

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-31/BBS

Mine code : 30ORI08025

- (i) Name of the Inspecting : **SRM**) **SHRI SUDIP RANJAN MAZUMDAR**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri S.K.Panda, Mines Manager & Shri B Mahapatra, Geo
Official with
Designation
- (iv) Date of Inspection : 01/02/2020
- (v) Prev.inspection date : 12/07/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JORIBAHAL (263.25 AC)**
- (b) **Registration NO.** : **IBM/343/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : JORIBAHAL
- Taluka : BARBIL
- Post office : PALSA
- Pin Code :
- FAX No. : 06767-272066
- E-mail : pmp1.123@rediffmail.com
- Phone : 06767-72101
- (f) Police Station : Joda
- (g) First opening date : 03/06/1960
- (h) Weekly day of rest : TUE
2. Address for : JARIBAHAL IRON ORE MINES
correspondance AT/PO-PALSA
DIST-KEONJHAR
3. (a) Lease Number : ORI0046
- (b) Lease area : 106.53
- (c) Period of lease : 10
- (d) Date of Expiry : 19/06/2008
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : PATNAIK MINERALS (P) LTD
 PATNAIK MINERALS (P) LTD
 POST :KEONJHARGARH
 KEONJHAR ORISSA
 Phone:06767-720101
 FAX :06767-72066

Owner : PATNAIK MINERALS (P) LTD
 POST: KEONJHARGARH
 KEONJHAR ORISSA
 Phone: 72101
 FAX : 72066

Agent : J.N.PATNAIK
 c/o PATNAIK MINERALS (P)
 LTD, POST :KEONJHARGARH
 KEONJHAR ORISSA
 Phone: 72101
 FAX : 72066

Mining Engineer

Name : SHRI DEBIPRASAD MISHRA,Full Time
 Qualification : DEGREE
 Appointment/ : 01/06/2018
 Termination date

Geologist

Name : SHRI BHABAGRAHI MOHAPATRA,Full Time
 Qualification : MSC GEOLOGY
 Appointment/ : 07/08/2004
 Termination date

Manager

Name : SHRI S K PANDA
 Qualification : DIPLOMA, FCC
 Appointment/ : 01/06/2018
 Termination date

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	01/02/2007
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	19/12/2008
	:	Modif.of approved Mining Plan	17/02/2011
	:	Mining Scheme rule 12 MCDR1988	28/05/2014
	:	MS modif under MCR 1960	09/06/2017
	:	MP review under 17(1) MCR 2016	30/11/2017
	:	Modif.approved Mining Scheme	25/07/2018
	:	FMCP under 23C(1)	28/11/2018

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	In 2018-19, 26 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 nos of boreholes have been drilled.	In 2018-19, 25 nos of boreholes have been drilled.
1b	Exploration over lease area for geological axis 1 or 2	In 2018-19, 26 nos of boreholes have been proposed to be drilled.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Specified	Exploration Agency: M/s Kaushik Engineers Expenditure: Rs 18.99 lakh	Exploration Agency: M/s Kaushik Engineers Expenditure: Rs 18.99 lakh
1d	Balance area to be explored to bring Geological axis in 1 or 2	In 2018-19, 26 nos of boreholes have been proposed to be drilled.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.
1e	Balance reserve as on 01/04/20	As per the modification of review of mining plan, the reserve and resource as on 01.04.2017 is as follows. Reserve: 16966755 tones and Remaining resources at 11455898. Total Reserve and Resource is 28422653 tones.	In 2018-19, ROM production was 997881.15 tones. Reserve as on 01.04.2019 is 15968874 tones and remaining resources at 11455898 tones. Total reserve and resource is 27424772 tones. Data as furnished in annual return for 2018-19.	In 2018-19, ROM production was 997881.15 tones. Reserve as on 01.04.2019 is 15968874 tones and remaining resources at 11455898 tones. Total reserve and resource is 27424772 tones. Data as furnished in annual return for 2018-19.

1f	General remarks of inspecting officers on geology, exploration etc	In 2018-19, 26 numbers of boreholes have been proposed to be drilled.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.	In 2018-19, 25 nos of boreholes have been drilled. Total potential mineralized area has been explored under G2 category.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2018-19, Development proposed in Quarry-1 and Quarry-9	In 2018-19, development carried out in Quarry-1 and Quarry-9	In 2018-19, development carried out in Quarry-1 and Quarry-9
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	n 2018-19, there was no proposal for top soil generation. Separate benches in overburden and mineral proposed.	There was no generation of top soil. Separate benches in overburden and mineral maintained.	There was no generation of top soil. Separate benches in overburden and mineral maintained.
2c	Stripping ratio or ore to OB ratio	stripping ratio proposed was 1: 0.19 MT/MT	stripping ratio achieved was 1: 0.427 MT/MT	stripping ratio achieved was 1: 0.427 MT/MT
2d	Quantity of topsoil generation in m3	There was no proposal for top soil generation.	There was no generation of top soil.	There was no generation of top soil.
2e	Quantity of overburden generation in m3	Proposal for overburden generation was 96425 m3	Overburden generated was 213257 m3	Overburden generated was 213257 m3
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	In 2018-19, Development proposed in Quarry-1 and Quarry-9. In 2018-19, stripping ratio proposed was 1: 0.19 MT/MT	In 2018-19, development carried out in Quarry-1 and Quarry-9. In 2018-19, stripping ratio achieved was 1: 0.427 MT/MT	In 2018-19, development carried out in Quarry-1 and Quarry-9. In 2018-19, stripping ratio achieved was 1: 0.427 MT/MT

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In 2018-19, two number of pits proposed for production namely Quarry-1 and Quarry-9	In 2018-19, two number of pits put for production namely Quarry-1 and Quarry-9	In 2018-19, two number of pits put for production namely Quarry-1 and Quarry-9
3b	Quantity of ROM mineral production proposed	In 2018-19, ROM production proposal was 997999 tones	In 2018-19, ROM production was 997881.15 tones	In 2018-19, ROM production was 997881.15 tones
3c	Recovery of sailable/usable mineral from ROM production	In 2018-19, generation of salable/usable mineral from ROM production proposal was 911216 tones	In 2018-19, generation of salable/usable mineral from ROM production was 920731.05 tones	In 2018-19, generation of salable/usable mineral from ROM production was 920731.05 tones
3d	Quantity of mineral reject generation	In 2018-19, Quantity of mineral reject generation proposal was 86783 tones	In 2018-19, Quantity of mineral reject generation proposal was 5809.1 tones	ROM production was 997881.15 tones but ROM processed was 926540.15 tones. Remaining ROM quantity of 71341 tones was reported in closing stock of ROM.
3e	Grade of mineral rejects generation and threshold value declared.	45% Fe -55% Fe, Threshold value for iron is 45% Fe.	45% Fe -55% Fe, Threshold value for iron is 45% Fe.	45% Fe -55% Fe, Threshold value for iron is 45% Fe.
3f	Quantity of sub grade mineral generation.	In 2018-19, Quantity of subgrade mineral generation proposal was 86783 tones	In 2018-19, Quantity of mineral reject generation proposal was 5809.1 tones	ROM production was 997881.15 tones but ROM processed was 926540.15 tones. Remaining ROM quantity of 71341 tones was reported in closing stock of ROM.
3g	Grade of sub grade mineral generation	45% Fe -55% Fe	45% Fe -55% Fe	45% Fe -55% Fe

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Mechanized
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	It is proposed that iron ore of 5-15mm size will be processed in the proposed jigging plant and -5mm fines will be kept separately for further beneficiation.	The plant has been established partially but is not under operation due to want of statutory clearances.	The plant has been established partially but is not under operation due to want of statutory clearances.
3j	Provision of drilling and blasting in mineral benches	Hard iron ore will be loosened through drilling & blasting. The proposed mining will have 6.0 m height benches and will be drilled for blastholes by 100 mm diameter crawler mounted pneumatic drills fed by compressor air and hydraulic drills will be used. Controlled blasting technique is adopted to minimize the ground vibration using non electric delay initiating device.	Drilling and blasting done as per requirement in overburden & mineral benches.	Drilling and blasting done as per requirement in overburden & mineral benches.

3k	Provision of mining machineries in mineral benches	Excavator and dumper combination have been proposed for mining in mineral benches.	The mine excavations have been undertaken with excavator & dumper combinations.	The mine excavations have been undertaken with excavator & dumper combinations.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches proposed is 6m	It was observed during inspection that in Quarry-9, the bench height and width was not maintained. Violation has been issued for non-compliance under rule 11(1) of MCDR 2017	It was observed during inspection that in Quarry-9, the bench height and width was not maintained. Violation has been issued for non-compliance under rule 11(1) of MCDR 2017
3m	Total area covered under excavation/pits	Area under mining at the end of plan period will be 66.21 Ha	Area under mining at the end of 2018-19 is 66.21 Ha as reported in annual return for 2018-19	Area under mining at the end of 2018-19 is 66.21 Ha as reported in annual return for 2018-19
3n	Ore to OB ratio for the pit/mine during the year.	In 2018-19, stripping ratio or ore to OB ratio proposed was 1: 0.19 MT/MT	In 2018-19, stripping ratio achieved was 1: 0.427 MT/MT	In 2018-19, stripping ratio achieved was 1: 0.427 MT/MT
3o	Total area put in use under different heads at the end of year	Total area put in use under different heads at the end of plan period will be 106.533 Ha	Total area put in use under different heads at the end of 2018-19 is 100.946 Ha	Total area put in use under different heads at the end of 2018-19 is 100.946 Ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15: 991705 tones 2015-16: 2166499 tones 2016-17: 3399955 tones 2017-18: 836280 tones 2018-19: 997999 tones	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: 997881.15 tones	2014-15: Nil 2015-16: Nil 2016-17: Nil 2017-18: Nil 2018-19: 997881.15 tones

3q	General remarks of inspecting officers on method of mining etc.	In 2018-19, two numbers of pits proposed for production namely Quarry-1 and Quarry-9. ROM production proposal was 997999 tones	In 2018-19, two number of pits put for production namely Quarry-1 and Quarry-9. ROM production was 997881.15 tones but ROM processed was 926540.15 tones. Remaining ROM quantity of 71341 tones was reported in closing stock of ROM.	In 2018-19, two number of pits put for production namely Quarry-1 and Quarry-9. ROM production was 997881.15 tones but ROM processed was 926540.15 tones. Remaining ROM quantity of 71341 tones was reported in closing stock of ROM.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	In 2018-19, there was no proposal for top soil generation. Separate dumping of overburden and mineral reject proposed.	In 2018-19, there was no generation of top soil. Overburden and mineral reject have been kept separately.	In 2018-19, there was no generation of top soil. Overburden and mineral reject have been kept separately.
4b	Location of topsoil, OB and mineral reject dumps	Overburden generated will be dumped over existing dump-4.	Overburden generated has been dumped over existing dump-4.	Overburden generated has been dumped over existing dump-4.
4c	Number of dumps within lease area and outside of lease area	Two waste dumps within lease area namely waste dump- 2 and waste dump-4	Two waste dumps within lease area namely waste dump- 2 and waste dump-4	Two waste dumps within lease area namely waste dump-2 and waste dump-4
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps are located outside the UPL	Dumps are located outside the UPL	Dumps are located outside the UPL

4e	Number of active and alive dumps.	There are two active number of active waste dumps namely waste dump- 2 and waste dump-4	There are two active number of active waste dumps namely waste dump- 2 and waste dump-4	There are two active number of active waste dumps namely waste dump- 2 and waste dump-4
4f	Number of dead dumps.	There is no dead dump	There is no dead dump	There is no dead dump
4g	Number of dumps established.	There is no dead dump	There is no dead dump	There is no dead dump
4h	Whether Retaining wall or garland drain all along dumps are there.	In 2018-19, 1330 m of retaining wall and 1550 m of garland drain have been proposed to be constructed around dump	It was observed during inspection that proposed protective measures around the proposed dump as shown in reclamation plan (of FMCP) have not been constructed till date of inspection which should have been completed by 2018-19.	Violation has been issued for non-compliance under rule 26 (1) of MCDR 2017
4i	Length of Retaining wall or garland drain all along dumps	In 2018-19, 1330 m of retaining wall and 1550 m of garland drain have been proposed to be constructed around dump	It was observed during inspection that proposed protective measures around the proposed dump as shown in reclamation plan was not constructed till date of inspection which should have been completed by 2018-19.	Violation has been issued for non-compliance under rule 26 (1) of MCDR 2017
4j	Number of settling ponds	In 2018-19, three numbers of settling tank have been proposed to be constructed.	It was observed during inspection that proposed protective measures around the proposed dump as shown in reclamation plan (of FMCP) have not been constructed till date of inspection which should have been completed by 2018-19.	Violation has been issued for non-compliance under rule 26 (1) of MCDR 2017

4k	Specific comments of inspecting officer on waste dump management	In 2018-19, there was no proposal for top soil generation. Overburden generated will be dumped over existing dump-4. Two waste dumps within lease area namely waste dump- 2 and waste dump-4.	In 2018-19, there was no generation of top soil. Overburden generated has been dumped over existing dump-4. Two waste dumps within lease area namely waste dump-2 and waste dump-4.	In 2018-19, there was no generation of top soil. Overburden generated has been dumped over existing dump-4. Two waste dumps within lease area namely waste dump-2 and waste dump-4.
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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.	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation.
5b	Area under backfilling of mined out area	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
5e	General remarks of inspecting officers on backfilling and reclamation etc.	There was no proposal for reclamation and rehabilitation	The mine is not matured for reclamation and rehabilitation	The mine is not matured for reclamation and rehabilitation

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).	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017	Annual report on PMCP for the year 2018-19 have been submitted	Annual report on PMCP for the year 2018-19 have been submitted
6b	Area available for rehabilitation (ha) .	0.845 Ha along the safety zone	0.845 Ha along the safety zone	0.845 Ha along the safety zone
6c	afforestation done (ha).	0.845 Ha along the safety zone	0.845 Ha along the safety zone	0.845 Ha along the safety zone
6d	No. of saplings planted during the year	5000 nos of saplings to be planted over 0.845 ha area in safety zone	5450 nos of sapling planted as furnished in annual return of 2018-19.	5450 nos of sapling planted as furnished in annual return of 2018-19.
6e	Cumulative no .of plants	Not Specified	21081 nos of saplings	21081 nos of saplings
6f	Any other method of rehabilitation	Not proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	Not proposed	Rs 2976047.00	Rs 2976047.00
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Not proposed	Nil	Nil

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	5000 nos of saplings to be planted over 0.845 ha area in safety zone	5450 nos of sapling planted as furnished in annual return of 2018-19.	5450 nos of sapling planted as furnished in annual return of 2018-19.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.845 Ha along the safety zone	0.845 Ha along the safety zone	0.845 Ha along the safety zone
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	Plantation
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly Monitoring	Quarterly Monitoring	Quarterly Monitoring
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Annual report on PMCP to be submitted as per Rule 26 (2) of MCDR, 2017. 5000 nos of saplings to be planted over 0.845 ha area in safety zone.	Annual report on PMCP for the year 2018-19 has been submitted. 5450 nos of sapling planted as furnished in annual return of 2018-19.	Annual report on PMCP for the year 2018-19 has been submitted. 5450 nos of sapling planted as furnished in annual return of 2018-19.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area.	Grade wise sorting within lease area.	Grade wise sorting within lease area.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Both manual & mechanical	Both manual & mechanical	Both manual & mechanical
7c	Different grade of mineral sorted out at mines.	Grade wise sorting within lease area	Data as per annual return for 2018-19. Lump 1. 58% to below 60% Fe 2. 60% to below 62% Fe 3. 62% to Below 65% Fe Fines: 1. Below 55% 2. 60% to below 62% 3. 62% to below 65%	Data as per annual return for 2018-19. Lump 1. 58% to below 60% Fe 2. 60% to below 62% Fe 3. 62% to Below 65% Fe Fines: 1. Below 55% 2. 60% to below 62% 3. 62% to below 65%
7d	Any beneficiation process at mines .	It is proposed that iron ore of 5-15mm size will be processed in the proposed jigging plant and -5mm fines will be kept separately for further beneficiation.	The plant has been established partially but is not under operation due to want of statutory clearances.	The plant has been established partially but is not under operation due to want of statutory clearances.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Grade wise sorting within lease area both manual & mechanical.	Grade wise sorting within lease area both manual & mechanical.	Grade wise sorting within lease area both manual & mechanical.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	There is no proposal for top soil generation.	There is no proposal for top soil generation.	There is no proposal for top soil generation.
8b	Concurrent use or storage of topsoil	There is no proposal for top soil generation.	There is no proposal for top soil generation.	There is no proposal for top soil generation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Overburden generated will be dumped over existing dump-4.	Overburden generated has been dumped over existing dump-4.	Overburden generated has been dumped over existing dump-4.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nil	The mine is not matured for reclamation and rehabilitation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	The mine is not matured for reclamation and rehabilitation
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	In 2018-19, 5000 numbers of saplings proposed to be planted over 0.845 ha area along the safety zone by gap filling	5450 nos of sapling have been planted over 0.845 Ha area along the safety zone by gap filling	5450 nos of sapling have been planted over 0.845 Ha area along the safety zone by gap filling
8g	Survival rate	Not specified	Survival rate: 70%	Data as furnished in annual return of 2018-19

8h	Water sprinkling on roads to control airborne dust	Regular water spraying on haul roads, waste dumps and maintaining approach roads to suppress dust.	Regular water spraying on haul roads, waste dumps and maintaining approach roads to suppress dust.	Regular water spraying on haul roads, waste dumps and maintaining approach roads to suppress dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	There is no proposal for top soil generation. Overburden generated will be dumped over existing dump-4. In 2018-19, 5000 numbers of saplings proposed to be planted over 0.845 ha area along the safety zone by gap filling	There was no generation of top soil. Overburden generated has been dumped over existing dump-4. 5450 nos of sapling have been planted over 0.845 Ha area along the safety zone by gap filling.	There was no generation of top soil. Overburden generated has been dumped over existing dump-4. 5450 nos of sapling have been planted over 0.845 Ha area along the safety zone by gap filling.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly returns and annual return for 2018-19 have been submitted.	Monthly returns and annual return for 2018-19 have been submitted.	Monthly returns and annual return for 2018-19 have been submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Manager, Mining Engineer and Geologist furnished in annual return for 2018-19	Manager, Mining Engineer and Geologist have been appointed in mines.	Manager, Mining Engineer and Geologist have been appointed in mines.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 66.21 ha, Used for waste disposal: 15.35 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.481 Ha, other purposes: 15.905 Ha	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 66.21 ha, Used for waste disposal: 15.35 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.481 Ha, other purposes: 15.905 Ha	Lease area (surface area) utilization at the end of the year as furnished in annual return for 2018-19. Covered under current working: 66.21 ha, Used for waste disposal: 15.35 Ha, Occupied by plant buildings, residential, welfare buildings & roads: 3.481 Ha, other purposes: 15.905 Ha
9d	Scrutiny of Annual return on afforestation	5450 nos of sapling planted as furnished in annual return of 2018-19.	5450 nos of sapling planted as furnished in annual return of 2018-19.	5450 nos of sapling planted as furnished in annual return of 2018-19.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	In 2018-19, Quantity of mineral reject proposal was 5809.1 tones	In 2018-19, Quantity of mineral reject generation proposal was 5809.1 tones	ROM production was 997881.15 tones but ROM processed was 926540.15 tones. Remaining ROM quantity of 71341 tones recorded in closing stock of ROM.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock of ROM as furnished in annual return of 2018-19 is 115718 tones	Closing stock of ROM as furnished in annual return of 2018-19 is 115718 tones	Closing stock of ROM as furnished in annual return of 2018-19 is 115718 tones

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price (in Rs per tonne) Lumps : Grades (% of Fe content) 58 to below 60% Fe: Rs 2475; 60% to below 62%: Rs 3589.0; 62% to below 65%: Rs 4624.44; 65% and above: Rs 5585.0 Fines : Grades (% of Fe content) 60% to 62% : Rs1481.78; 62% to 65%: Rs 1937.20 etc. Production cost: Rs1603.00 per tonne.	Ex-mine price (in Rs per tonne) Lumps : Grades (% of Fe content) 58 to below 60% Fe: Rs 2475; 60% to below 62%: Rs 3589.0; 62% to below 65%: Rs 4624.44; 65% and above: Rs 5585.0 Fines : Grades (% of Fe content) 60% to 62% : Rs1481.78; 62% to 65%: Rs 1937.20 etc. Production cost: Rs1603.00 per tonne.	Ex-mine price (in Rs per tonne) Lumps : Grades (% of Fe content) 58 to below 60% Fe: Rs 2475; 60% to below 62%: Rs 3589.0; 62% to below 65%: Rs 4624.44; 65% and above: Rs 5585.0 Fines : Grades (% of Fe content) 60% to 62% : Rs1481.78; 62% to 65%: Rs 1937.20 etc. Production cost: Rs1603.00 per tonne.
9h	Scrutiny of Annual return on fixed assets	Rs 293076414 as furnished in annual return of 2018-19	Rs 293076414 as furnished in annual return of 2018-19	Rs 293076414 as furnished in annual return of 2018-19
9k	Scrutiny of Annual return on mining machineries	Shovel Hydraulic (0.9 cum capacity) : 16 nos; Rock drill (non-electric) : 5 nos; Tipper (4.5 cum capacity): 35 nos etc.	Shovel Hydraulic (0.9 cum capacity) : 16 nos; Rock drill (non-electric) : 5 nos; Tipper (4.5 cum capacity): 35 nos etc.	Shovel Hydraulic (0.9 cum capacity) : 16 nos; Rock drill (non-electric) : 5 nos; Tipper (4.5 cum capacity): 35 nos etc.

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

Date :

(**SHRI SUDIP RANJAN MAZUMDAR**)

Indian Bureau of Mines