

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

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/IRON/KJR/MCDR-65/BBS

**Mine code :** 30ORI08017

- (i) Name of the Inspecting : **U11** ) **DAYANAND UPADHYAY**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Ambika Prasad Mohapatra, Mines Manager  
Official with  
Designation
- (iv) Date of Inspection : 07/01/2018
- (v) Prev.inspection date : 10/03/2015

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GANDHAMARDHAN 'B' BLOCK**
- (b) **Registration NO.** : **4269**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : SUAKATI
- Taluka : KEONJHAR
- Post office : SUAKATI
- Pin Code : 758018
- FAX No. : 06766-233085
- E-mail : info@orissamining.com
- Phone : 06766-233064
- (f) Police Station : Suakati
- (g) First opening date : 11/07/1970
- (h) Weekly day of rest : SUN
2. Address for : GANDHAMARDHAN  
correspondance AT/PO-SUAKATI  
DIST-KEONJHAR
3. (a) Lease Number : ORI0086
- (b) Lease area : 618.58
- (c) Period of lease : 30
- (d) Date of Expiry : 20/06/1993
4. Mineral worked : IRON ORE Main

## 5. Name and Address of the

Lessee : M/S Orissa Mining Corporation Ltd  
P.O.NO.34 OMC House  
Bhubaneswar KHURDA ORISSA  
Phone:  
FAX :

Owner : m/s ORISSA MINING CORPORATION LTD  
OMC HOUSE P.B.No.34  
BHUBNESHWAR ORISSA  
Phone: 2393431  
FAX : 2391629

Agent : P.K. Sahoo  
At/Po: Suakati PS: Suakati  
Dist: Keonjhar KEONJHAR  
ORISSA  
Phone: 06766-233064  
FAX : 06766-233085

## Mining Engineer

Name : Dillip Kumar Choudhury, Full Time  
Qualification : BE(Mining)  
Appointment/ : 16/12/2013  
Termination date

## Manager

Name : Ambika Prasad Mohapatra  
Qualification : Diploma in Mining & 1st class certificat  
Appointment/ : 11/06/2014  
Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	15/01/2003
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	04/12/2006
		Mining Scheme rule 12 MCDR1988	01/04/2011
		Modif.of approved Mining Plan	27/07/2016

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	20 number of bore holes in 2016-17.	Proposed bore holes have not been drilled.	Proposed bore holes have not been drilled due to non availability of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
1b	Exploration over lease area for geological axis 1 or 2	G1 & G2 level of exploration over the lease area.	Proposed bore holes have not been drilled.	Proposed bore holes have not been drilled due to non availability of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified.	Proposed bore holes have not been drilled.	Proposed bore holes have not been drilled due to non availability of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
1d	Balance area to be explored to bring Geological axis in 1 or 2	During scheme period about 1127.80 ha unexplored area is proposed for drilling.	Proposed bore holes for the year 2016-17 have not been drilled.	Proposed bore holes have not been drilled due to non availability of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

1e	Balance reserve as on 01/04/20	Balance reserve as per Modified mining plan approved on 27.07.2016 is 207.26MT under 111, 121 & 122 category and 71.18 MT feasibility resources undern211 & 222 category.	Balance reserve as on 01/04/2017 is 206.12MT under 111, 121 & 122 category and 71.18 MT feasibility resources undern211 & 222 category.	Balance reserve as on 01/04/2017 is 206.12MT under 111, 121 & 122 category and 71.18 MT feasibility resources undern211 & 222 category.
1f	General remarks of inspecting officers on geology, exploration etc		Out of total Lease area 1590.8673 ha, the exploration under G1 level is 139.432 ha. and under G2 level is 221.792 ha. Total 188 nos. of bore holes have been drilled by lessee covering meterage of 7950m. About 1127.807 ha area is un explored which falls under forest.	Proposed bore holes have not been drilled due to non availability of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	1. Hilltop Quarry; 100E to 480E & - 910N to -465N 2. Putulpani Quarry; -955 to -655E & 2232N to 2687N	Development is carried out only in Putulpani Quarry (-955 to -655E & 2232N to 2687N). Hilltop Quarry has not been developed due to want of forest clearance.	Development is carried out only in Putulpani Quarry. Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and ore with 10m height. Top soil bench is not proposed.	Separate benches in OB and ore of 10m height have been maintained. Top soil bench is not proposed.	Separate benches in OB and ore of 10m height have been maintained. Top soil bench is not proposed.
2c	Stripping ratio or ore to OB ratio	Hilltop quarry: 1:0.41 Cu.m/T and Putulpani quarry; 1:1 Cu.m/T	Putulpani quarry; 1:0.92 Cu.m/T. Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
2d	Quantity of topsoil generation in m3	Proposal not furnished in approved mining plan.	Nil.	Not applicable.
2e	Quantity of overburden generation in m3	2.01 million cu.m	140967 cu.m	Overburden generated is less because of Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Development was proposed in Hilltop quarry and Putulpani quarry. Presently development is concentrated in Putulpani quarry. of Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

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### Exploitation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	02 pit; Hilltop quarry and Putulpani quarry	Presntly production is being carried out from Putulpani quarry. Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
3b	Quantity of ROM mineral production proposed	3.61 million tonnes.	1301100T	ROM production is less than proposal because of Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
3c	Recovery of sailable/usable mineral from ROM production	Saleable 95% w.r.t total ROM.	Total ROM has been utilised by lessee for the year 2016-17.	Total ROM has been utilised by lessee for the year 2016-17.
3d	Quantity of mineral reject generation	0.18 million tonnes.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.
3e	Grade of mineral rejects generation and threshold value declared.	-55% to +45% Fe.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.
3f	Quantity of sub grade mineral generation.	0.18 million tonnes.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.

3g	Grade of sub grade mineral generation	-55% to +45% Fe.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.	No sub grade/mineral reject has been repotred by lesse. Total ROM has been utilised by lessee for the year 2016-17.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	Mechanised segregation of ROM +45% to +65% Fe is being practiced.	Mechanised segregation of ROM +45% to +65% Fe is being practiced.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Proposal not furnished in approved mining plan.	Nil	Not applicable.
3j	Provision of drilling and blasting in mineral benches	DTH drilling of 115mm dia. Blast hole with emulsion/slurr y exlosive as coloumn charge and booster alongwith electric detonator.	DTH drilling of 115mm dia. Blast hole with emulsion/slurry charge and booster as base charge alongwith electric detonator is being practiced for drilling and blasting.	Drilling is being carried out using 115 mm dia. drill with 3.0 m burden & 3.5 m spacing in Putulpani quarry. Holes are charged with slurry/emulsion explosives and initiated using NONEL/electric detonator.
3k	Provision of mining machineries in mineral benches	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-12, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-05, Dumper 18T- 42, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-05, Dumper 18T- 42, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 10m.	Bench height is suitably matched with the loading excavator.	Bench height is suitably matched with the loading excavator.
3m	Total area covered under excavation/pits	Area proposed in approved mining plan under pits are 153.48 ha.	Area covered under excavation pits are 125.40 ha.	Area covered under excavation pits are 125.40 ha.
3n	Ore to OB ratio for the pit/mine during the year.	Hilltop quarry: 1:0.41 Cu.m/T and Putulpani quarry; 1:1 Cu.m/T	Putulpani quarry; 1:0.92 Cu.m/T. Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
3o	Total area put in use under different heads at the end of year	Area proposed in approved mining plan under different heads are Pit-153.48 ha, waste dump-42.94 ha, Plant, residential & building, roads-45.425ha, Mineral storage-26.9393 ha. & others -15.085 ha.	Area covered under different heads are Pit & storage-188.52 ha, waste dump-5.0 ha, Plant, residential & building, roads-25.265 ha & others -0.24 ha.	Area covered under different heads are Pit & storage-188.52 ha, waste dump-5.0 ha, Plant, residential & building, roads-25.265 ha & others -0.24 ha.



3p	Production of ROM mineral during the last five year period as applicable	2012-13: 3.52MT 2013-14: 2.82MT 2014-15: 2.76MT 2015-16: 2.77T 2016-17: 3.61MT	2012-13: 0.205MT 2013-14: 0.32MT 2014-15: 0.383T 2015-16: 0.566MT 2016-17: 1.301MT	ROM production is less than proposal because of Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
3q	General remarks of inspecting officers on method of mining etc.	The ROM production has been carried out from Putulpani quarry. DTH drilling of 115mm dia. Blast hole with emulsion/ slurry explosive alongwith delay detonator is being practiced for drilling and blasting. No production has been reported Hill Top quarry.		Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

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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)	Separate dumping for OB, & Mineral reject. Top soil is not proposed.	Separate dumping for OB, & Mineral reject havebeen carried out.	There is no top soil generation as proposed in approved mining plan.
4b	Location of topsoil, OB and mineral reject dumps	1. WD3, Hilltop Area (720E to 960E & -985N to- 900N) 2. WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N)	Dumping is carried out on dump WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N).	Hilltop Quarry has not been developed due to want of forest clearance so dumping is not carried out on dump WD3.

4c	Number of dumps within lease area and outside of lease area	1. WD3, Hilltop Area (720E to 960E & -985N to-900N) 2. WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N)	There are 04 existing waste dump; 1. Upper Kainsiari, 2540 N to 2613 N & 1306 E to 1202 E 2. Jagar (within DRP area), 1145N to 1250N & -1140E to -1270E 3. Jagar (within DRP area), 1385N to 1480N & -1200E to -1300E 4. Hilltop area, -400N to 550N & 175E to 325E	Hilltop Quarry has not been developed due to want of forest clearance so dumping is only carried out on dump WD1 Upper Kainsari Area (00E to 530E & 2775N to 3120N).
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	1. WD3, Hilltop Area (720E to 960E & -985N to-900N) 2. WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N)	There are 04 existing waste dump outside the UPL; 1. Upper Kainsiari, 2540 N to 2613 N & 1306 E to 1202 E 2. Jagar (within DRP area), 1145N to 1250N & -1140E to -1270E 3. Jagar (within DRP area), 1385N to 1480N & -1200E to -1300E 4. Hilltop area, -400N to 550N & 175E to 325E	Hilltop Quarry has not been developed due to want of forest clearance so dumping is only carried out on dump WD1 Upper Kainsari Area (00E to 530E & 2775N to 3120N).
4e	Number of active and alive dumps.	1. WD3, Hilltop Area (720E to 960E & -985N to-900N) 2. WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N)	Presently there is one active dump WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N). Rest the dump of are ideal as the Hilltop Quarry has not been developed due to want of forest clearance.	Presently there is one active dump WD1, Upper Kainsari Area (00E to 530E & 2775N to 3120N). Rest the dump of are ideal as the Hilltop Quarry has not been developed due to want of forest clearance.
4f	Number of dead dumps.	Proposal not furnished in approved mining plan.	Hilltop Quarry has not been developed due to want of forest clearance so rest of dumps are ideal.	Hilltop Quarry has not been developed due to want of forest clearance so rest of dumps are ideal.
4g	Number of dumps established.	Proposal not furnished in approved mining plan.	Hilltop Quarry has not been developed due to want of forest clearance so rest of dumps are ideal.	Hilltop Quarry has not been developed due to want of forest clearance so rest of dumps are ideal.

4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall of 1428m x 1.5m x 1.2m & Garland drain of 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1.	Retaining wall 1428 x 1.5 x 1.2 & Garland drain 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1 have been made by lessee.	Retaining wall 1428 x 1.5 x 1.2 & Garland drain 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1 have been made by lessee.
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall of 1428m x 1.5m x 1.2m & Garland drain of 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1.	Retaining wall 1428 x 1.5 x 1.2 & Garland drain 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1 have been made by lessee.	Retaining wall 1428 x 1.5 x 1.2 & Garland drain 1458x1mx1m around subgrade Dump SGD3 & waste dump WD1 have been made by lessee.
4j	Number of settling ponds	02 settling tank.	02 settling tank near waste dump WD1 have been made.	02 settling tank near waste dump WD1 have been made.
4k	Specific comments of inspecting officer on waste dump management		Retaining wall & Garland drain around subgrade Dump & waste dump have been made by lessee to arrest the wash-off solid particles. Slope of the dead dump has been partially stabilised by plantation.	Retaining wall & Garland drain around subgrade Dump & waste dump have been made by lessee to arrest the wash-off solid particles. Slope of the dead dump has been partially stabilised by plantation.

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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.	Partly backfilling in mined out voids of Hilltop quarry	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

5b	Area under backfilling of mined out area	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N).	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposal not furnished in approved plan.	There is no top soil generation.	There is no top soil generation.
5d	Total area fully reclaimed and rehabilitated	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) for only bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		2.47 ha. Hilltop Area (300E to 475 E & -700 N to -510N) was proposed for bacfilling. Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Hilltop Quarry has not been developed due to want of forest clearance. Deviation has been pointed out through violation letter dated 12/01/2018.

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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).	Not specified.	Annual return on PMCP has been submitted.	Annual return on PMCP has been submitted.
6b	Area available for rehabilitation (ha) .	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) for only bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.

6c	afforestation done (ha).	Not proposed.	4800 nos. of saplings have been planted in 2016-17.	4800 nos. of saplings have been planted in 2016-17.
6d	No. of saplings planted during the year	Proposal not furnished in approved mining plan.	4800 nos. of saplings have been planted in 2016-17.	4800 nos. of saplings have been planted in 2016-17.
6e	Cumulative no .of plants	Not specified.	Cumulative nos. of saplings planted in the lease area is about 9800.	Cumulative nos. of saplings planted in the lease area is about 9800.
6f	Any other method of rehabilitation	Not proposed.	Nil.	Not applicable.
6g	Cost incurred on watch and care during the year	Not specified.	About Rs 1.5 lakh cost incurred on watch and care in 2016-17.	About Rs 1.5 lakh cost incurred on watch and care in 2016-17.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) for only bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) only for bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) only for bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) only for bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	2.47 ha. Hilltop Area (300E to 475 E & -700 N to - 510N) only for bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Proposal not furnished.	Nil.	Proposal has not been furnished in approved mining plan.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposal not furnished.	Nil.	Proposal has not been furnished in approved mining plan.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Proposal not furnished.	Nil.	Proposal has not been furnished in approved mining plan.
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly monitoring	Quarterly monitoring of air, water and noise level are being carried out.	Quarterly monitoring of air, water and noise level are being carried out.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Proposed backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance. Regular quarterly monitoring of air, water and noise level has been carried out by lessee.	Proposed backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance. Regular quarterly monitoring of air, water and noise level has been carried out by lessee.

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**Mineral Conservation:**


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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Gradewise sorting of +45% Fe to 55% Fe and +55% Fe is being practiced.	Gradewise sorting of +45% Fe to 55% Fe and +55% Fe is being practiced.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised.	Mechanised method is adopted for gradewise sorting of iron ore.	Mechanised method is adopted for gradewise sorting of iron ore.
7c	Different grade of mineral sorted out at mines.	45% to 55% Fe and +55% Fe.	Different grades of minerals sorted out at mines are 45% to 55% Fe and +55% Fe..	Different grades of minerals sorted out at mines are 45% to 55% Fe and +55% Fe..
7d	Any beneficiation process at mines .	Proposal not furnished in approved mining plan.	Nil.	Not applicable.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Cut off grade of iron ore for the mine is +55%. Different grades of minerals sorted out at mines are +65% Fe, 62 to 58% Fe and 58 to 55% Fe. In 206-17, no sub grade has been reported by lessee. There are 04 nos. of low grade/subgrade mixed dumps in the lease area. The total quantity of sub grade of all stacks/dumps is about 1725306 cu.m.	Cut off grade of iron ore for the mine is +55%. Different grades of minerals sorted out at mines are +65% Fe, 62 to 58% Fe and 58 to 55% Fe. In 206-17, no sub grade has been reported by lessee.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposal not furnished.	NIL.	There is no top soil generation as proposed in approved mining plan.

8b	Concurrent use or storage of topsoil	Proposal not furnished.	Nil.	There is no top soil generation as proposed in approved mining plan.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB, & Mineral reject.	Separate dumping for OB, & Mineral reject have been carried out.	Separate dumping for OB, & Mineral reject have been carried out.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Partly backfilling in mined out voids of Hilltop quarry.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	2.47 ha. Hilltop Area (300E to 475 E & -700 N to -510N) only for bacfilling.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.	Backfilling is not carried out as the Hilltop Quarry has not been developed due to want of forest clearance.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposal not furnished in approved mining plan.	Cumulative nos. of saplings planted in the lease area is about 9800.	Cumulative nos. of saplings planted in the lease area is about 9800.
8g	Survival rate	Not specified.	Survival rate is 80%	Survival rate is 80%
8h	Water sprinkling on roads to control airborne dust	03 Water tanker 20/12/08KL	03 Water tanker of 20/12/08KL capacity are used for water spraying along haul roads.	03 Water tanker of 20/12/08KL capacity are used for water spraying along haul roads.



8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mined area is maintained. In 2016-17, total 4800 nos of saplings have been planted by lessee. As reported cumulative no. of trees planted by lessee is about 5800 nos.	Aesthetic beauty in and around mined area is maintained. In 2016-17, total 4800 nos of saplings have been planted by lessee. As reported cumulative no. of trees planted by lessee is about 5800 nos.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly & Annual returns are being regularly submitted by lessee.	Monthly & Annual returns are being regularly submitted by lessee.	Monthly & Annual returns are being regularly submitted by lessee.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer-4, Diploma mining Engineer-20, Geologist-2, Surveyor-2	Graduate Mining Engineer-4, Diploma mining Engineer-20, Geologist-2, Surveyor-2	Graduate Mining Engineer-4, Diploma mining Engineer-20, Geologist-2, Surveyor-2
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under different heads are Pit & mineral storage-188.52 ha, waste dump-5.0 ha, Plant, residential & building, roads-25.265ha & others -0.24 ha.	Area covered under different heads are Pit & mineral storage-188.52 ha, waste dump-5.0 ha, Plant, residential & building, roads-25.265ha & others -0.24 ha.	Area covered under different heads are Pit & mineral storage-188.52 ha, waste dump-5.0 ha, Plant, residential & building, roads-25.265ha & others -0.24 ha.
9d	Scrutiny of Annual return on afforestation	4800 nos. of saplings.	4800 nos. of saplings have been planted in 2016-17.	4800 nos. of saplings have been planted in 2016-17.

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil.	Nil.	Nil.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock: Lump (62% Fe to +65% Fe); 731977.26T Fines ( 55%Fe to 65% fe): 2602774.43T	Closing stock: Lump (62% Fe to +65% Fe); 731977.26T Fines ( 55%Fe to 65% fe): 2602774.43T	Closing stock: Lump (62% Fe to +65% Fe); 731977.26T Fines ( 55%Fe to 65% fe): 2602774.43T
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine price: Lump: (62% Fe to 65% Fe); Rs 1691.94 +65% Fe: Rs 1815.05 Fines: 60% Fe to 63% Fe ; Rs 831.46 62% Fe to 65% Fe ; Rs 1489.21	Ex mine price: Lump: (62% Fe to 65% Fe); Rs 1691.94 +65% Fe: Rs 1815.05 Fines: 60% Fe to 63% Fe ; Rs 831.46 62% Fe to 65% Fe ; Rs 1489.21	Ex mine price: Lump: (62% Fe to 65% Fe); Rs 1691.94 +65% Fe: Rs 1815.05 Fines: 60% Fe to 63% Fe ; Rs 831.46 62% Fe to 65% Fe ; Rs 1489.21
9h	Scrutiny of Annual return on fixed assets	Fixed asset(Rs) :75632171	Fixed asset(Rs) :75632171	Fixed asset(Rs) :75632171
9k	Scrutiny of Annual return on mining machineries	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-05, Dumper 18T- 42, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-05, Dumper 18T- 42, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .	Balst hole drill 115mm dia.- 3, Excavator(Back hoe)2.4/2.6/1.5 cu.m-08, Laoder 2.4/2.5 cu.m-05, Dumper 18T- 42, Water Tanker-04, Dozer-1, Water tanker 20/12/08KL-5, Motor Grade-1, Air Compressor-3 etc .

**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
MCDR17	Rule 11(1)	12/01/2018			

**Date :**

(DAYANAND UPADHYAY)

Indian Bureau of Mines