

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR inspection REPORT

Ranchi regional office

Mine file No : BIH/GLA/BX/238/RRO

Mine code : 07BHR32021

- (i) Name of the Inspecting : **K03**) **G. S. KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri. Kuila, Lessee Representative
Official with
Designation
- (iv) Date of Inspection : 20/03/2020
- (v) Prev.inspection date : 10/02/2017

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KUJAAM (78.74)**
- (b) **Registration NO.** : **IBM/4211/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : JHARKHAND
District : GUMLA
Village : KUJAM
Taluka : BISHUNPUR
Post office : JOBHIPAT
Pin Code :
FAX No. : NIL
E-mail : NIL
Phone : 06526-24075
- (f) Police Station : BISHUNPUR
- (g) First opening date : 01/05/1990
- (h) Weekly day of rest : MON
2. Address for : VILL-KUJAM
correspondance : BISHNUPUR
DIST-GUMLA
3. (a) Lease Number : BHR0228
- (b) Lease area : 76.4
- (c) Period of lease : 50
- (d) Date of Expiry : 27/03/2040
4. Mineral worked : BAUXITE Main

5. Name and Address of the

Lessee : G.C.P. AGARWAL
 EAST GOLA ROAD UPPER BAZAR
 LOHARDAGA LOHARDAGA
 JHARKHAND
 Phone:06526-24075(R) ,24083(O)
 FAX :

Owner : GYAN CHAND PRASAD AGARWAL
 EASTGOLA ROAD, LOHARDAGA,
 LOHARDAGA JHARKHAND
 Phone: 06526-24075(R),
 FAX :

Agent : SRI A.K.SRIVASTAVA
 C/O GYANCHAND PRASAD
 AGARWAL, EAST GOLA ROAD,
 UPPER BAZAR, LOHARDAGA-
 835302 LOHARDAGA JHARKHAND
 Phone: 06526-224075
 FAX :

Mining Engineer

Name : DHANANJAY KUMAR SINGH,Full Time
 Qualification : AMIE (MINING)
 Appointment/ : 01/11/2014
 Termination date

Manager

Name : SRI D.K.SINGH
 Qualification : B.E(MIN)
 Appointment/ : 01/11/2014
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	21/12/1988
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	17/06/1996
		Mining Scheme rule 12 MCDR1988	11/08/2003
		Renewal under rule 24 MCR1960	21/06/2012
		MP review under 17(1) MCR 2016	21/11/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	15 Core Boreholes has been Proposed during 2018-2019 and 13 Boreholes has proposed during 2019-2020	No boreholes has been drilled during 2018-2019 & 2019-2020	Violation has been issued under Rule 11(1)
1b	Exploration over lease area for geological axis 1 or 2	Total 28 Additional exploration was proposed during 2018-2019 & 2019-2020 in the lease area for Geological axis - 1	No Additional exploration was carried out in the lease area for Geological axis - 1 during 2018-2019 & 2019-2020	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	15 Core Boreholes has been Proposed during 2018-2019 and 13 Boreholes has proposed during 2019-2020	No boreholes has been drilled during 2018-2019 & 2019-2020	Violation has been issued under Rule 11(1)
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was proposed out at 100m X 100m grid interval. Total 28 Additional exploration was proposed during 2018-2019 & 2019-2020 in the lease area for Geological axis - 1	No Exploration was carried out at 100m X 100m grid interval.	31 DDH boreholes have been drilled so far in the lease area

1e	Balance reserve as on 01/04/20	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 603270 tons Probable Mineral Reserves (122) = 1517912 Tons Feasibility Mineral Resources (211) = 252734 Tons Pre-Feasibility Mineral Resources (222) = 382863 Tons	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 1220711 tons Probable Mineral Reserves (122) = 1517912 Tons Feasibility Mineral Resources (211) = 252734 Tons Pre-Feasibility Mineral Resources (222) = 382863 Tons	Due to non-working of mines, there is no change Reserves and Resources after approval.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Chotanagpur Granite gneiss. Laterite, Bauxite and Lithomerge occur in the plateau top as capping of Chotanagpur Granite gneiss.	Bauxite deposit is not extensive and continuous but found in limited area only.	Lease is having Same Geology. Hence borehole has to be drilled at closer interval to get quantity and quality

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed to work in Quarry-2 & 4 during 2018-2019 and 2019-2020.	Development has been carried out only in Quarry-2 as per the proposal	Mine is not in operation during 2016-2017 & 2017-2018. Started to work from 2018-2019
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It is proposed to form separate Bench's in Topsoil, Overburden and Mineral.	Separate Benches are not formed for Topsoil, Overburden and Mineral.	Violation has been issued under Rule 11(1)

2c	Stripping ratio or ore to OB ratio	1 : 0.73 during 2018-2019	Nil, there is no development as per annual return 2018-2019	
2d	Quantity of topsoil generation in m3	It is proposed to remove 51695 cu.m of topsoil during 2018-2019	No topsoil has been generated.	
2e	Quantity of overburden generation in m3	During 2018-2019 it is proposed OB as 81831 Cu.m	No OB has been removed.	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Proposed to work in Quarry-2 & 4 during 2018-2019 and 2019-2020.	Development has been carried out only in Quarry-2 but quantity of waste is not mentioned during 2018-2019 annual return	Separate Benches are not formed for Topsoil, Overburden and Mineral.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Proposed to work in Quarry-2 & 4 during 2018-2019 and 2019-2020.	Production has been carried out only in Quarry-2 as per the proposal	Mine is not in operation during 2016-2017 & 2017-2018
3b	Quantity of ROM mineral production proposed	The total target of Production was 350652 tons during 2018-2019.	2956 tons of production have been achieved during 2018-2019	
3c	Recovery of sailable/usable mineral from ROM production	Recovery of Sailable/ Usable Mineral from ROM Production 80%	65%	
3d	Quantity of mineral reject generation	There is no proposal to produced mineral rejects during 2018-2019	No mineral rejects has been generated	
3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject- below the threshold value and outside the ore zone.	Mineral reject- below the threshold value and outside the ore zone.	

3f	Quantity of sub grade mineral generation.	No Sub Grade Generation	9599 cu.m of Sub Grade has been Generated against proposal during 2018-2019.	Violation has been issued under Rule 11(1)
3g	Grade of sub grade mineral generation	No Sub Grade Generation	9599 cu.m of Sub Grade has been Generated against proposal during 2018-2019.	Violation has been issued under Rule 11(1)
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No Proposal	Nil	Only Manual Picking of Ore from Intercalated Waste.
3j	Provision of drilling and blasting in mineral benches	Spacing - 3.5m Burden - 3m Depth - 3.3m It is Proposed to drill by 115mm dia, crawler mounted down hole drill. Blasting is done by using slurry explosives.	Drilling & Blasting are done as per proposal.	
3k	Provision of mining machineries in mineral benches	Hydraulic Excavators Dumpers Compressor Tractor Dozer Water Tanker Electric generator	As per proposal machineries are available in field.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height of 6m was proposed in Mineral.	Benches are not formed as per proposal.	Violation has been issued under Rule 11(1)
3m	Total area covered under excavation/pits	19.00 hect area is under Pit	15.02 hect area is under Pit	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.73 during 2018-2019	Nil, there is no development as per annual return 2018-2019	

3o	Total area put in use under different heads at the end of year	Landuse Pattern as on 01.04.2019 Mining area=19.00 hect Reclaimed = 3.11 hect OB Dump = 0.76 hect Roads = 0.10 hect	Landuse Pattern as on 01.04.2019 Mining area=15.02 hect Reclaimed = 1.80 hect OB Dump = 1.00 hect Roads = 0.10 hect	Land use pattern is not changed due do mine is not in operation from 2016-2017 & 2017-2018
3p	Production of ROM mineral during the last five year period as applicable	2018-2019 = 350652 tons 2017-2018 = 225994 tons 2016-2017 = Nil 2015-2016 = Nil 2014-2015 = 401990 tons	2018-2019 = 2956 tons 2017-2018 = Nil 2016-2017 = Nil 2015-2016 = 75509 tons 2014-2015 = 15550 tons	
3q	General remarks of inspecting officers on method of mining etc.	Mechanised Method is Proposed	2956 tons has been achieved during 2018-2019 against 350652 tons of proposal	

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no proposal for forming new dump during 2018-2019. It is proposed to backfill the area simultaneously	As per proposal the backfilling is not done concurrently. New dump has been formed.	Violation has been issued under Rule 11(1)
4b	Location of topsoil, OB and mineral reject dumps	It is proposed to backfill nearer to Quarry-2 & 4, during 2018-2019 & 2019-2020.	As per proposal the backfilling is not carried out during 2018-2019 & 2019-2020.	
4c	Number of dumps within lease area and outside of lease area	Lease area = 5 Non Lease area = Nil	Lease area = 5 Non Lease area = Nil	Dump-D2 has re-handled as per proposal and formed new dump. Violation has been issued under Rule 11(1)

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	There is no proposal of Dump.	New dump has been formed.	Violation has been issued under Rule 11(1)
4e	Number of active and alive dumps.	Active Dump = Nil Alive Dump = Nil	There is no active dump within lease area for waste dumping.	Excavated area is backfilled simultaneously. So dumping is not proposed.
4f	Number of dead dumps.	Dead Dumps = Nil	Dead Dumps = Nil	
4g	Number of dumps established.	No dumps have been established.	No dumps have been established.	
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No Proposal	Nil	
4j	Number of settling ponds	No Proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	There is no proposal for forming new dump during 2018-2019. It is proposed to backfill the area simultaneously	As per proposal the backfilling is not done concurrently. New dump has been formed.	

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Simultaneously Back filling has proposed during 2018-2019 & 2019-2020 in Quarry-2.	Simultaneously Back filling was in process and could not achieved as per proposal	Violation has been issued under Rule 11(1).
5b	Area under backfilling of mined out area	It is proposed to backfill 2.48 hectares during 2018-2019	No hectares has Backfilled against proposal	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use	Concurrent use
5d	Total area fully reclaimed and rehabilitated	Proposed Reclaimed area = 2.48 hect	Achieved Reclaimed = Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Simultaneously Back filling has proposed during 2018-2019 & 2019-2020 in Quarry-2.	No hectares has Backfilled against proposal

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	It should be on or before 1st July every year.	Not Submitted for the year 2018-2019	Violation has been issued under Rule 26(2).
6b	Area available for rehabilitation (ha) .	Proposed 2.48 hectares during 2018-2019	No hectares has achieved during 2018-2019	
6c	afforestation done (ha).	Proposed 0.05 hect in 2018-2019	No hectares has been afforested	
6d	No. of saplings planted during the year	1450 saplings proposed in backfilled area for 2018-2019	200 saplings have been achieved.	Violation has been issued under Rule 11(1).
6e	Cumulative no .of plants	5600 nos of saplings proposed during the plan period 2017-2020 in the backfilled area.	700 saplings have been planted during 2017-2020 inside the backfilled area.	
6f	Any other method of rehabilitation	No Proposal	Nil	
6g	Cost incurred on watch and care during the year	No Proposal	Nil	

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Proposed 2.48 hect in 2018-2019	No hectares has been backfilled during 2018-2019
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Proposed 0.05 hect in 2018-2019	No hectares have been afforested in backfilled area. 200 saplings have planted in unproposed area.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1450 saplings proposed in backfilled area for 2018-2019	200 saplings have been achieved.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposed 0.05 hect in 2018-2019	No hectares have been afforested in backfilled area. 200 saplings have planted in unproposed area.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Simultaneously Back filling	Simultaneously Back filling

6p	Compliance of environmental monitoring (core zone and buffer zone)	Bi-Annually Survey	Environment monitoring is carried out through own as well as private agency.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Environment monitoring is carried out through private agency.	200 saplings have been achieved during 2018-2019.	700 saplings have been planted during 2017-2020 inside the backfilled area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of Production was 350652 tons during 2018-2019.	2956 tons has been achieved during 2018-2019	Mine is not in operation during 2016-2017 & 2017-2018. Started to work from 2018-2019
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical Process and Manual Picking of Ore from Intercalated Waste	Mechanical Process and Manual Picking of Ore from Intercalated Waste	
7c	Different grade of mineral sorted out at mines.	Average Grade:- Al2O3 = +46% Sio2 = 3.85% Cut Off Grade:- Al2O3 = +30% Sio2 = 5%	Average Grade:- Al2O3 = +46% Sio2 = 3.85% Cut Off Grade:- Al2O3 = +30% Sio2 = 5%	
7d	Any beneficiation process at mines .	Manually sizing and sorting are proposed	sorting and sizing is being done	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The total target of Production was 350652 tons during 2018-2019.	2956 tons has been achieved during 2018-2019	Mine is not in operation during 2016-2017 & 2017-2018. Started to work from 2018-2019

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

8a	Separate removal and utilization of topsoil (Rule 32)	Proposal of removing topsoil separately and spreading over mined out area.	Concurrent backfilling and spreading of topsoil over backfilled areas is practiced for reclaimed and rehabilitation of mined out areas.	
8b	Concurrent use or storage of topsoil	Concurrent use	Concurrent use	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal of removing topsoil/ OB separately and spreading over mined out area.	Concurrent backfilling and spreading of topsoil over backfilled areas is practiced for reclaimed and rehabilitation of mined out areas.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The OB and waste generated are to be proposed to backfilled simultaneously in the mined out areas	Backfilling has done in during 2018-2019.	Mine is not in operation during 2016-2017 & 2017-2018. Started to work from 2018-2019
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No Proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1450 saplings proposed in backfilled area for 2018-2019	200 saplings have been achieved during 2018-2019	700 saplings have been planted during 2017-2020 inside the backfilled area.
8g	Survival rate	No such proposal in the approved document	30%	
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Water sprinkling on road is observed during the inspection.	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Thin vegetation, agriculture is observed in lease area. Paddy, Maize, Jowar, Gondli are common crops.	Sal vegetation is prominent in this area.
----	--	---	---

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = February 2020 AR Submitted up to = 2018-2019	Both Annual & Monthly returns are submitting in online system. Submitted within the time limits	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Geologist has shown	As per record Mining Engineer and Geologist are present during Inspection	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Land use Pattern as on 01.04.2019. Exploited area = 15.02 hect Current working = 5.60 hect Dump = 1.00 hect	Landuse Pattern is filled as per approved Mining Plan	
9d	Scrutiny of Annual return on afforestation	200 saplings have been achieved against the proposal of 1450 saplings during 2018-2019.	It is advised the lessee to plant the saplings as per the proposal.	Violation has been issued under Rule 11(1).
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no Mineral Rejects Generation	There is no Mineral Rejects Generation	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Bauxite Stock as on 01.04.2019 ROM Closing stock = 9125 tons Dispatches of Processed ore 40% to below 45% Al ₂ O ₃ = 21323 tons	Mine has produced 2956 tons of Production during 2018-2019	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production & Ex. Mine Price has shown	Some invoice has been checked and mismatched	Violation has been issued under Rule 45(5)(c).
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is not given	It is advice to fill the Fixed Assets	
9k	Scrutiny of Annual return on mining machineries	Machineries details not given	It is advised the lessee to show the machineries used during 2018-2019.	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 26(2)	10/06/2020			
MCDR17	Rule 45(5)(c)	10/06/2020			
MCDR17	Rule 11(1)	10/06/2020			

Date :

(G. S. KANNAN)

Indian Bureau of Mines