

MCDR INSPECTION REPORT

1.0 GENERAL

SN	Particulars	Details
1	Name of inspecting office & designation	Rajesh Kumar Das, Sr. Asstt. Controller of Mines S. Kartikeya, Jr. Mining Geologist, Indian Bureau of Mines, Raipur
2	Date of inspection	07/09/2018
3	Name of the Mine	Shri Bajrang Iron Ore Mine, Hahaladdi
4	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest: 75.00 Ha. Non-Forest: 0.00 Ha. Total Lease area: 75.00 Ha.
5	Mine Code	30CHG08007
6	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4393/2011
7	Name of the lessee, Address, phone, email and fax number	Shri Bajrang Power & Ispat Limited Village Borjhara, Urla-Guma Road, Urals Growth Center, Raipur (Chhattisgarh) – 492 221 Phone: 0771 – 4288019/ 29/ 39 Fax: 0771 – 4288123/ 2323601 Email: mining@goelgroup.co.in Info.bjr@goelgroup.co.in
8	Village	Hahaladdi & Chahchad
8	Taluka / Mandal / District	Forest Compartment No. 641(P),642(P), Forest Division – East Bhanupratappur, Taluka – Durgukondal, District – Uttar BastarKanker
10	State	Chhattisgarh, Pin Code: 494669
11	Post office & PIN	Durgukondal
12	Nearest police station	Durgukondal
13	Nearest Railway station	Bhanupratappur
14	Date of Grant of Mining Lease	21/11/2014 to 20/11/2044 (30 years)
15	Date of Execution	21/11/2014
16	Date of opening of Mine	09/02/2015
17	Date of first Renewal, if applicable and its period & expiry	As per section 8A of MMDR Amendment Act, 2015, Validity of the lease period: 21/11/2044 to 20/11/2064 (20 Years). Supplementary lease deed has not been made for extended period.
18	Date of second Renewal, if applicable and its period & expiry	Not Applicable.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable.
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Shravan Kumar Goyal, Director Village Borjhara, Urla-Guma Road, Urals Growth Center, Raipur (Chhattisgarh) – 492 221 Email: skgoyal@goelgroup.co.in Phone: 0771 – 4288019/ 29/ 39

		Fax: 0771 – 4288123/ 2323601 Date of Appointment: 15/11/2014
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Sarat Kumar Acharya, HoD (Mines) Village Borjhara, Urla-Guma Road, Urals Growth Center, Raipur (Chhattisgarh) – 492 221 Email: sk.acharya@goelgroup.co.in Phone: 0771 – 4288019/ 29/ 39 Fax: 0771 – 4288123/ 2323601 Date of Appointment: 22/11/2014
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Debendra Nath Mahanto Kothari Vatshalya, Bhanupratappur, Kanker, Chhattisgarh - Email: debenranath1966@gmail.com Phone: 0771 – 4288019/ 29/ 39 Fax: 0771 – 4288123/ 2323601 Date of Appointment: 03/04/2015
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Bhojram Banjare Qualification: B.E. (Mining) Experience: More than 12 Years Near Police Station, Durgukondal, Kanker (Chhattisgarh) - 494669 Email: banjare_br@rediffmail.com Phone: 0771 – 4288019/ 29/ 39 Fax: 0771 – 4288123/ 2323601 Date of Appointment: 25/03/2015
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	Shri R. K. Gupta Qualification: M.Sc (Geology) Experience: +8 Years Kothari Vatsalya, Salihapara, Near Hospital, Banupratappur, District Kanker, (Chhattisgarh) - 494669 Email: rggeologist06@gmail.com Phone: 0771 – 4288019/ 29/ 39 Fax: 0771 – 4288123/ 2323601 Date of Appointment: 25/03/2015
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan approved vide letter no. KNK/FE/MPLN-995/NGP Nagpur dated 11/07/2008 Proposal Period: 2014-15 to 2018-19 Modified Mining Plan approved vide letter no. KNK/FE/MPLN-995/NGP/2015 Nagpur dated 30/03/2016 Proposal Period: 2014-15 to 2018-19
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not applicable
27	Mineral(s) granted in lease and proved for mining	Iron Ore (Hematite)
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Category 'A Fully Mechanised'

30	Captive/Non Captive	Captive
31	Existing EC Limit and validity	Obtained from Ministry of Environment, Forest and Climate Change, Government of India, IA-II (Non Coal Mining) vide letter no. J-11015/150/2016-IA(II)-M New Delhi dated 21/02/2018 ROM Production Capacity 0.60 Million Tonnes Per Annum.
32	Status of Financial Assurance	BG No. 3074IGPER004118 dated 19/06/2018 Amount: 65,00,000/- (Sixty Five Lakhs)

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

1.0 Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2015-16: 26 nos. of core borehole with cumulative depth 1162.45 meters. 08 nos. (3n x 3m x 3m) of trial pits 2016-17: 11 nos. of core boreholes with cumulative depth 1000 meters.	2015-16: 26 nos. of core boreholes with cumulative depth 1162.45 meters 08 nos. (3n x 3m x 3m) of trial pits 2016-17: NIL 2017-18: 19 nos. of boreholes with cumulative depth 644.00 meters. 2018-19: so far 03 nos. of core boreholes with cumulative depth 154.00 meters	-
1b	Exploration over lease area for Geological axis 1 or 2.	Under G1 Category: 27.95 Ha Non- Mineralised: 47.05 Ha	Under G1 Category: 27.95 Ha Non- Mineralised: 47.05 Ha	The mineralised area has been explored in G1 level.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Shri Bajrang Power & Ispat Limited Village: Borjhara, Urla-Guma Road, Raipur (C.G.) – 493221 Phone: 0771-4288019 Email: mining@goelgroup.co.in	Shri Bajrang Power & Ispat Limited Village: Borjhara, Urla-Guma Road, Raipur (C.G.) – 493221 Phone: 0771-4288019 Email:	-

			mining@goelgroup.co.in	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Based on the field survey, closed spacing boreholes have been proposed in the mineralised zone to increase the level of confidence.	Boreholes have been drilled in the mineralised zone.	-
1e	Balance reserves as on 01.04.2018 (in Million Tonnes)	Under (111): 5.777 Million Tonnes	Under (111): 6.288 Million Tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.	NIL		

2.0 Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area (Range in UTM/Local Coordinate/Plot No./Location)	N 2232742 to N 2233500 and E 489708 to E 489974	N 2232800 to N 2233500 and E 489743 to E 489931	-
2b	Separate benches in topsoil, overburden and mineral (Rule 13)	OB: 01 no. Mineral/Ore: 04 nos.	OB: 03 no. Mineral/Ore: 03 nos.	-
2c	Stripping ratio or ore to OB ratio	1:0.89	1: 1.32	-
2d	Quantity of topsoil generation in m3	Not top soil present in this area.	Not applicable.	-
2e	Quantity of overburden generation in m3	535825 cubic meter	439076.5 cubic meters	-
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	<p>In addition to the proposed area for development and mineral production, the quarry has been extended and a haul road has been made towards eastern side up to 400 meters approx.</p> <p>There was a proposal given for development and mineral production up to the RL of 595 meters whereas the present working has reached up to the RL of 583 meters.</p> <p>Deviation has been pointed out.</p>		

3.0 Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	01 no.	01 no.	-
3b	Quantity of ROM mineral production proposed	6,00,000 Metric Tonnes	331787.110 Metric Tonnes	-
3c	Recovery of salable/usable mineral from ROM production	90%	100%	-

3d	Quantity of mineral reject generation	60,000 Metric Tonnes	NIL generation of mineral reject	-
3e	Grade of mineral reject generation and threshold value declared	Not mentioned in the approved document. 10% of total ROM production has been considered under mineral reject.	Mineral production has been done from the mineralised zone.	-
3f	Quantity of sub-grade mineral generation	Not mentioned in the approved document.	No sub-grade present in the mine.	-
3g	Grade of sub-grade mineral generation	Not mentioned in the approved document.	No sub-grade present in the mine.	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised crushing and screening.	Mechanised crushing and screening.	-
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed in the approved in the approved document.	Not applicable	-
3j	Provision of drilling & blasting in mineral benches	Depth: 6.0 meters Spacing: 4.0 meters Burden: 3.0 meters	Depth: 6.0 meters Spacing: 4.0 meters Burden: 3.0 meters	-
3k	Provision of mining machineries in mineral benches	<ol style="list-style-type: none"> 1. L&T Excavators 240 HP, 06 nos. 2. Indus Rock Breaker PC-200 & 300, 02 nos. 3. Elgi Compressor 450 CFM, 02 nos. 4. Wagon Drill 100-150 mm dia, 02 nos. 5. Jack Hammer 34 mm dia, 04 nos. 6. Hindustan Loader 300 HP, 03 nos. 7. Mercedes & MANN Dumper 20 	<ol style="list-style-type: none"> 1. L&T Excavators 240 HP, 06 nos. 2. Indus Rock Breaker PC-200 & 300, 02 nos. 3. Elgi Compressor 450 CFM, 02 nos. 4. Wagon Drill 100-150 mm dia, 02 nos. 5. Jack Hammer 34 mm dia, 04 nos. 6. Hindustan Loader 300 HP, 03 nos. 7. Mercedes & MANN Dumper 20 Tonner, 20 nos. 8. Backhoe JCB, 01 no. 9. Sansui Dozer, 01 no. 	-

		Tonner, 20 nos. 8. Backhoe JCB, 01 no. 9. Sansui Dozer, 01 no. 10. Maruti Suzuki Ambulance, 01 no.	10. Maruti Suzuki Ambulance, 01 no.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Mineral/Ore: 6.0 meters OB/Waste: 6.0 meters	Mineral/Ore: 6.0 meters OB/Waste: 6.0 meters	-
3m	Total area covered under excavation/pits	10.574 Ha. up to the end of plan period.	4.050 Ha.	-
3n	Ore to OB ratio for the pit/mine during the year	1:0.89	1: 1.32	-
3o	Total area put in use under different heads at the end of year	Pit- 10.574 Ha. Waste/reject- 0.0 Ha. Others- 7.063 Ha Up to the end of Plan period.	Pit- 4.050 Ha. Waste/reject- 1.0 Ha. Others- 6.82 Ha.	-
3p	Production of ROM mineral during last five-year period, as applicable (in Metric Tonnes)	Yr- 2014-15: 85,930.00 Metric Tonnes Yr- 2015-16: 2,57,814.00 Metric Tonnes Yr- 2016-17: 4,99,012.00 Metric Tonnes Yr- 2017-18: 6,00,000.00 Metric Tonnes	Yr- 2014-15: 85,930.00 Metric Tonnes Yr- 2015-16: 1,19,999 Metric Tonnes Yr- 2016-17: 2,49,998.80 Metric Tonnes Yr- 2017-18: 3,31,787.11 Metric Tonnes	-
3q	General remarks of inspecting officer on method of mining etc.	NIL		

4.0 Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 36, 37)	Topsoil: NIL OB/Waste: 02 nos of dumps. Mineral/Ore: 01 no.	Topsoil: NIL OB/Waste: 02 nos of dumps. Mineral/Ore: 01 no.	-
4b	Location of topsoil, OB & mineral reject dumps (Range in UTM/Local Coordinate/Plot No./Location)	OB/Waste: in between UTM coordinates N2231020 to N2232350 and	OB: in between UTM coordinates N2231020 to N2232350 and E489620 to	Area utilised under OB/Waste has not

		E489620 to E490000 Mineral, Sub-grage & Reject: in between UTM coordinates N2231020 to N2232420 and E490000 to E490200	E490000 Mineral, Sub-grage & Reject: in between UTM coordinates N2231020 to N2232420 and E490000 to E490200	been calculated for financial assurance . Deviation has been pointed out.
4c	Number of dumps within lease area and outside lease area	01 no.	01 no.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 14)	Proposed beyond ultimate pit limit.	Situated beyond ultimate pit limit.	-
4e	Number of active & alive dumps	01 no.	01 no.	-
4f	Number of dead dumps	Not proposed in the approved document.	No dead dump within lease area.	-
4g	Number of dumps stabilised	Not proposed in the approved document.	Not applicable.	-
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain has been proposed around waste dump to prevent the dump by rain water wash off.	Retaining wall and Garland drain have been made around waste dump.	-
4i	Length of Retaining wall or garland drain all along dump	Not mentioned the approved document.	Not applicable.	-
4j	Number of settling ponds	Not mentioned the approved document.	Not applicable.	-
4k	Specific comments of inspecting officer	NIL		

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	Backfilling has not been proposed during plan period.	Backfilling has not been started because the area has not been matured for backfilling and the mineral has been mined out completely from the mineralised zone.	-

5b	Area under backfilling of mined out area	Not proposed in the approved document.	Not applicable.	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 36)	No topsoil present in the area.	Very less lateritic soil has been found and same has been utilised for plantation.	-
5d	Total area fully reclaimed & rehabilitated	Area not matured for reclamation and rehabilitation.	Not applicable.	-
5e	General remarks of inspecting officer on backfilling, reclamation etc	NIL		

6.0 Progressive Mine Closure Plan

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23. Details should be given in the format as given in Annexure-20.	Submitted in due time.	Submitted in due time.	-
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	1.231 Ha. (up to end of plan period) 3000 nos. 1000 nos. 4000 nos. NIL NIL	Not mentioned 3700 nos. 2000 nos. 5700 nos. NIL NIL	-
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	Area not matured for reclamation and rehabilitation.	Not applicable.	-
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation	Area not matured for reclamation and rehabilitation.	Not applicable.	-

	ii) Area rehabilitated (ha) iii) Method of rehabilitation			
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Regular Environmental monitoring has been proposed as per MoEF Guidelines.	Carried out as per proposal.	-
6f	General remarks of inspecting officer on PMCP compliance & progressive	NIL		

7.0 Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral will be directly despatched to the plant.	ROM has been despatched after segregation in different grades.	Deviation has been pointed out.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mineral/ROM processing has not been proposed in the approved document.	Mechanised Crushing and Screening.	Deviation has been pointed out.
7c	Different grade of mineral sorted out at mines	Not mentioned in the approved document.	Grade wise sorting of ROM is being done through mechanised method.	Deviation has been pointed out.
7d	Any beneficiation process at mines	Not proposed in the approved document.	Mechanised Crushing and Screening.	-
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	NIL		

8.0 Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 36)	No topsoil present in this area.	Very less quantity of topsoil present in the area and same has been utilised for plantation.	-
8b	Concurrent use or storage of topsoil	Not proposed in the approved document.	Concurrent use of topsoil is being done.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 37)	Separate locations have been marked in the relevant plates for dumping.	Separate dumps for overburden, waste rock, rejects and fines have been	-

			identified.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Area not matured for reclamation and rehabilitation.	Not applicable.	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Area not matured for reclamation and rehabilitation.	Not applicable.	-
8f	Baseline information on existence of plantation & additional plantation done (Rule 44)	2017-18: 1000 nos. of plants has been proposed for plantation.	2017-18: 2000 nos. of plants have been plantation.	-
8g	Survival rate	Not mentioned in the approved document.	Approx 70-75%	-
8h	Water sprinkling on roads to control airborne dust	Water sprinkling has been proposed to maintain the ambient air quality within the permissible limit.	Water sprinkling is being done through the tractor mounted water sprinkler.	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	NIL		

9.0 Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
	Status of submission of Monthly and Annual returns	M.R. Submitted upto – August 2018 A.R. submitted upto- F.Y. 2017-18	-

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: Shri D.N.Mohanta, Geologist: Shri Rajkumar Gupta, Manager: Shri D.N.Mohanta	Mining Engineer: Shri D.N.Mohanta, Geologist: Shri Rajkumar Gupta, Manager: Shri D.N.Mohanta	NIL
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit- 4.050 Ha. Waste/reject- 1.0 Ha. Others- 6.82 Ha.	Pit- 10.574 Ha. Waste/reject- 0.0 Ha. Others- 7.063 Ha Up to the end of Plan period.	Difference in the land use patten has been pointed out.
9d	Scrutiny of Annual return on afforestation	200 nos.	200 nos.	NIL
9e	Scrutiny of Annual return on mineral reject	Reject Generation: 0.0 Metric Tonnes	Reject Generation: 0.0 Metric Tonnes	NIL

	generation (Grade & quantity)			
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock: August 33720.260 Tonnes Closing Up to 2018: Metric Ore (Lump): 55% to below 58%: 14818.160 Metric Tonnes 58% to below 60%: 1111.630 Metric Tonnes 60% to below 62%: 213.150 Metric Tonnes Graded Ore (Fines): Below 55%: 6820.890 Metric Tonnes 55% to below 58%: 12938.820 Metric Tonnes 58% to below 60%: 402.940 Metric Tonnes 60% to below 62%: 275.430 Metric tonnes	ROM Stock: August 33720.260 Tonnes Closing Up to 2018: Metric Ore (Lump): 55% to below 58%: 14818.160 Metric Tonnes 58% to below 60%: 1111.630 Metric Tonnes 60% to below 62%: 213.150 Metric Tonnes Graded Ore (Fines): Below 55%: 6820.890 Metric Tonnes 55% to below 58%: 12938.820 Metric Tonnes 58% to below 60%: 402.940 Metric Tonnes 60% to below 62%: 275.430 Metric tonnes	As per monthly returns for the month of August 2018
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Sale Value: Captive Consumption Ex. Mine Price: Lump: Below 55%: Rs 833 Per metric Tonne 55% to below 58%: Rs 1291 Per Metric Tonnes 58% to below 60%: Rs. 1332 Per metric Tonne 60% to below 62%: Rs 1650 Per Metric Tonne Fines: Below 55%: Rs 540 Per metric Tonne 55% to below 58%: Rs 880 Per Metric	Sale Value: Captive Consumption Ex. Mine Price: Ex Mine price should be same as cost of production. Production cost: Rs. 841.79 Per Metric Tonne	Difference in the ex mine price from the cost of production has been pointed out.

		Tonnes 58% to below 60%: Rs. 1320 Per metric Tonne 60% to below 62%: Rs 1611 Per Metric Tonne Production cost: Rs. 841.79 Per Metric Tonne		
9i	Scrutiny of Annual return on fixed assets	Rs 251598357/-	Rs 251598357/-	NIL
9k	Scrutiny of Annual return on mining machineries	Given in the returns	As per proposal.	NIL

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

No outstanding violations.

Date of Last Inspection, Name and Designation of the Inspecting Officer:

Shri R. N. Mishra, Sr. Mining. Geologist, Date of Inspection: 29/11/2017

Details of the Violations Pointed-out during Inspections:

नियम	उल्लंघन के प्रकार का विस्तृत ब्यौरा
Rule 11 (1)	The following deviations have been found in the mine from the approved Modified Mining Plan vide letter no. KNK/FE/MPLN-995/NGP/2015 Nagpur dated 30/03/2016 for the period of 2014-15 to 2018-19: Development F.Y. 2017-18 and 2018-19: In addition to the proposed area for development and mineral production, the quarry has been extended and a haul road has been made towards eastern side up to 400 meters approx. There was a proposal given for development and mineral production up to the RL of 595 meters whereas the present working has reached up to the RL of 583 meters. Financial Assurance: In the given table for Financial Assurance, the area utilized under waste dump site has been mentioned as NIL hectares, whereas; around 1.00 hectare area has been utilized for stacking of waste.
Rule 37(2)	The existing protective measures taken around waste dump are insufficient and it has been found that the waste material was escaping and washing away from the dumps and was contaminating the nearby area. A proper protective measure should be taken to prevent the escape of the material from the existing waste dumps.
Rule 45 (7)	Monthly Returns; April 2018 to August 2018 and Annual Returns; F.Y. 2017-18: Since the entire produced mineral/ore from the mine has been consumed in the captive plant, therefore the Ex-Mine Price on the mineral/ore and the cost of production per ton for mineral/ore should not be different.

11. Star Ratings submitted under Rule 35 of MCDR, 2017 for the F.Y. 2017-18 has been validated.

(Name of the Inspecting Officer and Designation and Date)

(Rajesh Kumar Das)
Sr. Asstt. Controller of Mines
Date of Inspection: 07/09/2018

(Shaival Kartikeya)
Jr. Mining Geologist
Date of Inspection: 07/09/2018