INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/CTD/FE/4/BNG Mine code: 30KAR07013

(i) Name of the Inspecting : P005) C.PARAMESHWARAN

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : S/ Shri. G. Jayavel. Mine Mgr. J.R. Chaudhary COM(Sz)

Official with

Designation

(iv) Date of Inspection : 20/07/2017 Prev.inspection date : 26/02/2016 (v)

PART-I : GENERAL INFORMATION

(a) Mine Name : A. NARRAIN

(b) Registration NO. : IBM/327/2011

(C) Category : A Fully Mechanised

(d) Type of Working Opencast

(e) Postal address

> State : KARNATAKA District CHITRADURGA Village MEDEKERIPURA Taluka CHITRADURGA Post office : BHEEMASAMUDRA

Pin Code : 577501

FAX No. 0832-6713721 (F), Jayavel. G(E-mail : MK.Reddy@vedanta.co.in

Phone 0832-6713600 (O),

Police Station (f) : Baramasagara First opening date : 03/10/1955 (g)

Weekly day of rest (h) : SUN

Address for : Vedanta Limited(formerly Sesa sterlite/Sesa Goa

correspondance Sesa Ghor, 20 EDC Complex,

Patto, Panaji, Goa- 403001

3. (a) Lease Number : KAR1020 (b) Lease area : 163.5 Period of lease : 20 (C)

> (d) Date of Expiry **:** 13/05/2013

Mineral worked 4. : IRON ORE Main 5. Name and Address of the

Lessee VEDANTA LIMITED

> Sesa Ghor, EDC Complex, Patto- Panaji, Tiswadi, North Goa, Goa. NORTH GOA

Phone: 08194238101, 9483211966

FAX :08194238170

Owner SAUVICK MAZUMDAR

> M/S VEDANTA LTD., SESA GHOR, EDC CO PATTO, PANAJI, TISWADI, NORTH GOA, 403001

NORTH GOA GOA Phone: 08194238101 FAX : 08194238170

Agent M. Krishna Reddy

Megalahalli Office Complex

Bheemasamudra ,

Chitradurga, Karnataka CHITRADURGA KARNATAKA Phone: 08194-238101

FAX : 0832-2460612

Mining Engineer

Y.M.MAHESH, Full Time

Qualification : B.E. MINING Appointment/ 20/01/2007

Termination date

Geologist

Name Somshekhar Dhodkunde, Full Time

Qualification : M.Sc, Applied Geology

Appointment/ 11/01/2016

Termination date

Manager

Name G.JAYAVELU Qualification : B.E MINING, FCC

Appointment/ 01/01/2013

Termination date

6. Date of approval of Mining Plan/Scheme of Mining

Renewal under rule 22 MCR1960 03/04/1992 Renewal under rule 22 MCR1960 04/03/1998 02/07/2001 Modif.of approved Mining Plan Mining Scheme rule 12 MCDR1988 06/03/2003 Modif.approved Mining Scheme 18/08/2005 Mining Scheme rule 12 MCDR1988 26/04/2007 Mining Scheme rule 12 MCDR1988 19/08/2008 Modif.approved Mining Scheme 25/02/2010 Mining Scheme rule 12 MCDR1988 29/02/2012 Mining Scheme rule 12 MCDR1988 03/09/2012 Renewal under rule 24 MCR1960 19/11/2012 Modif.of approved Mining Plan 10/05/2016 MP review under 17(1) MCR 2016 15/12/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals drawn for the future exploration.	Since entire area has been explored in G1 category, still the lessee proposed if required it will be undertaken.	The lessee proposed in a positive way to consider to drill holes if required.
1b	Exploration over lease area for geological axis 1 or 2	No proposals for the year 2016-17	complete area of 160.59 ha of the ML has been covered.	To understand the geology of the entire area for future planning in a appropriate manner.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	There is no proposals in the present year.	No work of exploration undertaken in the ML in the current year.	No comments.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposals	No future proposla to undertake.	No comments.
1e	Balance reserve as on 01/04/20	110 million as on 1/9/2016	2.29 million target for the year is being consumed in the ML area	Adequate reserves have been established.
1f	General remarks of inspecting officers on geology, exploration etc	Reserves have been established, further exploration may be required only attaining at depths	Erratic type geology, medium hard with lot of intercalation in between	hetrogeneous charactertics of deposits.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area		operation in the	Yes during the site inspection itwas observed the same in the mine
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	YES PROPOSED	During the inspection of the mines, benches were developed in OB benches and also in minerals.	It is being followed in the mine as per the proposals, but OB benches are nt kept sufficiently advance from the mineral benches.

2c	Stripping ratio or ore to OB ratio	1:0.79 during the year 2016- 17	As per the reported production, the actual stripping ratio or the ore to waste ratio is 1:0.71.	There is a marginal difference noticed.
2d	Quantity of topsoil generation in m3	No proposals given in the appropoved document.	there is no top soil generations.	no comments, since there is no proposals.
2e	Quantity of overburden generation in m3	1.82 million tonnes of OB waste development.	1.563 million tonnes of waste generated during the year 2016-17.	0.257 million tonnes of difference in the proposals/ vs generation quantity.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	ear marked area of 1.82	Though the work undertaken in the designated area, but, 0.29 million tonnes excavated more.	The planned work is not maintained, causing violation and deviation in the mine.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	two pits proposed, one in north block and another in south block.	The same proposal is maintained in the field.	yes same is maintained in the mine.
3b	Quantity of ROM mineral production proposed	year 2016-17 and also for	As on date for the year 2016-17, the actual production made was 2,289,541 tonnes, and 459 tonnes was the shortage. for the current year 12,30,077 tonnes upto june, 2017.	Production reported in the monthly returns.
3c	Recovery of sailable/usable mineral from ROM production	2	Whatever the ROM produced through dry process is being utilized and saleable, nothing goes as waste.	It was confirmed that through dry process the ROM is being used/ sold.
3d	Quantity of mineral reject generation	During the year 2016- 17=1.82 MMT, 2017- 18=15,94,345 tonnes	During the year 2016- 17=21,19,913 T, 2017-18= tonnes	299913 tonnes achived more in the year 2016-17 and in the year 2017-18

3e	Grade of mineral rejects generation and threshold value declared.	No proposals made in this area 2016 -17	No generation of mineral rejects for the year.	nil generation of mineral rejects.
3f	Quantity of sub grade mineral generation.	No proposal for the subgrade	no subgrade generation during this year.	yes nil reported.
3g	Grade of sub grade mineral generation	not proposed	there is no subgrade to report	nil generation.
3h	Manual / Mechanised method adopted for segregating from ROM	Fully Mechanised method	Fully Mechanised method	yes same is followed in the mine.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	not proposed	Beneficiation studies for silicious ore has been carried out in IBM bangalore lab.	yes conducted in IBM Bangalore laboratory and
3j	Provision of drilling and blasting in mineral benches	No drilling and blasting were proposed.	yes, during the year 2016-17, no drilling blasting were encountered. Used mainly ripper dozer and the excavators for the excavation and loading of waste and the ore. But in the year 2017-18, wherever hard strata encountered, drilling and blasting were used at places and not in the whole mine.	yes as reported above.
3k	Provision of mining machineries in mineral benches	yes mining machineries provisions were proposed in mineral benches.	Back hoe capcity from 1.65 to 4cum, dozer, dumper of 31t capacity, and other machineries were deployed for mining operations.	yes the above machineries were in operations for producing the iron ore and the waste.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	proposed for 7m height of the bench and 10m width of the bench in the year 2016- 17 and also 2017-18 respectively.	As per the proposals, the bench height and the width of the bench were not maintained, execept at places height more than 7m, at places slightly more than 7m.	majority of the workings reveals the proposed heeight and the benches were maintained. some places, less height, at places slightly heigher than the proposed.

3m	Total area covered under excavation/pits	62.45 ha only as per the data sheet.	During the year 2016- 17=62 ha, for the year 2017-18=62+4.83 ha	As on date the mining & the excavation is restricted within 62 ha, but indicated as 62.45 ha. Actually in annual return it is reported correctly for the year 2016-17.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.79	1:0.93	0.14 is the difference, which is possible in such big mine, reveals erratic and hetrogeneous character.
30	Total area put in use under different heads at the end of year	4 ha, waste disposal=40.25 ha, building & roads=25.61ha,	o/c workings=62 ha, green belt/ reclaimed=23.24 ha, waste disposal=40.25 ha, building & roads=16.98 ha mineral/subgrade stack=9.49ha & infrastruture =3.6 ha, total=160.59 ha.	23.24 ha area reported in annual return for the year 2016-17 is not correct. similarly in the data sheet of 2016-17 is also not correct. During the field inspection it was advised to rectify the same in the relevant datas.
3p	Production of ROM mineral during the last five year period as applicable	,2014- 15=2.29MMT ,2015-16= 2.29MMT,2016-	2012-13= 00, 2013- 14=2.06MMT, 2014- 15=1.03MMT, 2015- 16=2.29MMT, 2016-17= 2.29MMT. In the current year for the period up to june 2017, 1230077 tonnes of production of ROM achived.	from the above production details, it is reported that for the 1st quarter, the production achived is more than the proposed production limit, however, the limit is within the cap annual target.
3q	General remarks of inspecting officers on method of mining etc.		The proposals made by the lessee for systematic and scientific way has been followed in the mine.	Due to hetrogeneous charater of the strata in the OB workings and also in the ore benches, due to blue dust and the medium hard strata, benches collapsed in some places

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No proposals for top soil, and mineral rejects, execept for OB of 15,94,345 tonnes.	Actually OB was excavated to the tune of 21.10 lakhs tonnes of waste.	Actual quantity of OB is more than the proposed quantity, that is more than the approved quantity.
4b	Location of topsoil, OB and mineral reject dumps	D3 dump in South East corner of south Block	The location indicated above is being used for the above work.	Yes as per the proposals.
4c	Number of dumps within lease area and outside of lease area	There are two active waste dumps located within the lease.	There are two active waste dumps located within the lease	Yes no waste dumps are located outside as such. everything within the ML area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The dumps location proposed outside the ultimate pit limit as per the proposals.	work of dumping is not being carried out as per the proposals as observed in the mine.	The lessee carries out as per the proposals.
4e	Number of active and alive dumps.		Active and alive dump are being worked.	yes same thing is present in the southern end and worked in the field.
4f	Number of dead dumps.	One dump each on southern and northern block are inactive.	yes same as indicated above is being followed.	yes as above is followed in the mine.
4 g	Number of dumps established.	D2 are sabilized,	Two dumps D1 & D2 are sabilized, that is one in north & one in south block respectively.	Stabilized dumps are not in operation.
4h	Whether Retaining wall or garland drain all along dumps are there.		Yes constructed proposed retaining wall & garland drain all along the dumps as protective measures.	Yes it was observed during the field visit.
4i	Length of Retaining wall or garland drain all along dumps	D4= 672m & same measurements for retaining	D1=819m, D2=256m, D3=1055m, & D4= 478m for retaining wall and for garland drain D1=769m, D2=95m, D3=734m, & D4= 288m same measurements for retaining wall & Garland drain.	It was observed in the field as such work has been undertaken.

4 j	Number of settling ponds	09 nos., as per 23E(2) report only 5 nos.	constructed in the	yes it falls in the outside lease area.
4k	Specific comments of inspecting officer on waste dump management	proposals made in the approved	5 1	Yes same is being followed satisfactorily.

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	No area is matured for part or full extraction of mineral from mined out area before starting back filling.	As on date no area is matured for back filling neither part nor full within the lease area.
5b	Area under backfilling of mined out area	No proposals as such.	No chance to undertake, as there is no land matured.	yes no land is matured for back filling.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No area is available as such in the mine.	yes there is no such area available for reclamation & rehabilitation.	No area is presently available / exhausted from the mineral deposits.
5d	Total area fully reclaimed and rehabilitated	Nothing is proposed	wrongly reported in the annual returns of 2016-17.	violation pointed out for rectification of AR 2016-17.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	no proposals in the year 2016-17.	yes no area is available for such work in the mine.	No area is matured as on date for reclamation as of now.

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).	Report submitted.	submitted all the infromation as per the format, execept ambient air quality, water quality & noise level survey.	Deficiency are being pointed.

6b	Area available for rehabilitation (ha) .	No area is available for rehabilitation	There is no area is exhausted from the mineralised part to consider for rehabilitation work.	Still no area is matured for such reclamation or rehabilitation work in the mine.
6c	afforestation done (ha).	No proposals.	2.76 ha within ML & 2 ha outside ML, deficiencies are being pointed out.	None.
6d	No. of saplings planted during the year	no proposals in the approved document.	22000 (within ML, 5000 outside ML).	None
бе	Cumulative no .of plants	no proposals.	not undertaken.	none.
6f	Any other method of rehabilitation	no proposals.	Not undertaken due to non-availablity of area.	Yes not undertaken due to non-availability of area.
6g	Cost incurred on watch and care during the year	not indicated anything.	no amount on that.	none.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No such proposals.	not undertaken anything as such.	nothing done.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no proposals.	nothing.	no voids available to fill through waste/ tailings.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	no proposals.	not undertaken afforestation.	nothing as such.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	no proposals.	no such things of water reservoir done.	nothing.

61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	no proposals.	no such work undertaken within the Ml area.	not undertaken anything of such sort.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposals.	Afforested over an area of 2.76 ha withn ML & 2.00 ha outside ML area.	As above.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	no waste land to propose such work.	not undertaken anything of such sort.	not undertaken.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	no proposals for any rehabilitation s.	no any such work undertaken.	nothing of such work.
6p	Compliance of environmental monitoring (core zone and buffer zone)	yes proposed to be carried carried out by MOEF	yes undertaken quarterly by the MOEF accredited lab and submitted the analysis report.	yes submitting analysis report regularly to this offcie.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	There is no mined out area to draw the proposals as such to give, similarly no waste land or void available within the ML area.	There is no such work possible to undertake in the Ml area.	lessee caring to do anything as per the existing situations in the ML area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	sorting within	Yes this being carried out in the ML area regularly after excavation from the respective benches from the proposed locations.	Yes sorting, sizing and dispatch are being followed in the mine.

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	proposed for machanical sorting grade wise.	yes sorting of minerals are done through machanical means.(dry crushing & screening plant is erected and used.)	yes this being followed in the mine.
7c	Different grade of mineral sorted out at mines.	55%Fe, 55-58, 58-60, 60-62, 62-65 and 65%	65 and 65% and above	yes as per the proposals in the approved document, the same is being followed indicated above.
7d	Any beneficiation process at mines .	screening	same dry crushing & screening process of materials is proposed.	The crushing and screening proposals is being followed.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	proposed for systematic and scientific method of mining operations, including dry process of beneficiations.	the lessee following the system of operation with all out effort to achive the maximum output.	mining operations is being carried out satisfactorily.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	for separate	As such no top soil encountered.	not encountered to keep top soil.
8b	Concurrent use or storage of topsoil	no proposals made.	not encountered.	nothing excavated.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump for OB, fines developed out of ROM ear marked.	yes as per the approved document Separate dump for OB, fines developed out of ROM ear marked.	Whatever OB excavated were moved to the ear marked locations, but the fines generated after the dry process of crushing & sorting also placed in the ear marked locations. No separate location for rejects.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals given in the document as such, since there is no scope.	yes no scope to undertake such restoring work in the mine in the present situations.	No scope to undertake such work in the present situtaions.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed withphased afforestation only. Not for	Yes as per the present situation, whaterever the waste dumps, matured or become inactive were undertaken in phased afforestation through benches/ terracing.	Execpt old dumps, no pit areas/benches are available for any reclamation/rehabilitation work in the mine.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No of plantation done on the old dumps was 9650 saplings.	Additional saplings as on date 13750 nos and on green belt is of 6250 nos. of saplings done.	Total 20000 nos. of saplings undertaken in the ML area.
8g	Survival rate	80-90%	70%	<pre>due to lack of rain the survival % is not satisfactory.</pre>
8h	Water sprinkling on roads to control airborne dust	made for	the lessee company provided with vehicle for water sprinkling in the haul raods, other areas of the movements of the vehicles to suppress the dust.	Yes the sprinkling of water is observed during the inspection for the mine to avid the dust. During the rainy seasons it is not required.

8i General remarks of inspecting officer on aesthetic beauty on the haul in and around mines area

roads to suppress the dust, working benches both in the OB waste & the ore benches and up to dumping areas.

provision are During rainy seasons made to spray/ there is no problem, but sprinkle water in summer, and in windy seasons, water sprinkling is very much essential to avoid air borne dust and including the especially in the working area/ haul roads. the lessee carrying out regularly water sprinkling through the water tankers.

During rainy seasons there is no problem, other seasons the water sprinkling is very much needed that area, due to air borne and more wind, there is moe possibility of dust from the dwaste dumps. the lessee carrying out operations satisfactorily.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	submitted the monthly return up to june 2017 and the annual return for the year 2016-17 up todate. S/Shri. Sauvick Mazumdar, Nominated owner, M. Krishna Reddy Agent, G.	MR, june 17 the production is 254261t, the average production month should be 190833t, but 63428t reported more. the processed ROM is 324675t, 70414t of ore more than the 254261t. From AR, 2016-17, part-I, Sl.no. 12(iii). 23.24 ha is reported as reclaimed & rehabilitated is not correct. In approved document it is not brought out/ nor in plan & sections. violation issued for correction.	From the monthly return the actual production & the proposed production for 1st quarter is more & in the annual returns, the reclamation & rehabilitated area is shown wrongly, without undertaking actual in the ML area, hence violation observed in the report.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	S/Shri. Jayavel. G., Manager, Mahesh.Y.M. Mining Engineer, Somshekhar. S.D. Geologist,	As indicated in the annual returns for the year 2016-17, all the officials present in the mine during the inspection.	yes all the technical officers were appointed in the mine and were working during the mine visit of the undersigned.

9c Scrutiny of Open cast It was observed during yes violation Annual return on wrkings=62 ha, the field visit and the observed on the land use pattern reclamation & other document & found reclamation and for area under rehabilitation that, execept R & R, the pits, reclaimed =23.24ha, other things are rehabilitations area, dumps etc. waste appropriate. Open cast land, where it is disposal=40.25 wrkings=62 ha, not undertaken in ha, plant reclamation & the lease nor buildings rehabilitation=23.24ha, indicated in the etc=25.61 ha, waste disposal=40.25ha, plates. minerals stack plant buildings & SG=9.49 ha, etc=25.61 ha, minerals stack & SG=9.49 ha. However, violation observed and advised Mine manager to attend to the correction suitably. 9d Scrutiny of 22000 nos of thought the lessee yes lessee manages Annual return on trees planted indicated in the annual water from outside afforestation during the return for the year the lease area and year 2016-17 2016-17, the survival surviving the within the ML rate seems to be not trees and other area with 80% satisfactory due to lack mining work. survival rate water facility. besides, , 5000 nos of the lessee manages water trees planted from out side lease during the regularly for the day year 2016-17 today requirments. outside the lease area with 75% of survival rate. 9e Scrutiny of No information No information Nil information Annual return on furnished on furnished. (nil). furnished. since mineral reject mineral there is no rejects and generation of generation mineral rejects. (Grade and grades. quantity) 9f Scrutiny of opening stock The given information is information furnished is Annual return on is 28,228t, appropriate, and ROM stock and/or 22,89,541t is satisfactory. satisfactory. graded ore the production for the year 2016-17, and closing stock is 27,467t respectively.

9g Scrutiny of The ex-mine
Annual return on price is for
sale value, Ex. lumps is from
Mine price and Rs. 913/production cost =55%Fe to

The ex-mine lumps is from Rs. 913/-=55%Fe to <58%Fe.,Rs. 1070/, =58-60%Fe, 1487/-=60-62%Fe, 1982/-=62-<65%Fe. for fines-450/-=<55%Fe.,827/-=55-<58%Fe., 983/-=58-60%Fe, 1848/-=60-62%Fe, 1564/-=62-65%Fe, the cost of production is Rs.426/t, and the sale price is Rs. 2258/t of ore with 62 - < 65% Fe, Rs. 1482/t of ore between 60-<62%Fe lump, for fines Rs. 1750/t of 60-

The existing ex-mine price, sale price & the cost of production are given appropriately.

Yes the ex-mine price, cost of production and the sale price of fines and the lumps are satisfactory.

Scrutiny of Back hoe Annual return on various mining capacity machineries 1 cum to

9k

Back hoe of 1 cum to 4cum=11 nos. wheel loader3.1cum=9 nos., dozer=428hp=2n os., dumper of 31t=35nos.,water tanker=12000li t=4 nos.,generator-40KWH to 125,160, 320 & 725KWH -5 nos. Air compressor-600cum/mn-2nos, Jeep/tractor-5

nos. & truck=1

nos.

<62%Fe, Rs. 450/t for 55-

<58%Fe.

Back hoe of whatever the machineries various indicated in the annaula capacity..from return for the year 1 cum to 2016-17 are found used 4cum=11 nos. in the mines during the wheel site visit.

all the machineries are in use for the production and development and for other activities.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed				Show couse position					
Rule N	NO.		Issued on	Compliance c	n Rule	NO.	Issued	on Compliance	on
MCDR17	Rule 11	.(1)	31/08/2017						
MCDR17	Rule 13	3(2)	31/08/2017						
MCDR17	Rule 33	3	31/08/2017						
MCDR17	Rule 35	5(2)	31/08/2017						
MCDR17	Rule 45	5(5)(c	31/08/2017						
MCDR17	Rule 45	5(5)(c	31/08/2017						

Date :

(C.PARAMESHWARAN)

Indian Bureau of Mines