

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

**MCDR inspection REPORT
Ranchi regional office**

Mine file No : BIH/PAL/GRP/565/RRO

Mine code : 28BHR18014

- (i) Name of the Inspecting : **K03**) **G. S. KANNAN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri.Prakash, GM-Benefication Plant
Official with
Designation
- (iv) Date of Inspection : 08/01/2020
- (v) Prev.inspection date : 27/01/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BETLA (MLA 7.21)**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : JHARKHAND
District : LATEHAR
Village : BETLA
Taluka : MANIKA
Post office : MANIKA
Pin Code :
FAX No. : 0651-2283384
E-mail : hvbajaj@gmail.com
Phone : 0651-2283384
- (f) Police Station : MANIKA
- (g) First opening date : 24/06/1996
- (h) Weekly day of rest : SUN
2. Address for
correspondance : VILL.- BETLA,
PO/PS- MANIKA,
DISTT.- PALAMAU (JHK)
3. (a) Lease Number : BHR0534
(b) Lease area : 7.13
(c) Period of lease : 20
(d) Date of Expiry : 28/09/2015
4. Mineral worked : GRAPHITE Main

5. Name and Address of the

Lessee : PARIJAT MINING INDUSTRIES (IND) PVT. LTD
 502A, MANGAL MURTI HIEGHTS,
 5th FLOOR, RANI BAGAN,
 HARMU ROAD, RANCHI
 JHARKHAND
 Phone:0651-2283384
 FAX :0651-2283384

Owner : PARIJAT MINING INDUSTRIES (P) LTD.
 502A, MANGAL MURTI HIEGHTS,
 5th FLOOR, RANI BAGAN,
 HARMU ROAD, RANCHI
 JHARKHAND
 Phone: 0651-2283384
 FAX : 0651-2283384

Agent : S.K. BAJAJ
 OPP. SHIVAJI MAIDAN, AT/PO-
 DALTONGANJ DISTT.- PALAMAU
 (JHK) PALAMAU JHARKHAND
 Phone:
 FAX :

Geologist

Name : P.K. SEN,Part Time
 Qualification : M.Sc(GEOLOGY)
 Appointment/ : 24/06/1996 01/09/2003
 Termination date

Geologist

Name : M.K.MUKHOPADHYAY,Full Time
 Qualification : M.Sc(Geo)
 Appointment/ : 22/09/2003
 Termination date

Manager

Name : R.N. UPADHYAY
 Qualification : MINING MATE
 Appointment/ : 12/08/2000 01/01/2006
 Termination date

6. Date of approval of Mining : Fresh under rule 22 MCR1960 17/06/1996
 Plan/Scheme of Mining Mining Scheme rule 12 MCDR1988 14/11/2014
 MP review under 17(1) MCR 2016 12/09/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	8 Core Boreholes Proposed during 2017-2018	No Boreholes has been drilled as per proposal.	Violation has been issued under Rule 11(1)
1b	Exploration over lease area for geological axis 1 or 2	8 - Additional exploration was proposed during 2017-2018 in the lease area for Geological axis - 1	Additional exploration was not carried out in the lease area for Geological axis - 1	No Exploration has been carried out. Violation has been issued under Rule 11(1)
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Own drilling and/ or Contract drilling machines were proposed for Exploration.	No Boreholes has drilled	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 50m X 50m grid interval. 8 Additional exploration was proposed in plan period (2016-2021)	Exploration was not carried out at 50m X 50m grid interval. Entire lease area has to be explored for availability of ore for G-3 to G-1.	No boreholes have been drilled so far in te lease area and Reserves and Resources are estimate based on depth of Quarry has been considered under G-1.

1e	Balance reserve as on 01/04/20	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 65219 Tons Probable Mineral Reserves (122) = 49891 Tons Feasibility Mineral Resources (211) = 3475 Tons Pre-Feasibility Mineral Resources (222) = 9720 Tons	Reserves & Resources as on 01.04.2019 Proved Mineral Reserves (111) = 89709 Tons Probable Mineral Reserves (122) = 112300 Tons Feasibility Mineral Resources (211) = 3475 Tons Pre-Feasibility Mineral Resources (222) = 9720 Tons	Due to less production achieved there is no changes in R & R.
1f	General remarks of inspecting officers on geology, exploration etc	It is part of Chotanagpur Granite gneiss.	Graphite veins occur parallel and concordant with the quartz mica schist. Graphite veins occurs 2 to 3m thickness.	Lease is having Same Geology. Thickness and mineralogy is changes from place to place. 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-1 during 2018-2019. (Section line A-A', C-C', D-D', F-F' & G-G')	Working has been not carried out as per the proposal	Violation has been issued under Rule 11(1)
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It is proposed to form separate Bench's as Topsoil - 1 Overburden - 3 benches Mineral - 3 benches	As per proposal benches are not formed.	Violation has been issued under Rule 11(1)

2c	Stripping ratio or ore to OB ratio	1 : 1.33	1 : 1.60
2d	Quantity of topsoil generation in m3	No Proposal during 2018-2019	No topsoil has been generated.
2e	Quantity of overburden generation in m3	During 2018-2019 it is proposed OB as 21663 Cu.m/ 10831 tons	2601 cu.m/ 5203 tons of OB have been removed.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Proposed to work in Quarry-1 during 2018-2019. (Section line A-A', C-C', D-D', F-F' & G-G') to generate 21663 cu.m of OB	2601 cu.m/ 5203 tons of OB have been removed.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Development and production was proposed in Quarry-1 during 2018-2019. (Section line A-A', C-C', D-D', F-F' & G-G')	Development and production are not carried out as per proposal during 2018-2019	Violation has been issued under Rule 11(1)
3b	Quantity of ROM mineral production proposed	The total target of ROM Production was 38364 tons during 2018-2019.	3251 tons of production have been achieved during 2018-2019	
3c	Recovery of sailable/usable mineral from ROM production	80% Recovery is 30691 tons	90% recovery	
3d	Quantity of mineral reject generation	No Proposal	Nil	

3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared	Mineral reject- No Proposal. Threshold Value for Mineral rejects is not Declared	
3f	Quantity of sub grade mineral generation.	No Sub Grade Generation	No Sub Grade Generation	
3g	Grade of sub grade mineral generation	There is No Generation of Subgrade Mineral	There is No Generation of Subgrade Mineral	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
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	It is Proposed to use crackmite in this area to breaking or cracking of OM.	Crackmite are done as per proposal.	
3k	Provision of mining machineries in mineral benches	Hydraulic Excavators Poclain Water Tanker Tippers	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 3m was proposed in Mineral.	Benches are formed 5-8m height.	Violation has been issued under Rule 11(1)
3m	Total area covered under excavation/pits	1.93 hect area is under Pit as on 2018-2019	1.95 hect area is under Pit	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 1.33	1 : 1.60	

3o	Total area put in use under different heads at the end of year	Land use Pattern as on 01.04.2019. Mines = 1.93 hect Dump = 1.24 hect Roads = 0.06 hect Green Belt = 0.45 hect	Land use Pattern as on 01.04.2019. Mines = 1.95 hect Dump = 0.10 hect Reclaimed = 0.10 hect Roads/ Infra = 0.152 hect	0.10 hect has been reclaimed against the proposal. Violation has been issued under Rule 11(1)
3p	Production of ROM mineral during the last five year period as applicable	2018-2019 = 30691 tons 2017-2018 = 31718 tons 2016-2017 = 32386 tons 2015-2016 = 17376 tons 2014-2015 = 32556 tons	2018-2019 = 3251 tons 2017-2018 = 4645 tons 2016-2017 = Nil 2015-2016 = Nil 2014-2015 = Nil	
3q	General remarks of inspecting officers on method of mining etc.	Mechanised Method is Proposed	3251 tons has been achieved during 2018-2019 against 30691 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)	Generated OB/ Intercalated waste will be dumping in cross section H-H'	As per proposal the dumping is not carried out in Dump area nearer to section H-H'	Violation has been issued under Rule 11(1).
4b	Location of topsoil, OB and mineral reject dumps	Location of Proposed Dump (Cross section H-H')	As per proposal the dumping is not carried out in Dump area nearer to section H-H'	Violation has been issued under Rule 11(1).
4c	Number of dumps within lease area and outside of lease area	Lease area = 1 Non Lease area = Nil	Lease area = 1 Non Lease area = Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump is proposed outside the UPL	As per proposal dumps are not formed.	
4e	Number of active and alive dumps.	Active Dump = 1 Alive Dump = Nil	There is 1 active dump within lease area for waste dumping.	

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	Generated OB/ Intercalated waste will be dumping in cross section H-H'	As per proposal the dumping is not carried out in Dump area nearer to section H-H'

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.	No Back filling has proposed	Backfilling has done in existing pit	Violation has been issued under Rule 11(1).
5b	Area under backfilling of mined out area	No Back filling has proposed	Backfilling has done in existing pit	Violation has been issued under Rule 11(1).
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No Proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	No Proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No Back filling has proposed	Backfilling has done in existing pit	

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 pointed out under Rule 26 (2)
6b	Area available for rehabilitation (ha) .	No Proposal	Nil	
6c	afforestation done (ha).	Proposed 0.45 hect in 2018-2019	Nil	Violation has been issued under Rule 11(1).
6d	No. of saplings planted during the year	375 saplings proposed in 7.5m safety barrier and 675 saplings on dump slope for 2018-2019	Nil	Violation has been issued under Rule 11(1).
6e	Cumulative no .of plants	1875 nos of saplings proposed from during plan period 2016-2019 in 7.5m safety barrier and dump slope	No saplings have planted during 2016-2019 inside the lease area and outside lease around 550 saplings has planted.	Violation has been issued under Rule 11(1).
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	No Proposal	Nil	
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)Afforestati on on backfilled area	No Proposal	Nil	

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	375 saplings proposed in 7.5m safety barrier and 675 saplings on dump slope for 2018-2019	Nil	Violation has been issued under Rule 11(1).
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposed 0.45 hect in 2018-2019	Nil	Violation has been issued under Rule 11(1).
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	Nil	
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.	No saplings have planted during 2016-2019 inside the lease area and outside lease around 550 saplings has planted.	Violation has been issued under Rule 11(1).

Mineral Conservation:

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

7a	ROM Mineral dispatch or grade-wise sorting within lease area	The total target of ROM Production was 38364 tons during 2018-2019.	3251 tons has been achieved during 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.	Size = Lump > 200mm Fixed Carbon = 15.32 Ash = 80.86	Size = Lump > 200mm Fixed Carbon = 15.32 Ash = 80.86	Low grade are Blended with High grade ores to get the desired plant feed materials.
7d	Any beneficiation process at mines .	Manually sizing and sorting is proposed	Manually sizing and sorting is being done	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	The total target of ROM Production was 38364 tons during 2018-2019.	3251 tons has been achieved during 2018-2019	Low grade are Blended with High grade ores to get the desired plant feed materials.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No Proposal	Nil	
8b	Concurrent use or storage of topsoil	No Proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Generated OB/ Intercalated waste will be dumping in cross section H-H'	As per proposal the dumping is not carried out in Dump area nearer to section H-H'	Violation has been issued under Rule 11(1).

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Backfilling has done in existing pit	Violation has been issued under Rule 11(1).
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)	375 saplings proposed in 7.5m safety barrier and 675 saplings on dump slope for 2018-2019	No saplings have planted during 2018-2019 inside the lease area and outside lease around 300 saplings has planted during 2018-2019.	
8g	Survival rate	80%	75% for outside lease saplings	
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	Scanty vegetation, bushes are observed in lease area	Surrounding area beyond lease area is greenery.	

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR Submitted up to = November 2019 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	No Mining Engineer, Geologist	Only Mines mate is working as Permit Manager	It is advised to appoint mining engineer/ Geologist. Violation has been issued under Rule 55(1)(3)(iii)
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. Mines = 1.95 hect Dump = 0.10 hect Reclaimed = 0.10 hect Roads/ Infra = 0.152 hect	Landuse Pattern is filled as per approved Mining Plan	0.10 hect has been reclaimed against the proposal. Violation has been issued under Rule 11(1)
9d	Scrutiny of Annual return on afforestation	No saplings have planted during 2018-2019 inside the lease area and outside lease around 300 saplings has planted 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	Graphite Stock as on 01.04.2019 ROM Closing stock = 2789 tons Processed ore less that 40% fixed carbon dispatch = 3251 tons	Mine has produced 3251 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 matching	
9h	Scrutiny of Annual return on fixed assets	Fixed Assets is given	Fixed Assets is filled	

9k Scrutiny of Machineries As available in field
Annual return on details given
mining
machineries

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 11(1)	28/02/2020			
MCDR17	Rule 26(2)	28/02/2020			
MCDR17	Rule 33	28/02/2020			
MCDR17	Rule 35(2)	28/02/2020			
MCDR17	Rule 45(5)(c)	28/02/2020			
MCDR17	Rule 55(1)(3)	28/02/2020			

Date :

(G. S. KANNAN)

Indian Bureau of Mines