### INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### Mining Plan Modification REPORT

#### Ranchi regional office

Mine file No : BIH/PAL/GRP/565/RRO Mine code: 28BHR18014

(i)Name of the Inspecting : R002) RAGHVENDRA KUMAR

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Kamaluddin Khalifa (Mining Engineer), Md Khalid (Geol

Official with

Designation

(iv) Date of Inspection : 31/07/2023 Prev.inspection date : 16/03/2022 (v)

PART-I : GENERAL INFORMATION

(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 :

0651-2283384 FAX No.

E-mail : hvbajaj@gmail.com

0651-2283384 Phone

(f) Police Station : MANIKA

First opening date : 24/06/1996 (g)

Weekly day of rest (h) : SUN

Address for : VILL.- BETLA, correspondance PO/PS- MANIKA,

DISTT. - PALAMAU (JHK)

3. : BHR0534 (a) Lease Number (b) Lease area : 7.13 Period of lease : 20 (C)

> : 28/09/2015 (d) Date of Expiry

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:

Mining Engineer

Name : KAMALUDDIN KHALIFA, Full Time Qualification : DIP. IN MINING ENGINEERING

Appointment/ : 04/08/2022

Termination date

Geologist

Name : M.K.MUKHOPADHYAY,Full Time

Qualification : M.Sc(Geo)

Appointment/ : 22/09/2003 03/08/2024

Termination date

Geologist

Name : P.K. SEN, Part Time

Qualification : M.Sc(GEOLOGY)

Appointment/ : 24/06/1996 01/09/2003

Termination date

Geologist

Name : MD KHALID, Full Time

Qualification : MSc.GEO
Appointment/ : 01/04/2022

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

MP review under 17(1) MCR 2016 02/05/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

### Exploration :

| Sl.No. | Item  | Proposals  | Actual work  | Remarks   |
|--------|---|--|--|---|
| 1a     | Backlog of<br>previous year   | No Proposal.   | Nil.   | Nil.  |
| 1b     | Exploration over lease area for geological axis 1 or 2                  | 04 numbers of<br>boreholes<br>have been<br>Proposed<br>during 2022-<br>2023.                   | As per proposal no boreholes have been drilled during 2022-2023.             | Violation of Rule<br>11(1) has been<br>issued.  |
| 1c     | Exploration Agencies and Expenditure in lakh rupees during the year     | Exploration proposed during 2022-23.   | No exploration work was carried out.   | Exploration work was not carried out due to land acquisition issue.   |
| 1d     | Balance area to<br>be explored to<br>bring Geological<br>axis in 1 or 2 | G4 to G1,<br>4.656 Ha.<br>(non forest).  | 2.21 has explored to G-1 & 0.35 ha. has explored to G-2 (non forest).        | No boreholes have been drilled so far in the 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  | Balance<br>Reserve as on<br>01/04/2024 -<br>(Tones) 111 -<br>76302, 121 -<br>0, 122 -<br>15048 | Balance Reserve as on 01/04/2024 - (Tones) 111 - 93748, 121 - 0, 122 - 15048 | 9356 Ton<br>production has<br>been achieved<br>during FY 2022-23  |
| 1f     | General remarks of inspecting officers on geology, exploration etc      | 04 numbers of<br>boreholes<br>have been<br>Proposed<br>during 2022-<br>2023.                   | As per proposal no boreholes have been drilled during 2022-2023.             | Exploration work was not carried out due to land acquisition issue.   |

# Development :

| Sl.No. | Item                                     | Propasals   | Actual work                                       | Remarks |
|--------|--|---|---|---------|
| 2a     | Location of development w.r.t.lease area | Quarry 1,<br>N2649772-<br>N2649856,<br>E232761-<br>E232939. | Working has been carried out as per the proposal. | Nil.    |

| 2b | Separate benches<br>in topsoil,<br>overburden and<br>minerals (Rule<br>15)              | It is proposed<br>to form<br>separate<br>Bench's as<br>Topsoil - 1<br>Overburden<br>benches - 2<br>Mineral<br>benches - 2 | As per proposal benches are not formed. | Violation has been issued under Rule 11(1). |
|----|---|---|---|---|
| 2c | Stripping ratio<br>or ore to OB<br>ratio  | 1:1.5   | 1 :1.6                                  | Nil.  |
| 2d | Quantity of topsoil generation in m3  | 3405 cum  | 3400 cum                                | Nil.  |
| 2e | Quantity of overburden generation in m3   | 2023 it is  | 23075 Cu.m                              | Nil.  |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | work in Quarry<br>1, N2649772-<br>N2649856,   | As per proposal benches are not formed. | Violation has been issued under Rule 11(1). |

# Exploitation:

| Sl.No. | Item  | Propasals              | Actual work  | Remarks  |
|--------|---|------------------------|--|--|
| 3a     | Number of pit proposed for production                             | Quarry 1               | Quarry 1   | Nil.   |
| 3b     | Quantity of ROM mineral production proposed                       | 26802 ton              | 9356 ton   | Less production achieved.                                |
| 3с     | Recovery of sailable/usable mineral from ROM production           |                        | 80% of excavation  | Graphite, approx mineral-80%, approx gangue mineral-20%. |
| 3d     | Quantity of mineral reject generation                             | 5361 ton.              | 1870 ton   | Nil.   |
| 3e     | Grade of mineral rejects generation and threshold value declared. | approx<br>mineral-80%, | Graphite, approx mineral-80%, approx gangue mineral-20%. | Threshold Value for Mineral rejects is not Declared.     |

| 3f  | Quantity of sub grade mineral generation.  | There is No<br>Generation of<br>Subgrade<br>Mineral.                         | There is No Generation of Subgrade Mineral.         | Nil.   |
|-----|--|--|---|--|
| 3g  | Grade of sub<br>grade mineral<br>generation  | N/A  | Nil.  | Nil.   |
| 3h  | Manual / Mechanised method adopted for segregating from ROM  | Mechanised.  | Mechanised.   | Nil.   |
| 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.  |
| 3 j | Provision of<br>drilling and<br>blasting in<br>mineral benches   | It is Proposed to use crackamite in this area to breaking or cracking of OB. | Crackamite are used as per proposal.                | Crackamite is mixed with clean water and poured into pre-drilled holes on rock and concrete. |
| 3k  | Provision of mining machineries in mineral benches   | Hydraulic<br>Excavators<br>Poclain<br>Water Tanker<br>Tippers                | As per proposal machineries are available in field. | Nil.   |
| 31  | Whether height<br>of benches in<br>overburden and<br>mineral suitable<br>for method of<br>mining proposed<br>in MP/SOM | Bench height<br>of 6m was<br>proposed in<br>Mineral.                         | Benches are formed 7-8m height.                     | Violation has been issued under Rule 11(1).  |
| 3m  | Total area<br>covered under<br>excavation/pits   | A 1.907 hect.<br>area is under<br>Pit.                                       | A 1.907 hect. area is under Pit.                    | Nil.   |
| 3n  | Ore to OB ratio for the pit/mine during the year.  | 1:1.5  | 1 :1.6  | Nil.   |
| 30  | Total area put in use under different heads at the end of year   | 3.1835 На.   | 3.1835 На.  | Nil.   |

| 3p | Production of ROM mineral during the last five year period as applicable | T                                    | 2018-19=3251.832<br>2019-20=4676.409<br>2020-21=3259.415<br>2021-22= Nil.<br>2022-23= 9356 T | ALL PRODUCTION WITHIN APPROVED PLAN.        |
|----|--|--------------------------------------|--|---|
| 3q | General remarks of inspecting officers on method of mining etc.          | Mechanised<br>Method is<br>Proposed. | Benches are formed 7-8m height.  | Violation has been issued under Rule 11(1). |

### Solid Waste Management - Dumping:

| Sl.No. | Item   | Propasals                         | Actual work  | Remarks   |
|--------|--|-----------------------------------|--|---|
| 4a     | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | NORTH & EAST<br>OF THE LEASE.     | As per proposal the dumping is carried out in Dump area.         | Nil.  |
| 4b     | Location of<br>topsoil, OB and<br>mineral reject<br>dumps        | NORTH & EAST<br>OF THE LEASE.     | NORTH & EAST OF THE LEASE.                                       | Nil.  |
| 4c     | Number of dumps within lease area and outside of lease area      |                                   | Lease area = 2<br>Non Lease area = Nil                           | Nil.  |
| 4d     | Location of dumps w.r.t. ultimate pit limit (Rule 16)            | Dump is proposed outside the UPL. | All 2 dumps are outside<br>the Pit and within the<br>lease area. | Nil.  |
| 4e     | Number of active and alive dumps.                                |                                   | Active Dump = One Alive Dump = Nil                               | There is 1 active dump within lease area for Waste dumping. |
| 4f     | Number of dead dumps.  | Dead Dumps = One.                 | Dead Dumps = One.  | Nil.  |
| 4g     | Number of dumps established.                                     | Dumps<br>Established=<br>One.     | Dumps Established= One.  | Nil.  |

| 4h | Whether Retaining wall or garland drain all along dumps are there.           | YES.                        | YES, GARLAND DRAIN IS MAINTAINED.                        | Nil.   |
|----|--|-----------------------------|--|--|
| 4i | Length of<br>Retaining wall<br>or garland drain<br>all along dumps           | YES.                        | 300 MTR.   | Nil.   |
| 4j | Number of settling ponds   | No Proposal.                | Nil.   | PIT IS USED AS SETTLING POND.                              |
| 4k | Specific<br>comments of<br>inspecting<br>officer on waste<br>dump management | OB/Intercalate d waste will | As per proposal the dumping is carried out in Dump area. | All 2 dumps are outside the Pit and within the lease area. |

# 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. | Full extraction.                         | Full extraction.                     | Nil.  |
| 5b     | Area under<br>backfilling of<br>mined out area  | No proposal.                             | Nil.                                 | 0.094 ha. area reclaimed but not rehabilitated. |
| 5c     | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)     | No proposal.                             | Nil.                                 | Nil.  |
| 5d     | Total area<br>fully reclaimed<br>and<br>rehabilitated   | No proposal.                             | Nil.                                 | Nil.  |
| 5e     | General remarks of inspecting officers on backfilling and reclamation etc.                    | No Back<br>filling has<br>been proposed. | No backfilling and reclamation done. | Nil.  |

### Progressive Mine Clousre Plan:

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

| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).                               | It should be on or before 1st July every year. | Submitted for the year 2022-2023. | Nil.   |
|----|--|--|-----------------------------------|--|
| 6b | Area available for rehabilitation (ha) .   | No proposal                                    | Nil                               | Nil, as the ore is not completely exhausted. |
| 6c | afforestation done (ha).   | No Proposal                                    | Nil                               | Nil, as the ore is not completely exhausted. |
| 6d | No. of saplings planted during the year  | No Proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| бе | Cumulative no .of plants   | No Proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| 6f | Any other method of rehabilitation   | No Proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| 6g | Cost incurred on watch and care during the year  | No Proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D | No proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings          | No proposal.                                   | Nil                               | Nil, as the ore is not completely exhausted. |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area        | No proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir  | No proposal.                                   | Nil.                              | Nil, as the ore is not completely exhausted. |

| 61     | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.          | No proposal.  | Nil  | Nil, as the ore is not completely exhausted. |
|--------|---|---|--|--|
| 6m     | Compliance of rehabilitation of waste land within lease (i)afforestation                          | 530 saplings in 0.212 ha. Green Belt area.  | 530 saplings in 0.212 ha. Green Belt   | Nil.   |
| 6n     | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)              | No proposal.  | Nil.   | Nil.   |
| 60     | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation             | No proposal.  | Nil.   | Nil.   |
| 6p     | Compliance of environmental monitoring (core zone and buffer zone)                                |   | Environment monitoring is carried out through own as well as private agency. | Nil.   |
| 6q<br> | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | It was<br>proposed to<br>plant 530<br>saplings in<br>0.212 ha.<br>Green Belt<br>area. | 530 Saplings have been planted during 2022-2023 inside the lease area.       | The ore is not completely exhausted.         |

### Mineral Conservation:

| Sl.No. | Item   | Propasals   | Actual work   | Remarks |
|--------|--|-------------|---|---------|
| 7a     | ROM Mineral<br>dispatch or<br>grade-wise<br>sorting within<br>lease area     |             | 9356 tons has been achieved during 2022-2023.                               | Nil.    |
| 7b     | Method of grade-<br>wise mineral<br>sorting i.e.<br>manual or<br>mechanical. | Process and | Mechanical Process and<br>Manual Picking of Ore<br>from Intercalated Waste. | Nil.    |

| 7c | Different grade of mineral sorted out at mines.  | 200mm   | Size = Lump > 200mm<br>Fixed Carbon = 15.32<br>Ash = 80.86. | Low grade are Blended with High grade ores to get the desired plant feed materials. |
|----|--|---|---|---|
| 7d | Any beneficiation process at mines .   | J   | Manually sizing and sorting is being done.                  | Nil.  |
| 7e | General remarks<br>of inspecting<br>officer on<br>Mineral<br>conservation and<br>beneficiation<br>issues | target of ROM<br>Production was<br>26802 tons<br>during 2022- | 9356 tons has been achieved during 2022-2023.               | 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.   | Grity Soil.                                  |
| 8b     | Concurrent use or storage of topsoil  | No Proposal.   | NIL.   | NIL.   |
| 8c     | Separate dumps<br>for overburden,<br>waste rock,<br>rejects and<br>fines (Rule 33)                | Generated OB/Intercalate d waste will be dumping in North and East part of the lease area. | As per proposal dumping is carried out at the Dump area. | NIL.   |
| 8d     | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No proposal.   | Nil.   | Nil, as the ore is not completely exhausted. |

| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No proposal.  | Nil.   | Nil, as the ore is not completely exhausted.              |
|----|---|---|--|---|
| 8f | Baseline<br>information on<br>existence of<br>plantation and<br>additional<br>plantation done<br>(Rule 41)  | It was<br>proposed to<br>plant 530<br>saplings in<br>0.212 ha.<br>Green Belt<br>area. | 530 Saplings have been planted during 2022-2023 inside the lease area. | Cumulative - 1440 plants.                                 |
| 8g | Survival rate   | No proposal.  | 50%  | Nil.  |
| 8h | Water sprinkling<br>on roads to<br>control airborne<br>dust   | Proposed.   | Water sprinkling on road is observed during the inspection.            | Nil.  |
| 8i | General remarks<br>of inspecting<br>officer on<br>aesthetic beauty<br>in and around<br>mines area           |   | 530 Saplings have been planted during 2022-2023 inside the lease area. | As per proposal, dumping is carried out at the Dump area. |

### Compliance of Rule 45:

| Sl.No. | Item   | Propasals   | Actual work  | Remarks |
|--------|--|---|--|---------|
| 9a     | Status of<br>submission of<br>Monthly and<br>Annual returns  | Submitted.  | Submitted.   | Nil.    |
| 9b     | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager                          | Mining Engineer in charge Kamaluddin Khalifa Geologist in charge Md Khalid. | Mining Engineer in<br>charge Kamaluddin<br>Khalifa Geologist in<br>charge Md Khalid.                                   | Nil.    |
| 9c     | Scrutiny of<br>Annual return on<br>land use pattern<br>for area under<br>pits, reclaimed<br>area, dumps etc. | 01.04.2024.<br>Mines = 1.68<br>hect   | Land use Pattern as on 01.04.2024. Mines = 1.68 hect Dump = 0.166 hect Roads/ Infra = 0.026 hect Reclaimed = 0.10 hect | Nil.    |

| 9d | Scrutiny of<br>Annual return on<br>afforestation                            | 530 saplings<br>has planted<br>Inside the<br>lease area and<br>180 saplings<br>outside the<br>lease area<br>during 2022-<br>2023. | Seems to be correct.   | Nil.                   |
|----|---|---|--|------------------------|
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) |   | Graphite, approx mineral-80%, approx gangue mineral-20%.   | Nil.                   |
| 9f | Scrutiny of<br>Annual return on<br>ROM stock and/or<br>graded ore           | as on   | Mine has produced 9356 tons of Production during 2022-2023.  | Nil.                   |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | &Ex. Mine   | Some invoice has been checked and matching.  | Nil.                   |
| 9h | Scrutiny of<br>Annual return on<br>fixed assets                             | Fixed Assets is given.  | Seems to be correct.   | Nil.                   |
| 9k | Scrutiny of<br>Annual return on<br>mining<br>machineries                    | Machineries details given.  | DUMPER 10.000 TONNE =2 Non Electrical Opencast PUMPS (NON ELEC.) 500.000 L/MN =1 Non Electrical Opencast SHOVEL (HYDRAULIC) 0.320 CUM= 1 | As available in field. |

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

| Violation observed |            |               | Show couse position |                         |  |
|--------------------|------------|---------------|---------------------|-------------------------|--|
| Rule NO.           | Issued on  | Compliance on | Rule NO.            | Issued on Compliance on |  |
| Rule 45(1)(a)      | 17/09/2012 |               |                     |                         |  |
| Rule 45(1)(c)      | 17/09/2012 |               |                     |                         |  |
| MCDR17 Rule 11(1)  | 07/02/2023 | 24/03/2023    |                     |                         |  |
| MCDR17 Rule 11(1)  | 20/09/2023 | 16/01/2024    |                     |                         |  |
| MCDR17 Rule 13(2)  | 20/09/2023 | 16/01/2024    |                     |                         |  |
| MCDR17 Rule 46(a)  | 20/09/2023 | 16/01/2024    |                     |                         |  |

Date :

(RAGHVENDRA KUMAR)

Indian Bureau of Mines