### MCDR INSPECTION REPORT 2020-21

### General:

S .N.	Particulars	Details
1	Name of the Mine	Kesra Bauxite Mine
2	Date of Inspection:	14.03.2022
3	Name of Inspecting Officer	Shri Rudra Narayan Mishra, SMG and Shri Prasant Kumar Sahu, AME
4	Name of official accompanying inspection	Shri A. P. Shah, DGM (G) / Regional Officer and Shri Vivek Kumar Yadav, Mines Manager
5	Last date of Inspection & Officer	22/11/2019 & Shri S. Kartikeya, Junior Mining Geologist
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest: NIL Non-Forest: 9.00 Ha. Total Lease Area: 9.00 Ha.
7	Mine code	07CHG16013
8	IBM Registration Number under rule 45 of MCDR, 1988/2017	IBM/8239/2011
9	Name of the Lessee, Address, Phone, email and fax number	M/s CMDC Limited
		Sonakhan Bhawan, 2nd Floor, Ring
		Road No. 1, Village: Purena, Post –
		Ravigram, Raipur, Dist. Raipur (Chhattisgarh) Pin Code: 492001
		Phone: +91 (0) 771 – 4283557, 4043477
		Findle: +91 (0) 771 – 4283537, 4043477 Fax: +91 (0) 771 – 4001074
		Email: <u>cmdcraipur@gmail.com</u> ,
		cmdcambikapur@gmail.com
10	Village	Kesra
11	Taluka/Mandal	Mainpat
12	District	Surguja
13	Pin code	497111
14	State	Chhattisgarh
15	Post Office	Kamleshwarpur
16	Nearest Police Station	Kamleshwarpur
17	Nearest Railway Station	Ambikapur
18	Date of Grant of Mining Lease	26/07/2006 to 25/07/2036 (30 Years)
19	Date of Execution	26.07.2006
20	Weekly day of rest	Sunday
21	Date of opening of Mine	09.11.2018
22	Date of First Renewal, if applicable and its period & expiry	Not Applicable
23	Date of Second Renewal, if applicable and its period & expiry	Not Applicable
24	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable

25	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Jay Prakash Maurya (IAS), M/s CMDC Limited, Sonakhan Bhawan, 2nd Floor, Ring Road No. 1, Village: Purena, Post – Ravigram, Dist. Raipur (Chhattisgarh) Pin Code: 492001, Phone: +91 (0) 771 – 4283557, 4043477, Fax: +91 (0) 771 – 4001074, Email: <u>cmdcraipur@gmail.com</u> , <u>cmdcambikapur@gmail.com</u>
26	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	<ul> <li>Date of Appointment: Not Available.</li> <li>Notice of Appointment has not been sent.</li> <li>Shri A. P. Shah, DGM (Geology)</li> <li>M/s Chhattisgarh Mineral Development Corporation Limited, Housing Board</li> </ul>
		Colony, Namnakala, Dist. Ambikapur (Chhattisgarh) – 497 001, Phone: +91 (0) 7774 – 220898/9425581270 Email: cmdcambikapur@gmail.com Date of Appointment: 25/09/2019 Notice of Appointment has not been sent.
27	Name of the Mine Manager with Address, phone, email, fax number and date of appointment in mines	Shri Vivek Kumar Yadav, M/s CMDC Limited, Behind Carmel School, Housing Board Colony, Namnakala, Dist-Ambikapur (Chhattisgarh) – 497001 Phone: +91 (0) 7774 – 220898 Email: cmdcambikapur@gmail.com Date of Appointment: 11/12/2018
28	Name of the Mining Engineer, Qualification and total experience with address, phone, email, fax number and date of appointment in the mine	Shri Vivek Kumar Yadav, Qualification: B. E. (Mining) Experience: +5 years M/s CMDC Limited. Behind Carmel School, Housing Board Colony, Namnakala, Dist. Ambikapur (Chhattisgarh) – 497 001 Phone: +91 (0) 7774 – 220898 Email: cmdcambikapur@gmail.com Date of Appointment: 11/12/2018
29	Whether Geologist and Mining Engineer appointment in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	No, Not appointed
30	Date of Approval of Mine Plan/Modified Mine Plan with five- year period and specific condition in approval letter, if any.	<ul> <li>1.Mining Plan approved vide letter no. SRG/BX/MPLN- 927/NGP Nagpur dated 22/02/2006.</li> <li>Proposal Period: 2006-07 to 2010-11</li> <li>2.Modified Mining Plan approved vide letter no. SRG/BX/MPLN-927/NGP Nagpur dated 20/10/2008.</li> <li>Proposal Period: 2006-07 to 2010-11</li> </ul>

31	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five- year period and specific condition in approval letter, if any.	1. Review of Mining Plan approved vide letter no. SRG/BX/MPLN/1174/2018/RPR Raipur dated 28/11/2018. Proposal Period: 2018-19 to 2020-21 2. Review of Mining Plan approved vide letter no. SRG/BX/MPLN/1278/2021/RPR Raipur dated 01/06/2021. Proposal Period: 2021-22 to 2022-23 Lapse Period: 2011-12 to 2015-16 (5 years)
32	Mineral(s) granted in lease and approved for Mining	2016-17 to 2017-18 (2 years) Bauxite
33	Method of Mining (Opencast, Underground)	Opencast
34	Category (Fully Mechanized, Others or Manual)	Category-A
35	Captive/Non-Captive	Non-Captive
36	Present EC Status	30,000.00 Metric Tonnes Per Annum
37	Status of Financial Assurance	Rs. 20,11,800/- valid up to 31.03.2023 (Violation of Rule 27(2) of MCDR, 2017 is pointed out for non-submission of the differential financial assurance as per MCDR Amendment Rule 2021)

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

### 1.0 Exploration:

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
1a	Backlog of previous year Proposals	No Proposal	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	G1-9.00 ha	G1-9.00 ha	The entire lease area of 9.00 ha explored under G1 category through 38 nos. of boreholes and 2 nos. of trial pits.
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	No Proposal	Not Applicable	-do-
1d	Balance area to be explored to bring Geological axis in 1 or 2.	Nil	Not Applicable	-do-
1e	Balance reserves as on 01.04.2021 ( in Tonne)	Under 111-43808.8 T Under 221-14717.76 T		As per Annual Return, reserves / resources incorrectly reported under 111- 47000 T and under 221-17000 T. Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out
1f	General remarks of Inspecting officer on geology, exploration etc.	2017 is pointed out The bauxite bearing laterite capping is found on top of the basaltic plateau (Deccan traps). The entire lease area of 9.00 ha explored under G1 category through 38 nos. of boreholes and 2 nos. of trial pits. The detail exploration was carried by the Director of Geology & Mining, State Govt. of Chhattisgarh. Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out.		

## 2.0 <u>Development:</u>

S.N	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
2a	Location of Development w.r.t. lease area	In between local co-ordinates N 155 to N 490 and E 20 to E 275	In between local co-ordinates N 155 to N 490 and E 20 to E 275	As per the proposal
2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate benches in OB and Mineral proposed	Separate benches maintained in OB and Mineral	OB- No bench Topsoil: Not available Mineral/Ore: One (01) bench
2c	Stripping ratio or ore to OB ratio	1:0.75	1:0.61	Less development during the year as the mining

				operations were disturbed due to the COVID-19 pandemic
2d	Quantity of topsoil generation in $m^3$	1214.00	Nil	No top soil area encountered due to less production
2e	Quantity of overburden generation in m <sup>3</sup>	31109.00 m <sup>3</sup>	6500 m3 (13000 tonnes)	Less development during the year as the mining operations were disturbed due to the COVID-19 pandemic
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	The actual development is less in comparison to proposal for lack of market demand and the mining operations were disturbed due to the COVID-19. Quarry development is within the proposed area.		

## 3.0 Exploitation:

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
3a	Number of pits proposed for production	1	1	As per proposal
3b	Quantity of ROM mineral production proposed	ROM Ore- 29999.30 Tonne	ROM Ore- 7960.80 Tonne	Within the proposal limit and less production due to lack of market demand
3c	Recovery of Salable/usable mineral from ROM production	60% from the ROM	As per proposal	
3d	Quantity of mineral reject generation	No proposal	6000 tonnes	As per Annual Returns
3e	Grade of mineral reject generation and threshold value declared	No proposal	Al <sub>2</sub> O <sub>3</sub> - >30% & SiO <sub>2</sub> - <7%	
3f	Quantity of sub-grade mineral generation	Not mentioned in the approved document	Not Applicable	
3g	Grade of sub-grade mineral generation	Not mentioned in the approved document	Not Applicable	
3h	Manual/Mechanized method adopted for segregation from ROM	Manual sorting and sizing proposed	Manual sorting and sizing adopted	Done as proposed
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study proposed	No such study carried out	

Зј	Provision of drilling & blasting in mineral benches	Yes DTH Drill- 65 mm Jack Hammer- 32 mm	All the machineries used for mining operations have not been reported in AR and also not observed during field inspection	Violation of Rule45(5) (C) of MCDR, 2017 is pointed out
3k	Provision of mining machineries in mineral benches	<ol> <li>DTH Drill 01         <ul> <li>no. 65 mm</li> <li>Jack</li> <li>Hammer</li> <li>01 no. with 32</li> <li>mm</li> <li>Compressor</li> <li>01 no.</li> <li>Hydraulic</li> <li>Excavator 01</li> <li>no. with 0.9</li> <li>cum</li> <li>Portable</li> <li>Small</li> <li>Dozer 01 no.</li> <li>Dumper 01</li> <li>no. with 10.00</li> <li>Metric Tonne</li> <li>Diesel</li> <li>Tanker</li> <li>no. with</li> <li>2000 liters</li> <li>Water</li> <li>Tanker</li> <li>no. with</li> <li>10000 liters</li> <li>Service Van</li> <li>no.</li> <li>Water</li> </ul> </li> <li>Pump</li> <li>no. with 5.0</li> <li>HP</li> </ol>	All the machineries used for mining operations have not been reported in AR and also not observed during field inspection	Violation of Rule45(5) (C) of MCDR, 2017 is pointed out
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB/Topsoil: 0.50 m to 1.50 m Mineral/Ore: 3.0 m - 3.50 m	OB/Topsoil: NIL Mineral/Ore: 3.0 m	Seems to be correct
3m	Total area covered under excavation /pits	6.706 ha up to end of plan period	0.912 ha up to end of 2020-21	Nil reported in AR, Violation of Rule45(5) (C) of MCDR, 2017 is pointed out
3n	Ore to OB ratio for the pit/mine during the year	1:0.75	1:0.61	
30	Total area put in use under different heads at the end of	Pit-4.537 ha, Roads-0.112	Pit-0.670 ha, Roads-0.111 ha,	Nil reported in AR, Violation of

	year	ha, Dumps-0.021 ha, Safety Zone- 1.388 ha, Others-0.110 ha up to end of plan period	Dumps-0.021 ha, Others-0.110 ha up to end of 2020-21	Rule45 (5) (C) of MCDR, 2017 is pointed out
3р	Production of ROM mineral during last five-years period, as Applicable (tonne)	2016-17-0.00 2017-18-0.00 2018-19- 9352.98 2019-20-30000 2020-21- 29999.3	2016-17- 0.00 2017-18- 0.00 2018-19- 0.00 2019-20-17583.68 2020-21-7960.80	Actual production within proposed limit
3q	General remarks of inspecting officer on method of mining etc	The actual production is less in comparison to proposal for lack of market demand and the mining operations were disturbed due to the COVID-19 pandemic. The put to use area Nil reported in AR, Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out.		

#### 4.0 Solid Waste Management-Dumping:

S.N.	Item	Proposals (2020- 21)	Actual Work (2020-21)	Remarks
4a	Separate dumping of topsoil, OB &	Separate benches	Due to less	
	mineral reject (Rule 32,33)	of Topsoil/OB,	production top	
		Mineral/Ore and	soil area not	
		Mineral Reject	encountered at	
		have been	this stage	
		proposed		
4b	Location of topsoil, OB & mineral	Directly used	No top soil	
	reject dumps	for plantation and	generated during	
		backfilling	the year	
4c	Number of Dumps within lease area	No proposal	Not applicable	No proposal
	and outside lease area			for stacking /dumping
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	No proposal	Not applicable	
4e	Number of Active & Alive dumps	Nil	Not applicable	
4f	Number of dead dumps	Not applicable	Not applicable	
4g	Number of dumps established	No proposal	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	No proposal	Not applicable	
4i	Length of Retaining wall or garland drain all along dump	No proposal	Not applicable	
4j	Number of settling ponds	No proposal	Not applicable	

4k	Specific commends of inspecting	The waste generated during the year was used for		
	officer on waste dump management	concurrent back filling of the exhausted mined out pit.		
		So, no proposal for dumping envisaged in the		
		approved documents.		

## 5.0 Solid Waste Management-Backfilling:

S.N.	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	Concurrent backfilling in the mined out area proposed	No quarry is exhausted	Area is not matured for backfilling due to less production
5b	Area under backfilling of mined out area	2.115 ha	0.114 ha	Due to less production
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Spread over backfilled area	No top soil generated during the year	
5d	Total area fully reclaimed & rehabilitated	2.115 ha	Nil	As per AR, Nil reported, Violation of Rule45(5) (C) of MCDR, 2017 is pointed out
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Due to less produ filling not done.	iction, the propos	sed area for back

## 6.0 Progressive Mine Closer Plan:

S. N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly-Rule 26 (2) of MCDR, 2017.	PMCP report to be submitted	PMCP report submitted	
6b	Management of worked/mined out benches			
	Area available for rehabilitation (Ha)	No proposal	Nil	
	Afforestation done (ha)	No proposal	Nil	
	No. of saplings planted during the year	No proposal	Nil	
	Cumulative no. of plants	No proposal	Nil	
	Any other specific method of rehabilitation	No proposal	Nil	
	Cost incurred on watch & care during the year	No proposal	Nil	
6с	Compliance on reclamation and rehabilitation by backfilling Voids available for backfilling (L*B*D)	Backfilling - 461m X 102.97m X 7.8(max.)	Nil	Due to less production and development

	Void filled by waste/tailings Afforestation on the backfilling Rehabilitation by making water reservoir Any other specific means			
6d	Compliance of Rehabilitation of waste land within lease i. Afforestation ii. Area rehabilitation (ha) iii. Method of rehabilitation	i. Afforestation- 4.747 ha ii. Area rehabilitation (ha) -4.747 ha iii. Method of rehabilitation- Plantation over backfilled area & Safety zone	Nil	Due to less production
6e	Compliance of Environment monitoring (core zone & buffer zone)	3 station or 12 samples for Air, Water & Noise monitoring, quarterly.	Done as per proposed	
6f	General remarks of inspecting officer on PMCP compliance & progressive closer operations	Due to less production the proposed area for back filling and afforestation not done.		

### 7.0 Mineral Conservation:

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Grade wise sorting proposed	Grade wise sorting done	Done as proposed
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual method proposed	Manual method adopted	-do-
7c	Different grade of mineral sort out at mine	Yes	Done as proposed	
7d	Any beneficiation process at mines	Not envisaged in the approved document	Not applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Manual method of grade-wise sorting of bauxite mineral adopted.		

## 8.0 Environment:

S.N.	Item	Proposals (2020-21)	Actual Work (2020-21)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Nil generation of topsoil	No topsoil generated during the year
8b	Concurrent use or storage of topsoil	Spread over backfilled area	Nil generation of topsoil	No topsoil generated during the year

80	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumping of waste/OB, Mineral/Ore and Mineral reject proposed	Concurrent practice adopted	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Backfilling of 2.115 ha exhausted quarry	0.114 ha	Due to less production area is not matured for backfilling
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No proposal	Nil	
8g	Survival rate	No proposal	Nil	Plantations were done outside the lease area allocated by the State Govt.
8h	Water sprinkling on roads to control airborne dust	Haul road, nearby village road & periphery of mine area	Done as per proposal.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	The area fo outside the le		n by the State Govt.

# 9.0 Compliance of Rule 45:

S N	Item	Comments		Remarks
9a	Status of submission of monthly and Annual returns	MR submitted up to February 2022 AR submitted up to 2020-21 dated 15.06.2021		
S N	Item	Details Given in A.R.	Observation of I/Officer	
9 b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri Vivek Kumar Yadav Geologist: Not appointed Manager: Vivek Kumar Yadav	During inspection the Geologist was not present	Violation of Rule 55 of MCDR, 2017 is pointed out
9c	Scrutiny of Annual return on land use pattern for area under pits,	Nil reported	Pit-0.670 ha, Roads-0.111 ha,	Violation of Rule 45(5) (C) of

9 d	reclaimed area, dumps etc. Scrutiny of Annual return on afforestation	Within lease area-1600	Dumps-0.021 ha, Others-0.110 ha up to end of 2020-21 Planted outside lease area but reported in within the lease area in AR	MCDR, 2017 is pointed out Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	30% and 6000 tonne	Incorrect information furnished in AR	Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Opening-0.00 T Production- 7960.80 T Closing-0.00 T	No stock is reported	Seems to be correct
9 g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	Sale Value: Rs. 7045308.00 Ex. Mine Price: Rs. 885.00 Per Metric Tonne Cost of Production: Rs. 885.00 Per Metric Tonne	Ex. mine price and cost of production reported as same	Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out
9i	Scrutiny of Annual return on Fixed assets	Rs. 0/-	Report as per Annual Return	
9 k	Scrutiny of Annual return on mining Machineries	Back Hoe- 0.9 cum Air Compressor- 400 Cum/Min Water Tanker- 20000 liter	All the machineries used for mining operations have not been reported	Violation of Rule 45(5) (C) of MCDR, 2017 is pointed out

10- (a) Details of violations observed during current inspection:-Rule 27(2), 45(5)(C) and 55 of MCDR, 2017.

(b) Compliance position of earlier violation pointed out: - The violations pointed earlier have been complied.

Date: 04.04.2022

Signature: Name: Rudra Narayan Mihsra Designation: Senior Mining Geologist

Signature: Name: Prasant Kumar Sahu Designation: Assistant Mining Engineer