

MCDR INSPECTION REPORT

1.0 GENERAL

SL.N	PARTICULARS	DETAILS
1	File No.	CHG/SRG/BX-07CHG16011
2	Name & Designation of the inspecting officer	Shri D.Dash Senior Mining Geologist
3	Date of Inspection	21.12.2021
4	Date of Last Inspection & Officer	14.01.2020, Shri Rudra N. Mishra, Senior Mining Geologist
5	Accompanying mine personnel	1. Shri A.P. Shah AGM(G)/Regional Officer 2 Shri Vivek Kumar Yadav, Mines Manager
6	Name of the Mine	Kesra Bauxite mine
7	Total Lease Area (Ha) with breakup of Non-forest and forest land	20.340 ha. Private. land (Non- forest)
8	Mine code	07CHG16011
9	IBM Registration Number under rule 45 of MCDR, 1988	IBM/8239/2011
10	Name of the lessee, Address, phone, email and fax number	M/S Chhattisgarh Mineral Development Corporation Ltd. Sonakhan Bhawan Ring road no. 01, Village -Purena, Post Ravigram Raipur Chhattisgarh, 492006
	Village	Kesra
	Taluka/Mandal	Mainpat
	District	Surguja
	Pincode	497111
	State	Chhattisgarh
	Post office	Kesra
11	Nearest police station	Kamleshwar
12	Nearest Railway station	Ambikapur
13	Date of Grant of Mining Lease	26.07.2006 First Grant for Twenty years up to 25/07/2006.
14	Date of Execution	26.07.2006 (The lease has been renewed up to 25.07.2026 for next twenty years)
15	Date of opening of Mine	09/11/2018
16	Weekly day of rest	Thursday
17	Date of first Renewal, if applicable and its period & expiry	NA
18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jay Prakash Maurya (I.A.S.) Chhattisgarh Mineral Development Corporation Ltd. Sonakhan Bhawan Ring road no. 01, Village -Purena, Post Ravigram Raipur Chhattisgarh, 492006 Email: -cmdcraipur@gmail.com ph no. 0771 4043477
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri A.P. Shah, Deputy General Manager (Geology) Chhattisgarh Mineral Development Corporation Ltd. Behind Carmel School, Housing Board Colony

		Namnakala , Ambikapur District - Surguja (C.G.) 497001 Email: -cmdcambikapur@gmail.com Mob: - 9425581270
20	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Vivek Kumar Yadav Chhattisgarh Mineral Development Corporation Ltd. Village Narmadapur Post – Narmadapur District Surguja Email: - cmdcmainpat@gmail.com , mobile : 9589118198, Date of Appointment 09.12.2018
21	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Vivek Kumar Yadav BE, Mining Chhattisgarh Mineral Development Corporation Ltd. Village Narmadapur Post – Narmadapur District Surguja (C.G.) , Email: - cmdcmainpat@gmail.com Mob: - 9589118198, Date of Appointment 09.12.2018
22	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri A.P. Shah (Geologist) Shri Vivek Kumar Yadav (Mining Engineer)
23	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	SRG/BX/MPNL-1173/2018 Raipur, Dated 27/11/2018
24	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	SRG/BX/MPLN-925/NGP Date 22/02/2006 & Modified scheme SRG/BX/MPLN-925/NGP Date 20/10/2008
25	Mineral(s) granted in lease and proved for mining	Bauxite
26	Method of Mining (Opencast, Underground)	Opencast
27	Category (Fully Mechanized, Others or Manual)	Mechanized
28	Captive/Non-Captive	Non-Captive
29	EC for ROM Prod: Date of Issue:	20,000TPA Date 07.01.2011
30	FA amount Rs Valid up to:	Rs. 16,55,700.00/- 31 st March 2021

1.0 EXPLORATION

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
1a	Backlog of previous year	06 trial pits during the year 2019-20	Nil	Violation of 11(1) of MCDR, 2017 has been pointed out. Violation of 45(5) (c) of MCDR, 2017 is pointed out for furnishing incorrect information on balance reserves.
1b	Exploration over lease area for Geological axis 1 or 2.	0.7 ha	Not done	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	0.7 ha	Nil	
1e	Balance reserves as 01.04. 2021	Under 121: 0.221T Under 122: 0.015T Under 221: 0.017T Under 222: 0.012 T		
1f	General remarks of inspecting officer on geology, exploration etc.	Lateritic Bauxite occur as discontinuous lenticular and tabular bodies. Gibbsite is the main constituent mineral. The mineral is moderately hard and massive in nature. Thickness of bauxite is varying 0 .0 to 5.20m, with grey to pink color having. 32 Bore Hole Drilled at 85m X 85m Interval. No further exploration has been carried out as proposed. Since, Bauxite occurs as lenticular bodies, exploration at close spaced grid needs to be carried out to delineate the pocket ore body accurately. While mining, the lessee encountered very low grade bauxite in proposed mining area, for which a number of quarries have been opened up in search of good grade Bauxite. But, the lessee did not encounter any good grade Bauxite for which mining has become cost prohibitive. The lessee intends to surrender the lease area for which FMCP has been submitted.		

2.0 DEVELOPMENT

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
2a	Location of development w.r.t. lease area	on north western side(between 2521748N & 2521948N)	Three quarries have been developed on south western side(between 2521148N & 2521548N)	Violation of Rule 11(1) of MCDR, 2017 has been pointed out.
2b	Separate benches in	proposed	Maintained	

	topsoil, overburden and mineral (Rule 15)			
2c	Stripping ratio or ore to OB ratio	1:0.60	1 : 1.30	No OB generation reported, mineral rejects of 1300 tonnes reported.
2d	Quantity of topsoil generation in Tonnes	Nil	Nil	
2e	Quantity of overburden generation in m ³	6309.60m ³	Nil	OB generation not reported. Only 1300 tonnes of mineral rejects generation reported during the year.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Mining operations were commenced from November, 2019. Due to low grade nature of mineral produced, the production from the mine is very low compared to proposed production. A number of pits have been opened in search of better grade ore. However, there is no market for grade of ore produced from the mine for which, the lessee has submitted Final Mine Closure Plan in which only reclamation and rehabilitation measures proposed.		

3.0 EXPLOITATION

S.N.	ITEM	PROPOSAL (2018-19)	ACTUAL WORK (2018-19)	REMARK
3a	Number of pits proposed for production	1	03	
3b	Quantity of Bauxite mineral production proposed	19999.95 Tonne.	999 tonnes	Low production due to lack of market.
3c	Recovery of saleable/usable mineral from Bauxite production	19999.95 Tonne.	999 tonnes	Same as above.
3d	Quantity of mineral reject generation	Nil	1300 tonnes	Due to inadequate scale of exploration and subsequent detailed chemical analysis, this mismatch in planning observed.
3e	Grade of mineral reject generation and threshold value declared	Al ₂ O ₃ – 30% SiO ₂ - >= 5%	Al ₂ O ₃ -30%	
3f	Quantity of sub-grade mineral generation	Proposal has not been given	Nil	

3g	Grade of sub-grade mineral generation	Not proposed	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Semi Mechanised method	Semi Mechanised	Bench development by machines and ore segregation manually.
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Not done.	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
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	2.808 ha (cumulative till 2020-21)	1.145 ha (cumulative till 2020-21)	Less area degradation due to low scale mining.
3n	Ore to OB ratio for the pit/mine during the year	1:0.60	1 : 1.30	No OB reported during the year. 1300 tonnes of mineral rejects reported.
3o	Total area put in use under different heads at the end of year	Area under mining: 2.808 ha Overburden dump: 0.579 ha Roads: 0.217ha	Area under mining: 1.145 ha Overburden dump: 0.132 ha Roads: 0.3687ha	Over burden/mineral rejects are stacked on edges of quarries. Violation of Rule 11(1) of MCDR, 2017 pointed out.
3p	Production of Bauxite mineral during last Three -year period, as applicable	2017-18	Nil	Low scale production due to lack of market for the grade of ore produced.
		2018-19	Nil	
		2019-20	3950.00 Tonne	
		2020-21	999.99 tonnes	

3q	General remarks of inspecting officer on method of mining etc.	The mining operation is carried out by semi-mechanised method i.e. bench development by machines and ore segregation is done manually. Due to limited market demand of grade of ore produced from the mine, the mining operations have been carried out on a very low scale. Due to lack of market for low grade ores from the mine, no production has been reported for the year 2021-22. The lessee intends to surrender the lease area. A Final Mine Closure Plan is submitted for the purpose.
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4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate waste dump proposed	Waste dumped on edges of pits	
b	Location of topsoil, OB & mineral reject dumps	Waste dumping on north eastern side (between N400& N 800)	Dumped on quarry edges	Against proposal of waste dump development on north eastern side (between N400& N 800), waste have been dumped on quarry edges. Violation of Rule 11(1) of MCDR, 2017 is pointed out.
4c	Number of dumps within lease area and outside lease area	01 within lease area	03	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL temporary dump	Within UPL on quarry edges	
4e	Number of active & alive dumps	01	03	
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	Nil	
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer	Violation of 11(1) of MCDR, 2017 pointed out for site deviation in respect of waste dumping.		

5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	0.903 ha	Nil	

5b	Area under backfilling of mined out area	0.903 ha	Nil	Violation of Rule 11(1) of MCDR, 2017 was pointed out.
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No top soil generation proposed.	No generation of top soil	
5d	Total area fully reclaimed & rehabilitated	Nil	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Against proposal of backfilling, no area has been backfilled. Violation of Rule 11(1) of MCDR, 2017 is pointed out.		

6.0 PROGRESSIVE MINE CLOSURE PLAN

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	yes	Not submitted	Violation of Rule 26(2) of MCDR, 2017 is pointed out.
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	(i). Total 2.808 ha (ii) Plantation of 1021 saplings proposed (iii) 2042 saplings (iv) Nil proposed (v) Rs 102100	(i) Total 1.145 ha area have degraded due to quarry development (ii) Plantation of 2000 saplings reported. (iv) No other method adopted. (v) Not furnished	

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	0.903 ha area proposed for backfilling	Nil	Violation of Rule 11(1) of MCDR, 2017 pointed out.
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)	Yes	Yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Violation of Rule 26(2) of MCDR, 2017 is pointed out for non submission of Annual report on PMCP .		

7.0 MINERAL CONSERVATION

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	Manual Hand sorting within lease area
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual sorting	Manual sorting	
7c	Different grade of mineral sorted out at mines	40-45% Al ₂ O ₃	40-45% Al ₂ O ₃	
7d	Any beneficiation process at mines	Proposal not given	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Medium grade of Bauxite of Al ₂ O ₃ 40-45% are produced from the mine after separation of Laterite from Bauxite by manual sorting. However, due to limited occurrence of 40-45% Al ₂ O ₃ in ROM, due to pocket nature of ore deposit, the lessee intends to surrender the lease.		

8.0 ENVIRONMENT

SN	ITEM	PROPOSALS (2020-21)	ACTUAL WORK (2020-21)	REMARKS
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	Violation of Rule 11(1) of MCDR, 2017 is pointed out for site deviation of waste dumps and for not carrying out backfilling as proposed.
8b	Concurrent use or storage of topsoil	Nil	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only waste dump proposed	Waste dumping done	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	1021 saplings	Plantation of 2000 saplings reported in Annual Return.	
8g	Survival rate	1021 Plants with 60% survival rate	2000 saplings with 60% survival rate	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Violation of 11(1) of MCDR, 2017 is pointed out for not carrying out backfilling as proposed.		

9.0 COMPLIANCE OF RULE 45

S. N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	M.R. Submitted up to November, 2021.	Violation of 45(5) (c) of MCDR, 2017 is pointed out for furnishing incorrect/ nil information on(i) Surface area utilization. (ii) Mineral reserves (iii) Ex-mine price & cost of production (iv) nil Production
		A.R. submitted for the year 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Mining Engineer & Geologist not furnished.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	No information on land sue pattern is furnished.	
9d	Scrutiny of Annual return on afforestation	2000 nos saplings planted during the year	
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	1300 tonnes of mineral rejects of 30% Al ₂ O ₃ reported. Appears to be correct.	
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Nil stock. Appears to be correct since no mineral stock observed during the visit.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Ex mine price, sale value and cost of operation- Rs 885. The information appears to be incorrect.	proposal (v) It was advised to furnish information on Mining Engineer & Geologist during the inspection.
9i	Scrutiny of Annual return on Fixed assets	Fixed assets is reported as nil. Appears to be correct.	
9k	Scrutiny of Annual return on mining Machineries	BACK HOE 0.900 CUM 1 Non Electrical WATER TANKER 20000.000 LITRE 1 Non Electrical Opencast AIR COMPRESSOR 400.000 CUM/MN 1 Non Electrical. Information appears to be correct.	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out: -Details of the Violations Pointed-out during Inspections:

नियम	उल्लंघन के प्रकार का ब्यौरा
11(1)	<p>Following violations are observed against proposals in approved Review of Mining Plan for the period from 2018-19 to 2021 approved vide letter no. Surguja/Bx/MPNL-1173/2018/Raipur dated 27.11.2018</p> <p>(i) Against proposal to carry out 06 nos of trial pitting, no work has been carried out.</p> <p>(ii) Three quarries have been developed on south western side(between 2521148N & 2521548N) and one quarry on north western side(between 2521748N & 2521948N) against proposal of single quarry development on southern side.(between 2521148N & 2521548N)</p> <p>(iii) Against proposal of waste dump development on north eastern side (between N400& N 800), waste have been dumped on quarry edges.</p> <p>(iv) Mining operations have been carried out in 7.5 m safety barrier zone in southern side at two places between boundary pillar BP1 and BP 29 and at one place between boundary pillar BP1 and BP3.</p> <p>(v) Against backfilling proposal of 0.903 ha no backfilling has been carried out.</p>
26 (2)	A yearly report as per the format specified by Indian Bureau of Mines, before 1st day of July every year setting forth the extent of protective and rehabilitate works carried out has not been submitted for the year 2020-21.
45(5) (c)	<p>Following information are furnished incorrectly in submitted Annual Return for the year 2020-2021:</p> <p>(i) Surface area utilization.</p> <p>(ii) Mineral reserves</p> <p>(iii) Ex-mine price and cost of production is cited as same price of Rs 885</p> <p>(iv) Production proposal during the year 2020-21 is not furnished.</p>

Violation Rule 11(1) of MCDR, 2017 pointed out for not carrying out plantation during 2018-19 against which plantation 2000 saplings carried out during the year 2020-21. Violation of Rule 26(2) of MCDR, 2017 is not complied. Violation of Rule 26(2) is pointed out during the current inspection. Violation of Rule 45(5) (c) is complied since, the lessee has submitted Annual return for the year 2018-19.

Date:

(D.Dash)

Senior Mining Geologist