

MCDR INSPECTION REPORT

1.0 GENERAL

SN	PARTICULARS	DETAILS
1	Name & Designation of the inspecting officer	Mr. R. K. Das, Sr. ACOM.
2	Date of Inspection	18.03.2019
3	Accompanying mine personnel	1.Mr. Subhash Kujur, Mines Manager 2.Mr. Dhrijpal Singh Kanwar, Jr. Foreman 3 Mr. Vidyabhusan Mishra (Qualified Person) 4 Mr. priyaranjan (Assistant Geologist)
4	Name of the Mine	Barima Bauxite mine
5	Total Lease Area (Ha) with breakup of Non-forest and forest land	80.414 ha. Govt. land (Non- forest)
6	Mine code,File No.	07MPR42003, CHG/SRG/BX-1/NGP
7	IBM Registration Number under rule 45 of MCDR, 1988	IBM/8239/2011
8	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 chhattishgarh, 492006
9	Village	Barima
10	Taluka/Mandal	Mainpat
11	District	Surguja
12	Pincode	497111
13	State	Chhattishgarh
14	Post office	Kamleshwarpur
15	Nearest police station	Kamleshwarpur
16	Nearest Railway station	Ambikapur
17	Date of Grant of Mining Lease	18.02.1999
18	Date of Execution	30.09.1999
19	Date of opening of Mine	30.09.1999
20	Date of first Renewal, if applicable and its period & expiry	Nil
21	Date of second Renewal, if applicable and its period & expiry	Nil
22	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Nil
23	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mrs. K.C. Devsenapathi (I.A.S.) Chhattisgarh Mineral Development Corporation Ltd. Sonakhan Bhawan Ring road no. 01, village -purena post ravigram raipur chhattishgrh, 492006 Email :-cmdcraipurgmail.com
24	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr. S.K.Pandey AGM (Geology) Chhattisgarh Mineral Development Corporation Ltd. Sonakhan Bhawan Ring road no. 01, village -purena post ravigram raipur chhattishgrh, 492006 Email :-cmdcraipurgmail.com

		Mob:- 9926533449
25	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr. Subhash Kujur Chhattisgarh Mineral Development Corporation Ltd. Village Narmadapur Post – Narmadapur District Surguja Email :- cmdcambikapur@gmail.com Mob:- 8349213976
26	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr. Upendra Kumar Chhattisgarh Mineral Development Corporation Ltd. Village Narmadapur Post – Narmadapur District Surguja Email :- cmdcambikapur@gmail.com Mob:- 9630753321
27	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Mr. S.K. Pandey Mr. Upendra Kumar
28	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan was approved vide letter no.SRG/BX/MPNL-637/NGP,Dated 10.12.1998 for period 1999-2004
29	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Modification in approved mining plan,Letter no. SRG/BX/MPLN-1079/2017/ Raipur dated 24.04.2017 for the period of 2017-18 to 2018-19.
30	Mineral(s) granted in lease and proved for mining	Bauxite
31	Method of Mining(Opencast, Underground)	Opencast,
32	Category (Fully Mechanised, Others or Manual)	Semi mechanised
33	Captive/Non Captive	Non Captive
34	EC for ROM Prod: Date of Issue:	90000 MT 14.07.2006
35	FA amount Rs Valid up to:	32,97,000 and valid upto 31.03.2019

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. –

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 nos	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	Nil	Till date about 48.488 ha area covered under G1 & G2 category.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not applicable.		
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Balance area to be explored to bring Geological axis in 1 or 2 is about 23 ha.	
1e	Balance reserves as on 01.04.2018	390565.80 Tonne.	390565.80 Tonne.	
1f	General remarks of inspecting officer on geology, exploration etc.	The area mainly shows alluvial soil and bauxite and laterite outcrops shows at the base of hill part. The quarry and surface exposures of bauxite in the form of big boulders.		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	In influence of Borehole- BH- 3 & 4 in Block – A (67.67.941ha) and BH- 1 & 2 in Block-B (12.473 ha.).	In influence of Borehole- BH- 3 & 4 in Block – A.	Less production done due to, lessee has no valid Environment Clearance
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	1 bench each in overburden and mineral.	1 bench in overburden and 1 bench in mineral zone.	
2c	Stripping ratio or ore to OB ratio	1:0.20	1:0.5	(T/m ³)
2d	Quantity of topsoil generation in m3	There was no separate calculation for top soil given in Approved Modified Scheme of Mining. The Soil is mixed with morrum and pebbles thus it counts under overburden.		
2e	Quantity of overburden generation in m3	2017-18:23078 2018-19:23835.07	2017-18:19940 2018-19:720.00	Lessee has no valid Environment Clearance therefore work has been stopped in 2018-19.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Broadly as per proposal.		

3.0 Exploitation

	Item	Proposals	Actual work	Remarks												
3a	Number of pits proposed for production	2	2													
3b	Quantity of ROM mineral production proposed (t)	10307.00	1335.65													
3c	Recovery of salable/usable mineral from ROM production (t)	10307.00	1335.65													
3d	Quantity of mineral reject generation	Nil	Nil													
3e	Grade of mineral reject generation and threshold value declared	Nil	Nil													
3f	Quantity of sub-grade mineral generation	Nil	Nil													
3g	Grade of sub-grade mineral generation	NA	NA													
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual													
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No	No													
3j	Provision of drilling & blasting in mineral benches	Yes with Jack hammer drill.	Yes with Jack hammer drill.													
3k	Provision of mining machineries in mineral benches	Yes given	<table border="1"> <tbody> <tr> <td>DTH Drills</td> <td>1</td> </tr> <tr> <td>Jack Hammers</td> <td>1</td> </tr> <tr> <td>Compressor</td> <td>1</td> </tr> <tr> <td>Hydraulic Excavators</td> <td>1</td> </tr> <tr> <td>Portable small dozer</td> <td>1</td> </tr> <tr> <td>Dumper</td> <td>1</td> </tr> </tbody> </table>	DTH Drills	1	Jack Hammers	1	Compressor	1	Hydraulic Excavators	1	Portable small dozer	1	Dumper	1	
DTH Drills	1															
Jack Hammers	1															
Compressor	1															
Hydraulic Excavators	1															
Portable small dozer	1															
Dumper	1															

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	The proposed height of OB bench was 3m and in ore zone maximum bench height was 5m proposed in Modification of Scheme of Mining.	The actual height of OB bench was 2 and in ore zone maximum bench height was also 3m.																						
3m	Total area covered under excavation/pits	37.967 ha	Presently 18.787 ha area reclaimed and balance area proposed for reclamation.																						
3n	Ore to OB ratio for the pit/mine during the year	1:0.20	1:0.5																						
3o	Total area put in use under different heads at the end of year	Land use proposal as per approved Modified scheme of Mining and actual is given below- .																							
		Item details	Proposed area in last document (ha)																						
		i) Area under mining	19.18																						
		ii) Storage for soil	-																						
		iii) Waste dump site	-																						
		iv) Mineral storage	-																						
		v) Infrastructure – workshop, administrative building etc.	0.039																						
		vi) Roads	0.93																						
		vii) Virgin area Plantation	1.046																						
		viii) Reclaimed area	18.787																						
3p	Production of ROM mineral during last five-year period, as applicable	<p align="center"><u>TABLE SHOWING PROPOSED BAUXITE PRODUCTION IN MODIFIED SOM</u></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Production in MT</th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>33435.00</td> </tr> <tr> <td>2017-18</td> <td>80000.00</td> </tr> <tr> <td>2018-19</td> <td>10307.00</td> </tr> <tr> <td>Total</td> <td>123742</td> </tr> </tbody> </table>		Year	Production in MT	2016-17	33435.00	2017-18	80000.00	2018-19	10307.00	Total	123742	<p align="center"><u>TABLE SHOWING ACTUAL BAUXITE PRODUCTION DETAILS OF MINE</u></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Production in MT</th> </tr> </thead> <tbody> <tr> <td>2016-17</td> <td>Nil</td> </tr> <tr> <td>2017-18</td> <td>74387.00</td> </tr> <tr> <td>2018-19</td> <td>1335.65</td> </tr> <tr> <td>Total</td> <td>75722.65</td> </tr> </tbody> </table>	Year	Production in MT	2016-17	Nil	2017-18	74387.00	2018-19	1335.65	Total	75722.65	
Year	Production in MT																								
2016-17	33435.00																								
2017-18	80000.00																								
2018-19	10307.00																								
Total	123742																								
Year	Production in MT																								
2016-17	Nil																								
2017-18	74387.00																								
2018-19	1335.65																								
Total	75722.65																								
3q	General remarks of inspecting officer on method of mining etc.	The method of mining is opencast semi mechanised method .The mining is shallow depth mining with concurrent backfilling.																							

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	There was proposal for stacking temporarily near the working face and after the extraction of ore these waste used for reclamation of existing quarry in Block A.	Stacked near the quarry and later used for backfilling of exhausted quarry.	
b	Location of topsoil, OB & mineral reject dumps	There was proposal for stacking temporarily near the working face and after the extraction of ore these waste used for reclamation of existing quarry in Block A.	The top soil is stack near the working area and used for concurrent backfilling.	
4c	Number of dumps within lease area and outside lease area	Nil	No major dump	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	NA	
4e	Number of active & alive dumps	Nil	Nil	
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	NA	NA	Working is shallow depth 5-8 meter depth with concurrent backfilling
4i	Length of Retaining wall or garland drain all along dump	N.A.	N.A.	
4j	Number of settling ponds	N.A.	N.A.	
4k	Specific comments of inspecting officer on waste dump management	The working is shallow depth working of 4-8 meter depth and after removing ore body the waste/OB is backfilled therefore no major dump.		

5.0 Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
----	------	-----------	-------------	---------

5a	Status on part or full extraction of mineral from mined out area before starting backfilling	There was proposal of 13557.00m ² area for backfilling.	Backfilling done in 99405.00m ² area.	
5b	Area under backfilling of mined out area	1.35 ha proposed for backfilling.	9.94 ha area backfilled.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	As per approved Modified scheme of Mining the top soil shall be spread over reclaimed area for plantation purpose.	There is no major dump observed and topsoil is mainly used for concurrent backfilling.	
5d	Total area fully reclaimed & rehabilitated	29.65 ha	Till date 33.290ha area backfilled & plantation done in 13.624ha.	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Broadly the concurrent backfilling was done but still area not reclaimed properly.		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2).	Yes	Broadly as per proposal	.
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	1.35 ha 1.35 ha backfilled area. Total no of saplings required under this will be about, 2500 nos. 107840 no. NA Rs.- 340000.00	9.94 ha area backfilled. Nil . Nil 105340 no. Nil Rs.- 340000.00 (3 workers engaged) Rs- 300000.00 for fencing.	
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	9065m X 4501m X 2.5m N.A. 1.35 ha Nil.	60120m X 39285m X 2m N.A. N.A. Nil Nil	

6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	1.35 ha area with 2500 no of saplings. 1.35 ha Plantation.	Nil Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed	Broadly as per proposal.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Broadly as per proposal		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	All the excavated ore above threshold value shall be manually sorted and despatched	All the excavated ore above threshold value shall be manually sorted and despatched	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual sorting	All the excavated ore above threshold value shall be manually sorted and despatched	
7c	Different grade of mineral sorted out at mines	Not mentioned specifically	All the excavated ore above threshold value shall be manually sorted and despatched	
7d	Any beneficiation process at mines	Not Applicable.	NA	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The manual sorting is done and different grade mineral sack is kept for dispatch.		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	There was no separate calculation and stacking for top soil given in Approved Modified Scheme of Mining. The Soil is mixed with morrum and pebbles thus it counts under overburden.	There is a soil dump between N -2522800 & E 737900 grid coordinate. These soil shall be spread over backfilled area for plantation.	
8b	Concurrent use or storage of topsoil	There was no separate calculation and stacking for top soil given in Approved Modified Scheme of Mining. The Soil is mixed with morrum and pebbles thus it counts under overburden.	These soil shall be spread over backfilled area for plantation.	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	There was proposal for stacking temporarily near the working face and after the extraction of ore these waste used for backfilling of existing quarry in Block A.	Stacked near the quarry and later used for backfilling of exhausted quarry.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	There was proposal of backfilling by using generated waste.	Stacked near the quarry and later used for backfilling of exhausted quarry.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	There was proposal of backfilling by using generated waste.	Used for backfilling	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	It was proposed that plantation shall be carried out on proposed backfilled area. Total no of saplings required for the year under this will be about, 2500nos and presently 105340 no of saplings already planted over backfilled area which cover 13.642 ha and 1.046ha virgin area.	presently 105340 no of saplings already planted over backfilled area which cover 13.642 ha and 1.046ha virgin area.	
8g	Survival rate	70 %– 80%	60 %– 70%	
8h	Water sprinkling on roads to control airborne dust	There was proposal of utilization of 2 water taker with 10000 litre capacity for water sprinkling on roads to control airborne dust.	2 water taker with 10000 litre capacity for water sprinkling is carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	The mining is done upto shallow depth with concurrent backfilling therefore no adverse impact observed on aesthetic beauty in and around mines area.		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	AR submitted upto 2017-18 and MR upto feb'19	

S. N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
-------	------	-----------------------	--------------------------	---------

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer & Geologist name not given, Manager name given		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes given	49 ha. abandoned by mining, Reclaimed & rehabilitated area 2.7 ha., infrastructure & road 2.0 ha.	
9d	Scrutiny of Annual return on afforestation	Nil		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil		
9f	Scrutiny of Annual return on ROM stock and/or graded ore			
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Yes given	Cost of production Rs 656.60/- & Ex-Mine price Rs369/-	
9i	Scrutiny of Annual return on fixed assets	Nil	Contractual working	
9k	Scrutiny of Annual return on mining machineries	Yes given	Backhoe 2 cum capacity & Dumper 15 ton capacity	

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:- The mining inspection was carried out for processing FMCP and mine is not having EC therefore work has been stopped in 2018-19. The deviation of working with rectification is updated in present FMCP and no other serious violation observed.

Rajesh Kumar Das,
Senior Assistant Controller of Mines