

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

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-25/BBS

Mine code : 30ORI08030

- (i) Name of the Inspecting : **U11**) **DAYANAND UPADHYAY**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sri B.N. Maharana, Geologist & Shri S.R. Behra, Mines
Official with
Designation
- (iv) Date of Inspection : 16/07/2017
- (v) Prev.inspection date : 05/03/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **JORURI (335 AC)**
- (b) **Registration NO.** : **IBM/5289/2011**
- (c) Category : A Manual
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : KEONJHAR
- Village : JORURI
- Taluka : BARBIL
- Post office : JAJANG
- Pin Code : 758052
- FAX No. : 0671-2508259
- E-mail : kmc53@hotmail.com
- Phone : 0671-2508259
- (f) Police Station : Bamberi
- (g) First opening date : 15/06/1957
- (h) Weekly day of rest : TUE
2. Address for : JORURI IRON MINE M/S KMC
correspondance P.O.JAJANG, DIST:KEONJHAR
ORISSA-758052
3. (a) Lease Number : ORI0064
- (b) Lease area : 135.57
- (c) Period of lease : 20
- (d) Date of Expiry : 10/04/1997
4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : KALINGA MINING CORPORATION
 P.O.JAJANG KEONJHAR
 ORISSA
 Phone:79206
 FAX :

Owner : M/S.Kalinga Mining Corporation
 po.Jajang KEONJHAR ORISSA
 Phone: 06767- 79206
 FAX :

Agent : Sri.T.Pal
 C/O KALINGA MINING CORP
 P.O.JAJANG KEONJHAR ORISSA
 Phone: 79206
 FAX :

Mining Engineer
 Name : B.N.PATI,Full Time
 Qualification : DIPLOMA IN MINING WITH 2ND CLASS CERT. F
 Appointment/ : 06/07/2001
 Termination date

Mining Engineer
 Name : T.C.MAHANTA,Full Time
 Qualification : DIPLOMA MINING,I ST CLASS MANAGER CERTIF
 Appointment/ : 16/12/2002
 Termination date

Geologist
 Name : Dr. MITHILESH SINGH,Full Time
 Qualification : M.Sc (geology)
 Appointment/ : 01/01/2002
 Termination date

Manager
 Name : D.C.KALIA
 Qualification : Diploma in Mining
 Appointment/ : 09/02/2004
 Termination date

Manager
 Name : P.K.NANDA
 Qualification : B.E.(MINING)
 Appointment/ : 12/07/2000
 Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	05/07/2005
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	25/03/2009
	:	Modif.approved Mining Scheme	07/04/2011
	:	Mining Scheme rule 12 MCDR1988	26/04/2012
	:	MP modif under 17(3) MCR 2016	10/11/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No bore holes proposed in 2015-16 and 2016-17.	Not applicable.	
1b	Exploration over lease area for geological axis 1 or 2	No bore holes proposed in 2015-16 and 2016-17.	Total 55.096 ha area is explored under G1 level out of total lease area 73.228 ha.	Total 55.096 ha area is explored under G1 level out of total lease area 73.228 ha.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No bore holes proposed in 2016-17.	Not applicable.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	9.812 ha. area to be explored by 20 no. of bore holes in further plan period 2018-18 to 2019-20.	Balance area of 9.812 ha. will be explored by 20 no. of bore holes under G1/G2 level in further plan period 2018-18 to 2019-20.	Unexplored area is 18.132ha. out of which about 8.32 ha. area is earmarked as safety zone and cultivated land. Therefore balance 9.812 ha. area has been proposed to be explored by 20 no. of bore holes under G1/G2 level in further plan period 2018-18 to 2019-20.
1e	Balance reserve as on 01/04/20	Balance reserve and resources as per Modified mining plan which was approved on 10.11.2016 is 6.216MT under proved (111)category and 0.621 MT feasibility mineral resources under 122 category.	Balance reserve as on 01/04/2017 under proved (111) category is 5.294MT and feasibility mineral resource (211) category is 0.621 MT.	Total reserve & resources estimated as per Modified mining plan approved on 10.11.2016 was 6.637 MT.

1f	General remarks of inspecting officers on geology, exploration etc	Total 55.096 ha area is explored under G1 level out of total lease area 73.228 ha. Unexplored area is 18.132ha. out of which about 8.32 ha. area is earmarked as safety zone and cultivated land. Therefore balance 9.812 ha. area has been proposed to explored by 20 no. of bore holes under G1/G2 level in further plan period 2018-18 to 2019-20.
----	--	---

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	In 2016 -17, development is proposed from top pit between grid E-335493 to E-335883 and N-2428600 to N-2428880.	The development has been carried out in top pit between grid E-335493 to E-335883 and N-2428600 to N-2428880.	The development has been carried out in top pit which is located in south-western part of the lease.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in ore and OB of 6m height.	Separate benches have been made in ore and OB. In further modification of mining plan approved on 10/11/2016 the bench height modified to 10m.	Separate benches have been made in ore and OB. In further modification of mining plan approved on 10/11/2016 the bench height modified to 10m. There is no top soil encountered in pit
2c	Stripping ratio or ore to OB ratio	Average stripping ratio 1:0.907	Average stripping ratio is 1:0.90	

2d	Quantity of topsoil generation in m3	Not proposed.	Not applicable.	
2e	Quantity of overburden generation in m3	88638 cu.m OB	In 2016-17, about 15000 cu.m overburden has been excavated.	Less overburden is excavated against the proposal due to less development and less production of ROM.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			There are two existing pit i.e top pit and tata pit. In 2016-17, the ROM production has been carried out from top-pit. DTH drilling of 115mm dia. Blast hole with emulsion/ slurry explosive alongwith delay detonator is being practiced for drilling and blasting.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	In 2016-17, production proposed from top pit.	Production of iron ore has been carried out from top pit.	There are two existing pit i.e top pit and tata pit. In 2016-17, the ROM production has been carried out from top-pit.
3b	Quantity of ROM mineral production proposed	1199744 tonnes Iron ore .	In 2016-17, 922792 tonnes Iron ore has been produced.	Against the proposal the less ROM production is carried out by lessee based upon demand and supply.
3c	Recovery of sailable/usable mineral from ROM production	Saleable 65% w.r.t total ROM.	Total ROM has been utilised by lessee .	Total ROM has been utilised by lessee .

3d	Quantity of mineral reject generation	264510T in 2016-17.	No sub grade/mineral reject generation has been reported for the peroid 2016-17. The subgrade generated about 25% of ROM production as proposed in modified mining plan has been blended with high garde.	No sub grade/mineral reject generation has been reported for the peroid 2016-17. The subgrade generated about 25% of ROM production as proposed in modified mining plan has been blended with high garde.
3e	Grade of mineral rejects generation and threshold value declared.	+45% Fe to-58% Fe.	No sub grade/mineral reject generation has been reported for the peroid 2016-17.	The sub grade/mineral reject generated during 2016-17 has been blended with high garde.
3f	Quantity of sub grade mineral generation.	264510T in 2016-17.	No sub grade/mineral reject generation has been reported for the peroid 2016-17.	The sub grade/mineral reject generated during 2016-17 has been blended with high garde.
3g	Grade of sub grade mineral generation	-58% to +45% fe	No sub grade/mineral reject generation has been reported for the peroid 2016-17.	The sub grade/mineral reject generated during 2016-17 has been blended with high garde.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised.	No sub grade/mineral reject generation has been reported for the peroid 2016-17.	The sub grade/mineral reject generated during 2016-17 has been blended with high garde.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Wet beneficiation on trial basis.	Lessee has installed a beneficiation plant of 0.666 MTPA capacity within lease area to upgarde the subgrade ore.	Wet beneficiation process is adapting on trial basis but it is not functioning as on date of inspection..

3j	Provision of drilling and blasting in mineral benches	Deep hole blasting with DTH 115mm dia. of drill hole with emulsion/slurry explosive as column charge and booster as base charge .	DTH drilling of 115mm dia. Blast hole with emulsion/slurry explosive as column charge and booster as delay detonator is being practiced for drilling and blasting.	DTH drilling of 115mm dia. Blast hole with emulsion/slurry explosive as column charge and booster as base charge alongwith delay detonator is being practiced for drilling and blasting.
3k	Provision of mining machineries in mineral benches	Drilling machine- 115 mm dia.-2, Excavator- 2.1 & 0.9cu.m-5, Dumper 30T-10 etc.	DTH of 115mm dia. is used for drilling blast hole. Ore & OB are handled by excavator of 2.1cu.m capacity with dumper of 30 T capacity. Machineries available on site were Drilling machine- 115 mm dia.-2, Excavator- 2.1 & 0.9cu.m-5, Dumper 30T-10 etc.	DTH of 115mm dia. is used for drilling blast hole. Ore & OB are handled by excavator of 2.1cu.m capacity with dumper of 30 T capacity.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height 6m.	Excavator of 2.1 cu.m capacity are used of loading the Dumper of 30T capacity.	Bench height is suitably matched with the loading excavator.
3m	Total area covered under excavation/pits	23.531 ha during approved plan period.	About 21.93 ha. has been covered under excavation pits.	About 21.93 ha. has been covered under excavation pits.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.90	1:0.90	
3o	Total area put in use under different heads at the end of year	Total 44.154 ha. area put in use under different heads during approved plan period.	Total area covered under different heads are Pit- 21.93 ha., Waste dump- 3.5 ha., Mineral storage & sub grade- 10.75ha, Infrastructure, roads & others- 4.273 ha.	Total area covered under different heads are Pit- 21.93 ha., Waste dump- 3.5 ha., Mineral storage & sub grade- 10.75ha, Infrastructure, roads & others- 4.273 ha.

3p	Production of ROM mineral during the last five year period as applicable	Iron ore: 2013-13: 872302T 2013-14: 2267951T 2014-15: 898353T 2045-16: 1056140T 2016-17: 1199744T	Iron ore: 2013-13:437298T 2013-14: 1473795T 2014-15: 64756T 2045-16: 285442T 2016-17: 922792T	Against the proposal the less ROM production is carried out by lessee based upon demand and supply.
3q	General remarks of inspecting officers on method of mining etc.			The ROM production has been carried out from Top- pit . DTH of 115mm dia. is used for drilling blast hole. Ore & OB are handled by excavator of 2.1cu.m capacity with dumper of 30 T capacity.

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 overburden.	Overburden is dumped in exhausted village pit.	There is no top soil generation.
4b	Location of topsoil, OB and mineral reject dumps	Location of dump proposed in village pit between grid N-2429490 tro N-2429270 and E-336083 to E-336333.	Wsate has been dumped in exhausted village pit between grid N-2429490 tro N-2429270 and E-336083 to E-336333.	There is no top soil generation. Mineral reject generated during 20167-17 is no separately dumped and it has been blended with high grade ore.
4c	Number of dumps within lease area and outside of lease area	One active dump in village pit within lease area.	There is one active dump in village pit and one dead dump which is partially rehabilitated.	There is no dump in outside lease area.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	One active dump located in village pit between grid N-2429490 tro N-2429490 tro N-2429270 and E-336083 to E-336333.	There is one active dump in village pit between grid N-2429490 tro N-2429270 and E-336333and one dead dump which is partially rehabilitated.	Dump do not falls under ultimate pit limit.
4e	Number of active and alive dumps.	One active village pit dump.	There is one active dump in village pit and one dead dump which is partially rehabilitated.	There is one active dump in village pit and one dead dump which is partially rehabilitated.
4f	Number of dead dumps.	Not proposed.	There is one dead dump which is partially rehabilitated.	
4g	Number of dumps established.	Not proposed.	There is one dead dump which is partially rehabilitated.	There is one dead dump which is partially rehabilitated.
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed for the year 2016-17.	Retaining wall and garland drain along waste dump have been made.	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed.	Not applicable.	
4j	Number of settling ponds	Not proposed.	Not applicable.	
4k	Specific comments of inspecting officer on waste dump management			There is one active dump in village pit and one dead dump which is partially rehabilitated. Slope of the dead dump has 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.	Not proposed.	Village pit of the mining lease is fully exhausted where waste dumping has been proposed. In 2016-17 the area covered dumping is about 0.92 ha in village pit.	Village pit of the mining lease is fully exhausted whether waste dumping has been proposed.
5b	Area under backfilling of mined out area	Waste dumping is proposed in mined out area in village pit between grid N-2429490 tro N-2429270 and E-336083 to E-336333.	The waste has been dumped in village pit between grid N-2429270 and E-336083 to E-336333. In 2016-17 the area covered dumping is about 0.92 ha.	The waste has been dumped in mined out area of village pit.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	Not applicable.	There is no generation of top soil in working pit.
5d	Total area fully reclaimed and rehabilitated	Not proposed.	Not applicable.	Total arround 1.8 ha area has been reclaimed/rehabilitated by plantation on old dump near village pit.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Village pit of the mining lease is fully exhausted whether waste dumping has been proposed. In 2016-17 the area covered dumping is about 0.92 ha in village pit.

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 for the year 2016-17..	Annual return on PMCP has been submitted to this office vide letter no. KMC/JM/17-18/97, dates 29/06/2017.
6b	Area available for rehabilitation (ha) .	Not proposed.	Not applicable.	
6c	afforestation done (ha).	Afforestation proposed in safety zone of 1600 nos. of saplings.	About 1.4 ha area covered under plantation in safety zone and 1.16 ha area covered under gap plantation. In 2016-17, total 5410 nos. of saplings have been planted by lessee.	About 1.4 ha area covered under plantation in safety zone and 1.16 ha area covered under gap plantation.
6d	No. of saplings planted during the year	1600 saplings.	In 2016-17, total 5410 nos. of saplings have been planted by lessee.	In 2016-17, total 5410 nos. of saplings have been planted by lessee.
6e	Cumulative no .of plants		Cumulative nos. of saplings planted in the lease area is about 84275 nos.	Cumulative nos. of saplings planted in the lease area is about 84275 nos.
6f	Any other method of rehabilitation	Not proposed.	Not applicable..	The old dump near village pit is rehabilitated by plantation.
6g	Cost incurred on watch and care during the year	Not specified.	Around Rs 1.5 lakh cost incurred on watch and care of green belt in 2016-17.	Around Rs 1.5 lakh cost incurred on watch and care of green belt in 2016-17.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed.	Not applicable.	Village pit of the mining lease is fully exhausted whether waste dumping has been proposed.

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Not applicable.	Village pit of the mining lease is fully exhausted where waste dumping has been proposed.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed.	Not applicable.	
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 propose.	Not applicable.	About 1.4 ha area is covered under plantation in safety zone and 1.16 ha area covered under gap plantation.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not propose.	Not applicable.	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not propose.	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.	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.			The old dump near village pit is rehabilitated by plantation. Afforestation has been carried out by lessee and about 1.4 ha area is covered under plantation in safety zone and 1.16 ha area covered under gap plantation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Gradewise sorting.	ROM produced from the mine sorted out gradewise of 45 to 58% Fe and +55% Fe.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	Mechanised method is adpoted for gradewise sorting of iron ore.
7c	Different grade of mineral sorted out at mines.		Different grades of minerals sorted out at mines are 45 to 58% Fe and +58 % Fe.	Different grades of minerals sorted out at mines are 45 to 58% Fe and +58 % Fe.
7d	Any beneficiation process at mines .	Wet beneficiation.	Wet beneficiation of 0.666MTPA has been installed in the lease area.	Wet beneficiation of 0.666MTPA has been installed in the lease area which is adapting on trial basis. At time of inspection it was not in working.

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Cut off of iron ore for the mine is +58%. Different grades of minerals sorted out at mines are 45 to 58% Fe and +58 Fe. In 206-17, no sub grade has been reported by the lessee. The sub grade generated in 2016-17 has blended with high grade. Wet beneficiation of 0.666MTPA has been installed in the lease area which is adapting on trial basis. There area 04 sub grade dump present in mining lease of total quantity 2023829T.
----	--	---

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed.	Not applicable.	There is no top soil generation in working pit.
8b	Concurrent use or storage of topsoil	Not proposed.	Not applicable.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate village pit dump for overburden.	There is Separate village pit dump for overburden and mineral rejects.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste dumping in village pit.	Waste dumping has been carried out in village pit which is fully exhausted.	Village pit of the mining lease is fully exhausted whether waste dumping has been proposed.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Not applicable.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposed along the slope of waste dump & safety zone.	Total 5410 nos. saplings have been planted in 2016-17.	As reported cumulative no. of trees planted by lessee is about 84275 nos.
8g	Survival rate		As reported survival rate is 75%.	
8h	Water sprinkling on roads to control airborne dust	Two water sprinkler	Two water sprinklers are utilised to control air borne dust.	Two water sprinkler of 8 KL capacity are used for water spraying.
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 5410 nos of saplings have been planted by lessee. As reported cumulative no. of trees planted by lessee is about 84275 nos.

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 have been submitted by lessee for the year 2016-17..	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Graduate Mining Engineer-1, Diploma mining Engineer-4, Geologist-1, Surveyor-1.	Graduate Mining Engineer-1, Diploma mining Engineer-4, Geologist-1, Surveyor-1.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit-33.963 ha, waste dump- 0.335 ha, Plant & building-1.883 ha & Mineral storage & others -10.425 ha.	The annual return for the year 2016-17, has been scrutinined and observed that the land use pattern for the area under pits, dump, Plant & building, Mineral storage & others are not furnished correctly.	The annual return for the year 2016-17, has been scrutinined and observed that the land use pattern for the area under pits, dump, Plant & building, Mineral storage & others are not furnished correctly.
9d	Scrutiny of Annual return on afforestation	Total 5410 nos. saplings have been planted in 2016-17.	Total 5410 nos. saplings have been planted in 2016-17.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject- Nil	In 2016-17, sub generated has been blended with high grade ore.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Closing stock at mine head: Lump: 62% to 65% Fe: 86282.168T Fines: Below 55% Fe: 2415280.5T 58% to 60% Fe: 3925.85T 62% to 65% Fe: 86987.272T	Lump: 62% to 65% Fe: 86282.168T Fines: Below 55% Fe: 2415280.5T 58% to 60% Fe: 3925.85T 62% to 65% Fe: 86987.272T	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Lump: 62% to 65% Fe: Ex mine price Rs 1761.0 Fines: Below 55% Fe : price Rs 401.0 Ex mine price 58% to 60% Fe: price Rs 401.0 58% to 60% Fe: 62% to 65% Fe: Ex mine price Rs 768.0 62% to 65% Fe: Ex mine price Rs 888.0	Lump: 62% to 65% Fe: Ex mine price Rs 1761.0 Fines: Below 55% Fe : Ex mine price Rs 401.0 58% to 60% Fe: Ex mine price Rs 768.0 62% to 65% Fe: Ex mine price Rs 888.0
9h	Scrutiny of Annual return on fixed assets	Fixed asset(Rs) : 164286621.00	As per AR 2016-17, Fixed asset(Rs in thousand) : 164286621.00
9k	Scrutiny of Annual return on mining machineries	Drilling machine- 115 mm dia.-2, Excavator- 2.1 & 0.9cu.m-5, Dumper 30T-10 etc.	Drilling machine- 115 mm dia.-2, Excavator- 2.1 & 0.9cu.m-5, Dumper 30T-10 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
MCDR17	Rule 11(1)	21/07/2017			
MCDR17	Rule 45(5)(c)	21/07/2017			
MCDR17	Rule 47(a)	21/07/2017			

Date :

(DAYANAND UPADHYAY)

Indian Bureau of Mines