Scrutiny of Annual return on mining Machineries	Backhoe:02, Dumper (25t): 04, water tanker: 01, blast hole drill: 01, Dozer: 01, Front end loader: 01, crusher: 01	-do-	

10- Details of violations observed during last inspection and the compliance status.

During the previous inspection on 03.11.2022 by Shri Deepak Chinchkhede Assistant Controller of Mines, no violation is observed.

During the current inspection, no major violation observed.

Date: DD/MM/YYYY

Signature:

Name: (Debadurllav Dash)

Designation: Regional Mining Geologist