

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-43/BBS

Mine code : 30ORI08040

- (i) Name of the Inspecting : **U11**) **DAYANAND UPADHYAY**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Ashok Kumar Bhuyan, Agent
Official with
Designation
- (iv) Date of Inspection : 03/11/2017
- (v) Prev.inspection date : 27/07/2015

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NUAGAON**
- (b) **Registration NO.** : **IBM/4132/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : GUALI
- Taluka : BARBIL
- Post office : GUALI
- Pin Code : 758035
- FAX No. : 06767-270049
- E-mail : kjsahluwalia@rediffmail.cor
- Phone : 06767-270048, 9437041818
- (f) Police Station : Barbil
- (g) First opening date : 01/01/1959
- (h) Weekly day of rest : SUN
2. Address for : VILL% PO: GUALI
correspondance POLICE STATION :BARBIL
DIST: KEONJHAR,ORISSA,PIN:758035
3. (a) Lease Number : ORI0070
- (b) Lease area : 767.28
- (c) Period of lease : 20
- (d) Date of Expiry : 03/03/1999
4. Mineral worked : IRON ORE Main

5. Name and Address of the

Lessee : K.J.S.AHLUWALIA
 AT/PO.BARBIL KEONJHAR
 ORISSA
 Phone:
 FAX :

Owner : K.J.S AHLUWALIA
 AT/PO. BARBIL P.B NO.3
 KEONJHAR ORISSA
 Phone: 06767 75348,756
 FAX : 06767-30348, 30

Mining Engineer

Name : Manoj Kumar, Full Time
 Qualification : BE Mi ning
 Appointment/ : 12/08/2012
 Termination date

Geologist

Name : RANJAN KUMAR MOHARANA, Full Time
 Qualification : Msc. Applied Geology
 Appointment/ : 08/08/2016
 Termination date

Manager

Name : Sahadat Mandal
 Qualification : Diploma in Mining Engg, FCC
 Appointment/ : 16/09/2011
 Termination date

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	10/05/2005
Plan/Scheme of Mining		Modif.approved Mining Scheme	15/10/2007
		Modif.approved Mining Scheme	23/10/2008
		Mining Scheme rule 12 MCDR1988	23/06/2009
		Modif.approved Mining Scheme	18/08/2010
		Mining Scheme rule 12 MCDR1988	05/07/2013
		Mining Scheme rule 12 MCDR1988	22/07/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nos. of boreholes proposed to be drilled in 2016-17 was 32 Nos.	Actual Nos. of boreholes drilled in 2016-17 was 64 Nos of boreholes.	Form J has been submitted on 20.04.2016 for 108 Nos of boreholes covering backlog of previous years 2014-15 & 2015-16.
1b	Exploration over lease area for geological axis 1 or 2	In the approved scheme of mining , a tentative exploration proposal has been worked out for the entire lease area in regular grid pattern for assessing the total mineral reserves/resources as per the CCOM's guidelines under UNFC.	Area Explored under UNFC limit of G1 is 210.30 Ha; Area Explored under UNFC limit of G2 is 88.360 Ha; Thus. total area explored under UNFC limit of G1 & G2 is 298.66 Ha	With reference to the quarterly status of reports on exploration submitted in respect of Nuagaon Iron Mine of M/s KJS Ahluwali dated 10.04.2017, it is stated that the total area covered under G1 and G2 level of exploration is 298.66 Ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Exploration Agency: M/s Thriveni Exploration Agency and M/s Geo Exploration Pvt Ltd Expenditure: Rs 247 lakhs	

1d	Balance area to be explored to bring Geological axis in 1 or 2	In the approved scheme of mining, a total of 197 boreholes have been proposed over the entire area including the inferred non-mineralised area to prove presence or absence of mineralisation in the area.	Balance area to be explored to bring to Geological axis 1 or 2 is 415.472 Ha.	Total Lease area: 767.284 ha of which G1 is 210.30 Ha, G2 is 88.36 ha, G3 is 95.03 Ha, Explored and found Non-mineralised is 53.152 ha and unexplored lease area is 320.442 Ha. It has been observed during inspection that the drilling is under progress.
1e	Balance reserve as on 01/04/20		Balance Reserve as on 01.04.2017 as per the annual return form H1 submitted for the period 01.04.2016 to 31.03.2017 under 111 category is 55 million tonne and 121 category is 58 million tonne.	Remaining Resources as per the annual return for the period 01.04.2016 to 31.03.2017 is 52 million tonnes
1f	General remarks of inspecting officers on geology, exploration etc			It has been observed during inspection that the drilling is under progress. Also, the Form J has been submitted on 20.04.2016 for 108 boreholes covering the backlog of previous years i.e, 2014-15 & 2015-16.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	<p>Development proposed in six blocks.</p> <p>1.Barapada Block between coordinates 400N to 800S, 200E to 800E</p> <p>2.Katasahi Block between coordinates 400S to 950S, 1900E to 2300E</p> <p>3.Topadihi Block between coordinates 1730N to 400N, 100W to 1060E</p> <p>4.Dumka Block between coordinates 120N to 500N, 330W to 800W</p> <p>5.Kanhusahi Block between coordinates 1720S to 1400S, 400W to 100W</p> <p>6.Guali Block between coordinates 1880N to 2100N, 150E to 350E</p>	<p>Development done in five blocks within following limits.</p> <p>1.Barapada Block between coordinates 380N to 800S, 200E to 800E</p> <p>2.Katasahi Block between coordinates 420S to 950S, 1900E to 2200E</p> <p>3.Topadihi Block between coordinates 1730N to 420N, 80W to 1010E</p> <p>4.Dumka Block between coordinates 200N to 500N, 350W to 800W</p> <p>5.Kanhusahi Block between coordinates 1660S to 1450S, 380W to 120W</p> <p>6. Guali Block was not operated.</p>	<p>(a). Guali Quarry was not operated as per the proposal for the year 2016-17.</p> <p>(b) In Chanaguda pit, benches have not been developed in Southwest and South East Direction as per development plan of 2016-17 (ref. Plate No.8A of approved Scheme of Mining). In B.Top Quarry, the development of the benches has not been done as per development plan of 2016-17 (ref. Plate No.8A of approved Scheme of Mining). The short comings has been informed to lessee by violation letter dated 26.07.2017.</p>
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	<p>Separate benches in OB & Ore.</p>	<p>There is no bench in top soil.</p> <p>Barpada Block : OB-2 bench,Ore-10 bench;</p> <p>Katasahi Block : OB-2 bench,Ore- 6 bench;</p> <p>Topadihi block: OB-3 bench,Ore- 9 bench;</p> <p>Dumka block: OB-1 bench,Ore-10 bench;</p> <p>Kanhusahi block : OB-1 bench,Ore- 7 bench;</p>	<p>Separate benches in OB and Ore has been maintained.</p>

2c	Stripping ratio or ore to OB ratio	Stripping ratio proposed for 2016-17 was 1:0.038	Stripping ratio achieved for 2016-17 was 1:0.018	Generation of OB was less @ 0.0523 MCum gainst the plan of 0.235 MCum in 2016-17.
2d	Quantity of topsoil generation in m3	Not Proposed.	Not Applicable.	
2e	Quantity of overburden generation in m3	Quantity of Overburden generation proposed during 2016-17 was 0.235 (M.cum)	Actual Overburden generated during 2016-17 was 0.0523 (M.cum)	The actual OB material generated during 2016-17 was 0.0523 (M.cum) which is less than proposed for the year. The short comings has been informed to lessee by violation letter dated 26.07.2017.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mining is done by open cast method in five blocks namely Barpada block, Katasahi block, Topadihi Block, Dumka Block and Kanhusahi Block. The workings in number of quarries are being done due to discontinous patchy occurance of ore bodies within the lease area. Guali Quarry was not operated as per the proposal for the year 2016-17.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	Number of pits proposed for production in 2016-17 was 11 Nos.	Actual numbers of pits put for production in 2016-17 was 8 Nos.	Actual Nos. of pits put in production was 8 Nos except D-Top pit in Dumka Block, Kanhusahi pit in Kanhusahi Block and Guali pit in Guali Block which were not operated. The short comings has been informed to lessee by violation letter dated 26.07.2017.
3b	Quantity of ROM mineral production proposed	Production Proposed during the year 2016-17 is 6585320 MT	Actual Production achieved during the year 2016-17 is 5614000 MT	EC over 767.284 Ha ML area for a production capacity of 5.62 MTPA has been obtained on 02.02.2010.
3c	Recovery of sailable/usable mineral from ROM production	Recovery of Saleable Ore during the period 2016-17 will be 70%.	The recovery of saleable ore during the period 2016-17 achieved is 93.68%.	
3d	Quantity of mineral reject generation	1175950 MT in 2016-17.	There is no mineral reject generation reported from ROM as these have been blended with high grade ROM.	

- 3e Grade of mineral rejects generation and threshold value declared. Grade of Mineral Rejects generation is 45-58% Fe. Threshold Value declared is below 45% Fe No subgrade/mineral reject generation has been reported for the year 2016-17. Threshold Value is below 45% Fe The subgrade/mineral reject generated during the year has been blended with high grade. The subgrade or mineral reject stack register along with grade is not maintained properly and not made available during inspection. The short comings has been informed to lessee by violation letter dated 26.07.2017.
- 3f Quantity of sub grade mineral generation. 1175950 MT in 2016-17 Production of Subgrade Fines
 1. Below 55% Fe is 334170.00 MT
 2 Between 55% Fe to below 58% Fe is 20740 MT
 Thus, total fines below 58% Fe content produced is 354910MT Subgrade mineral generation was less as the workings were confined to lower mine faces in the pit where inherently the grade are better. It has been observed during inspection that the subgrade dump no-16 has extended around 20-25 m in eastern direction along the section line 900 S in between grids 500E to 600E and 800 S to 1000S. It has been observed during inspection that protective measures such as garland drain and retaining wall were not present at places to prevent the flow of material.

3g	Grade of sub grade mineral generation	Grade of subgrade mineral generation is between 45-58% Fe.	Grade of subgrade mineral generation is between 45-58% Fe.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Method	Mechanised Method.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Not Applicable.
3j	Provision of drilling and blasting in mineral benches	Blastholes of 115mm dia up to around 6.6/8.8m deep are to be drilled by number of wagon drills powered by 450 cfm compressors. Blasting to be done by OCG & PG combination for which nonel & excel detonators are to be used.	Drilling is being done by 105mm to 115mm dia drill machines. Blasting is being carried out by using the NONEL technology and proper blast design firing pattern along with proper implementation and supervision of total blasting operations.
3k	Provision of mining machineries in mineral benches	Drilling machine:104mm dia -1Nos, 115mm dia - 1Nos. Excavator 0.9 cum to 4.3 cum capacity -10 Nos. Dumper 20T to 35 T capacity: 40Nos. Dozer-2 Nos.	The machineries available at the site were drilling machine: 104mm dia -1Nos, 115mm dia -1Nos; Excavator 0.9 cum to 4.3 cum capacity -10 Nos; Dumper 20T to 35 T capacity: 40Nos; Dozer-2 Nos.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	During the year 2016-17, in the proposed Barpada block and Kanusahi Block, it has been planned to develop the benches with 8m height and 15m width and in other blocks the height of the benches will be 6m and 12m width.	Yes, the height of the benches in overburden and mineral is suitable for proposed method of mining.	
3m	Total area covered under excavation/pits	188.637 Ha during approved scheme period.	About 178.226 Ha has been covered under excavation/pits.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.038	1:0.018	Actual Overburden material generated during 2016-17 was 0.0523 (M.cum).

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 scheme period (2018-19): Mine working - 188.637Ha, OB dump-10.865 Ha, Sub-Grade/ Minerals Storage-61.350 Ha; Infrastructure with road - 21.523 Ha; Mineral Separation Plant - 6.000Ha, Township Area- 3.290 Ha, Magazine- 0.077 Ha, Plantation- 28.100 Ha, Reclamation - 2.218 Ha	Area covered under different heads are: Mine working -178.226 Ha, OB dump-5.790 Ha, Infrastructure with road -13.717 Ha, Reclamation -5.238 Ha, Others- 93.40 Ha, Plantation etc.- 4.427 Ha.	Area covered under different heads are: Mine working - 178.226 Ha, OB dump-5.790 Ha, Infrastructure with road -13.717 Ha, Reclamation - 5.238 Ha, Others- 93.40 Ha, Plantation etc.- 4.427 Ha.
3p	Production of ROM mineral during the last five year period as applicable	ROM proposal for the period 2014-15 is 6.493 million tonne ROM proposal for the period 2015-16 is 6.584 million tonne	Actual ROM production during the period 2014-15 is 1.066 million tonne Actual ROM production during the period 2015-16 is 4.074 million tonne	The approved scheme of mining is for the period 2014-15 to 2018-19. The EC over 767.284 Ha of ML area for a production capacity of 5.62 MTPA has been obtained on 02.02.2010.
3q	General remarks of inspecting officers on method of mining etc.			ROM production is from five blocks covering eight pits. Based on the nature of deposit, the scientific method of mining is practiced.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB generated shall be dumped into three nos. of waste dumps namely PD1, PD2 and PD3.	The part of the OB generated during the year 2016-17 has been stacked in the Waste dump no. PD/3.	The generation of Top Soil is Nil.
4b	Location of topsoil, OB and mineral reject dumps	Dump No PD1 located in MDH Quarry, Dump No PD2 located in Barpada Bottom and Dump No PD3 located in Katesahi Block.	In total there are four numbers of OB dumps within lease area. Dump No PD/3 located in Katesahi Block and three other dumps no-27, 28 & 30 is located near Udalwari Quarry which are inactive now.	There is no top soil dump. Mineral reject generated during 2016-17 hasa been blended with high grade ore.
4c	Number of dumps within lease area and outside of lease area	There were three nos. of dumps at the end of last approved mining scheme namely Dump No-27, 28 & 30 in Udalbari Quarry. In the current scheme period it is proposed to dump OB material in three new waste dumps namely PD1 at MDH Quarry, PD2 and Barpada Bottom & PD3 at Katesahi Block.	There are four (04) nos. of OB dumps within lease area. Dump No-PD3 at Katesahi Block and three nos. of dump namely dump no. 27, 28 & 30 at Udalbari Quarry.	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In the current scheme period it is proposed to dump OB material in three new waste dumps namely PD1 at MDH Quarry, PD2 and Barpada Bottom & PD at Katesahi Block.	All the four numbers of dump are located outside the ultimate pit limit.	Existing three dumps at Udalbari Quarry and one new dump at Katesahi block
4e	Number of active and alive dumps.	Waste generated during the schme period from all the workings are proposed to be dumped in three OB dumps namely PD1, PD2 and PD3.	At present there is no active dump. All the four dumps have been stabilised.	
4f	Number of dead dumps.	Not Proposed.	At present there are four nos. of dead dumps. Three nos Dump No 27, 28 and 30 near Udalbari Quarry and one dump no PD/3 at Katesahi Block.	
4g	Number of dumps established.	There are three numbers of dumps stabilized at Udalbadi Quarry.	At present, four numbers of dumps have been stabilised.	
4h	Whether Retaining wall or garland drain all along dumps are there.	During the year 2016-17, construction of garland drain has been proposed for 600mx 1m x 1.5 m and retaining wall over 550mx1mx2m.	Garland drain has been constructed over 750 mx 1m x 1m and retaining wall over 550mx1mx2m.	

4i	Length of Retaining wall or garland drain all along dumps	Construction of retaining wall in 2016-17 proposed was of 550m x 1m x 2m Construction of garland drain in 2016-17 proposed was of 600m x 1m x 1.5m	Retaining wall and garland drain has been constructed as per proposal. Retaining wall has been constructed of 550m X 2m x 1m and Garland drain of 750m x 1m x 1.5m	Cummulative length of retaining wall is 6650m and cummulative length of garlain drain is 7550m.
4j	Number of settling ponds	During the year 2016-17, only maintenance of settling ponds is proposed.	Settling ponds have been maintained. Cummulative there are six (06) nos. of settling ponds.	
4k	Specific comments of inspecting officer on waste dump management			Waste dumps have been properly managed in the mine. To avoid the erosion and rain slides application of natural geotextiles such as coir matting has been undertaken. Slope of the dead dumps have been stabilised by plantation.

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.	Part of Udalbari Quarry (0.535 Ha) mined out area has been proposed for backfilling.	During the year 2016-17, backfilling has been done over 1.218 Ha in Udalbari Quarry.	
5b	Area under backfilling of mined out area	0.535 Ha in Udalbari	1.218 Ha area in Udalbari has been backfilled.	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	It has been proposed that if top soil is encounterd then it wil be stacked separetely and utilised for plantation.	There is no generation of top soil during the year 2016-17.
5d	Total area fully reclaimed and rehabilitated	Reclamation/Re habilitation program for the year 2016-17 proposed in the mined out area over 0.535 Ha	Reclamation in the 2016-17 done over 1.218 Ha Udalbadi Quarry.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		There is no generation of top soil during the year 2016-17. Reclamation in the 2016-17 done over 1.218 Ha Udalbadi Quarry.

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 Proposed	Annual Report on PMCP has been submitted.	Annual Report on PMCP has been submitted to this office.
6b	Area available for rehabilitation (ha) .	1.302 Ha	1.218 Ha in Udalbari Quarry (1.218 Ha) & 1 Ha in Gangeiguda Quarry.	
6c	afforestation done (ha).	4.452 Ha	In the year 2016-17, 6.517 Ha of afforestation has been done.	
6d	No. of saplings planted during the year	5324 Nos of saplings.	In the year 2016-17, 9282 nos of saplings have been planted within lease area & 2000 nos of saplings planted outside the lease area.	

6e	Cumulative no .of plants	Not Specified	Cumulative nos. of saplings planted is about 286346 nos upto 30.06.2017.
6f	Any other method of rehabilitation	Not proposed.	Not applicable.
6g	Cost incurred on watch and care during the year	10.648 lakhs	10.00 lakhs
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	5350 sq.m area with 28 m height in Udalbari.	13200 sq.m with 18 m height at Udalbari.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed.	Not Applicable.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	1.302 ha with 2084 nos. of saplings.	Cumulative afforestation of backfilled area over 1.218 ha with 927 nos of saplings in Udalbari Quarry.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed.	Not Applicable.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not Proposed.	Not Applicable.

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not Proposed	Not Applicable	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not Proposed.	Not Applicable.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not Proposed.	Not Applicable.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly Monitoring.	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.			Cummulative afforestation of backfilled area over 1.218 ha with 927 nos of saplings in Udalbari Quarry. Quarterly monitoring of air, water and noise level are being carried out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Yes	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Mechanical	

7c	Different grade of mineral sorted out at mines.	Yes	Yes	
7d	Any beneficiation process at mines .	2.0MTPA capacity beneficiation plant has been set up in mines.	In 2016-17, the beneficiation plant was not operated.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The Mineral reject generated from ROM has been blended with high grade ROM. However, the beneficiation plant setup of 2.0 MTPA was not operated during the year 2016-17.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top soil as and when generated shall be stored and utilised for plantation.	In 2016-17, the top soil generation was nil and hence there was no utilisation of top soil.	
8b	Concurrent use or storage of topsoil	Top soil as and when generated shall be stored and utilized for plantation program.	In 2016-17, the top soil generation was nil and hence there was no utilisation of top soil.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps of OB, Mineral rejects and fines stock have been proposed.	Separate dumping of OB, Mineral fines have been carried out as per proposal. Mineral rejects generated during the period 2016-17 has been utilised.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	It is proposed that around 1.922 M.CuM OB/waste shall be generated during the proposed scheme of which around 10% i.e, 289800 cum of the materials are expected to be utilised for road construction and maintenance.	The waste rock/OB generated is being utilised for repairing of roads and also backfilling of the mined out area.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	During the year 2016-17, it has been proposed to reclaim/rehabilitate 1.987 Ha by means of backfilling and plantation.	During the year 2016-17, 2.368 ha has been reclaimed.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not specified	Plantation during the year 2016-17 was 112852 nos. and cumulative till 30.06.2017 is 286346 Nos.
8g	Survival rate	Not specified	Around 75%.

8h	Water sprinkling on roads to control airborne dust	Water spraying shall be continued and plantation shall be done. Water spraying shall be carried out by automatic and revolving water spraying system on some of the roadsides and over dump for suppression of dust which has been installed. Installation of automatic water spraying system all along the haul roads shall be done in phased manner during the scheme period.	The lessee has fitted 2900m length fixed water sprikler along the haul road. Besides one 8KL, one 15 KL, one 16 KL and 4 nos of 12 KL water tankers are frequency used for spraying water on haul road and quarry area.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around mines area has not been unduly affected by mining.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	The monthly returns and annual return are being regularly submitted by the lessee.	The annual return for 2016-17 has been submitted by the lessee.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining engineer-4, Diploma Mining Engineer-12, Geologist-1.	Graduate Mining engineer-4, Diploma Mining Engineer-12, Geologist-1.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under different heads are Pit-178.226 ha, Waste disposal-5.79 ha, Plant, residential, buildings & roads-13.717 ha & others-93.4 ha.	Area covered under different heads are Pit-178.226 ha, Waste disposal-5.79 ha, Plant, residential, buildings & roads-13.717 ha & others-93.4 ha.
9d	Scrutiny of Annual return on afforestation	Total 11282 nos. saplings have been planted in 2016-17	Total 11282 nos. saplings have been planted in 2016-17
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	In 2016-17, subgrade has been blended with high grade ore.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing Stock at mine head (in tonne) 1.Lump: a) Below 55% Fe- 411221.57 T b) 55% to below 58% Fe- Nil c) 58% to below 60% Fe- Nil d) 60% to below 62% Fe- 36862.38 T e) 62% to below 65% fe- 372403.87T f) 65% Fe and above - Nil 2.Fines: a) Below 55% Fe- 599719.87 T b) 55% to below 58% Fe- 2735903.21T c) 58% to below 60% Fe- 69066.94T d) 60% to below 62% Fe- 50614.86T e) 62% to below 65% Fe- 4021914.13T f) 65% Fe and above - Nil	Closing Stock at mine head (in tonne) 1.Lump: a) Below 55% Fe- 411221.57 T b) 55% to below 58% Fe- Nil c) 58% to below 60% Fe- Nil d) 60% to below 62% Fe- 36862.38 T e) 62% to below 65% fe- 372403.87T f) 65% Fe and above - Nil 2.Fines: a) Below 55% Fe- 599719.87 T b) 55% to below 58% Fe- 2735903.21T c) 58% to below 60% Fe- 69066.94T d) 60% to below 62% Fe- 50614.86T e) 62% to below 65% Fe- 4021914.13T f) 65% Fe and above - Nil
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9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	<p>1.Lump: Below 55% Fe: Ex-mine price (in Rs per tonne) is Rs 593.00 60% to below 62% Fe: Ex-mine price (in Rs per tonne) is Rs 2102.00 62% to below 65% Fe: Ex-mine price (in Rs per tonne) is Rs 2102.00 2. Fines Ex-mine price (in Rs per tonne) is Rs 686.00 55% Fe to below 58% Fe:Ex-mine price (in Rs per tonne) is Rs 860.00 58% Fe to below 60% Fe:Ex-mine price (in Rs per tonne) is Rs 886.00 60% Fe to below 62% Fe:Ex-mine price (in Rs per tonne) is Rs 1256.00 62% and above: Rs 1300.00</p>	<p>1.Lump: Below 55% Fe: Ex-mine price (in Rs per tonne) is Rs 593.00 60% to below 62% Fe: Ex-mine price (in Rs per tonne) is Rs 2102.00 62% to below 65% Fe: Ex-mine price (in Rs per tonne) is Rs 2102.00 2. Fines Ex-mine price (in Rs per tonne) : Below 55% Fe:Rs 686.00 55% Fe to below 58% Fe:Ex-mine price (in Rs per tonne) is Rs 860.00 58% Fe to below 60% Fe:Ex-mine price (in Rs per tonne) is Rs 886.00 60% Fe to below 62% Fe:Ex-mine price (in Rs per tonne) is Rs 1256.00 62% and above: Rs 1300.00</p>
9h	Scrutiny of Annual return on fixed assets	As per annual return 2016-17, the Value of Fixed Assets (in Rs) is 105916840.	As per annual return 2016-17, the Value of Fixed Assets (in Rs) is 105916840.

9k Scrutiny of Annual return on mining machineries Shovel (Hydraulic)-10 Nos, Front End Loader-11 Nos, Front End Loader-11 Nos, Rock Drill (Non-elect)-2 Dumper-40 Nos, Nos, Water Tanker -12 Rock Drill (Non-elect)-2 Nos, Water Tanker -12 Nos, Dozer-2 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 :

(DAYANAND UPADHYAY)

Indian Bureau of Mines