INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bhubaneshwar regional office

Mine file No : ORI/IRON/KJR/MCDR-32/BBS Mine code : 300RI08027

(i) Name of the Inspecting: U11) DAYANAND UPADHYAY

Officer and ID No.

(ii) Designation : Sr. Asst. Contrl. Mines

(iii) Accompaning mine : Shri D. Vijayendra, Mines manager

Official with Designation

(iv) Date of Inspection : 17/02/2019
(v) Prev.inspection date : 10/01/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : JODA EAST

(b) Registration NO. : IBM/4376/2011

(c) Category : A Mechanised

 $\text{(d)} \quad \text{Type of Working} \qquad \qquad \text{:} \quad \text{Opencast}$

(e) Postal address

State : ORISSA
District : KEONJHAR
Village : JODA
Taluka : BARBIL
Post office : JODA
Pin Code : 758034

FAX No. : 06767272010

E-mail : gm.office@tatasteel.com

Phone : 9234301340

(f) Police Station : JODA

(g) First opening date : 01/04/1956

(h) Weekly day of rest : SUN

2. Address for : JODA EAST IRON MINES

correspondance VILL/PO-JODA

DIST-KEONJHAR PIN- 758034

3. (a) Lease Number : ORIO106 (b) Lease area : 671.09

(c) Period of lease :

(d) Date of Expiry : 31/03/2030

4. Mineral worked : IRON ORE Main

MAGNESITE Associated KAOLIN Associated

5. Name and Address of the

Lessee : TATA STEEL LTD.

KEONJHAR ORISSA

Phone: FAX:

Owner : Tata Steel Limited

Bombay House, 24, Homi Modi Street Fort Mumbai MUMBAI (SUBURBAN) MAHARASHTRA Phone: 06572424602

FAX : 06572431818

Agent : Rajesh Kumar

At- Joda Post-Joda Dist Keonjhar KEONJHAR ORISSA

Phone: 9234612797

FAX :

Geologist

Name : SANJAY KUMAR BHUYAN, Full Time

Qualification : Msc Tech Geology

Appointment/ : 01/07/2015

Termination date

Manager

Name : D. Vijayendra
Qualification : B.Tech (mining)
Appointment/ : 02/04/2018

Termination date

6. Date of approval of Mining : Renewal under rule 22 MCR1960 07/06/2004
Plan/Scheme of Mining Modif.of approved Mining Plan 19/07/2007
Mining Scheme rule 12 MCDR1988 02/07/2010
Mining Scheme rule 12 MCDR1988 26/03/2015
Modif.approved Mining Scheme 21/02/2018

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PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	18 number of bore holes in 2017-18.	In 2017-18, total 18 numbers of bore holes have been drilled by lessee.	There is no backlog.
1b	Exploration over lease area for geological axis 1 or 2	G1/G2 level	In 2017-18, total 18 numbers of bore holes have been drilled by lessee under G1/G2 level.	In 2017-18, total 18 numbers of bore holes have been drilled by lessee under G1/G2 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration through inhouse facility.	In 2017-18, total cost incurred in drilling was Rs 36.4 lakh. Exploration is carried out inhouse.	In 2017-18, total cost incurred in drilling was Rs 36.4 lakh. Exploration is carried out inhouse.
1d	Balance area to be explored to bring Geological axis in 1 or 2	214.01 ha area under G1/G2 level during plan perion.	Total 283.92 ha area explored under G1 level and 164.64 ha area under G2 level.	About 216.18 ha area is declared non mineralised based on G3 level of exploration. Further to enhance the confidance level exploration is proposed during plan period.

Balance reserve 1e as on 01/04/20

In the modification of review of mining plan, dated 21/02/2018 the reserves/reso urces for iron ore have been estimated as Proved reserves (111): 139.58million tonnes, Probable reserves(122) : 12.72 million tonness & total remaining resources of 71.08 million tonnes.

The reserves/resources for iron ore as on 01.04.2018 is :- Proved reserves (111): 134.80 million tonnes, Probable Proved reserves reserves(122): 12.72 million tonness & total remaining resources of 71.08 million tonnes.

reserves/resources for iron ore as on 01.04.2018 is :-(111): 134.80million tonnes, Probable reserves(122): 12.72 million tonness & total remaining resources of 71.08 million tonnes.

General remarks 1f of inspecting officers on geology, exploration etc

18 number of bore holes in 2017-18.

In 2017-18, total 18 numbers of bore holes have been drilled by lessee.

Total 283.92 ha area explored under G1 level and 164.64 ha area under G2 level. About 216.18 ha area is declared non mineralised based on G3 level of exploration. Further to enhance the confidance level exploration is proposed during plan period.

Development :

Sl.No. Actual work Item Propasals Remarks

2a	Location of development w.r.t.lease area	North quarry- 2400N-4300N & 1200E-2400E and South quarry- 1650N- 2250N & 1633E- 2300E.	North quarry-2400N-4300N & 1200E-2400E and South quarry- 1650N-2250N & 1633E-2300E.	Development is as per proposal.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in OB and ore ,	Separate benches in OB and ore of 9m height have been maintained.	Separate benches in OB and ore of 9m height have been maintained. No top soil proposed.
2c	Stripping ratio or ore to OB ratio	1:15.79	1:16.02	Stripping ratio is more or less same
2d	Quantity of topsoil generation in m3	Not proposed.	Not applicable.	No top soil generation is proposed.
2e	Quantity of overburden generation in m3	760000 cu.m in 2017-18.	677210 cu.m	OB generated is less due to less ROM production as proposed.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development proposed in North quarry-2400N-4300N & 1200E-2400E and South quarry-1650N-2250N & 1633E-2300E.	Development is concentrated in North quarry-2400N-4300N & 1200E-2400E and South quarry- 1650N-2250N & 1633E-2300E.	Development is per proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02Pits	Working is concentrated in 02 pits i.e north quarry and south quarry.	Working is concentrated in 02 pits i.e north quarry and south quarry as proposed.
3b	Quantity of ROM mineral production proposed	12 Million T	11.24 Million T	ROM production is less than proposal as per its captive plant requirement.

3c	Recovery of sailable/usable mineral from ROM production	10.16 Million T	9.13 Million T	Recovery of saleable mineral is less due to less ROM production.
3d	Quantity of mineral reject generation	1.84 Million T	1.75 Million T	Mineral reject/sub grade generation is less due to less ROM production.
3e	Grade of mineral rejects generation and threshold value declared.	45-58%Fe	Grade of mineral reject/sub grade generated in 2017-18 is 52.47% Fe.	Grade of mineral reject/sub grade generated in 2017-18 is 52.47% Fe.
3f	Quantity of sub grade mineral generation.	1.84 Million T	1.75 Million T	Mineral reject/sub grade generation is less due to less ROM production.
3g	Grade of sub grade mineral generation	45-58%Fe	Grade of mineral reject/sub grade generated in 2017-18 is 52.47% Fe.	Grade of mineral reject/sub grade generated in 2017-18 is 52.47% Fe.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Mechanised
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Yes.	Blast hole drill cuttings are sampled and analyzed in the laboratory using inductively coupled plasma spectrometer for iron values. Depending upon the analysis results mine faces demarcated as ore, subgrade/mineral reject and waste zone.	Blast hole drill cuttings are sampled and analyzed in the laboratory using inductively coupled plasma spectrometer for iron values.

3j	Provision of drilling and blasting in mineral benches	y exlposive as	Drilling and blasting is carried out with DTH drilling of 150mm dia. Blast hole with emulsion/slurry exlposive as coloumn charge and booster alongwith delay detonator.	Drilling and blasting is carried out with DTH drilling of 150mm dia. Blast hole with emulsion/slurry exlposive as coloumn charge and booster alongwith delay detonator.
3k	Provision of mining machineries in mineral benches	cum, dumpers- 50/60./100T,	Heavy machinaries like Shovel-5.7/5.9 cum, dumpers-50/60./100T, Drill machine-100mm dia., Grader, Water sprinkler-20KL are used at mines.	Excavator, Loader and Dumper are equipped to winning out the mineral.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height- 9m	Bench height is suitably matched with the excavator.	Bench height is suitably matched with the excavator.
3m	Total area covered under excavation/pits	388.65 Ha proposed under excavation pits for 2017- 18 as per approved modification of review of mining plan	About 388.65 ha area has been covered under excavation pits.	About 388.65 ha area has been covered under excavation pits.
3n	Ore to OB ratio for the pit/mine during the year.	1:15.79	1:16.02	Stripping ratio is more or less same.

30	Total area put in use under different heads at the end of year	Total area proposed under different heads for the year 2017-18 are Pit-388.655 ha, waste dump-25.792 ha, Infrastructure -27.352, roads, conveyor-21.656 ha & Mineral storage-57.481ha, tailing pond -42.996 ha.	Total area covered under different heads for the year 2017-18 are Pit-388.655 ha, waste dump-25.792 ha, Infrastructure-27.352, roads, conveyor-21.656 ha & Mineral storage-57.481ha, tailing pond -42.996 ha.	Total area covered under different heads for the year 2017-18 are Pit-388.655 ha, waste dump-25.792 ha, Infrastructure-27.352, roads, conveyor-21.656 ha & Mineral storage-57.481ha, tailing pond -42.996 ha.
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 12MT 2014-15: 12MT 2015-16: 14.14MT 2016-17: 14.62MT 2017-18: 12MT	2013-14: 8.74MT 2014-15: 8.17MT 2015-16: 9.97MT 2016-17: 11.17MT 2017-18: 11.24MT	2013-14: 8.74MT 2014-15: 8.17MT 2015-16: 9.97MT 2016-17: 11.17MT 2017-18: 11.24MT
3q	General remarks of inspecting officers on method of mining etc.	quarry-2400N-	The ROM production has been carried out in 02 quarries North quarry-2400N-4300N & 1200E-2400E and South quarry-1650N-2250N & 1633E-2300E. DTH drilling of 150mm dia. Blast hole with emulsion/ slurry explosive alongwith delay detonator is being practiced for drilling and blasting.	The ROM production has been carried out in 02 quarries i.e North quarry and South quarry as per proposal.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	dumping for	Separate dumping for overburden and mineral reject have been maintained.	Separate dumping for overburden and mineral reject. There is no top soil generation.

4b	Location of topsoil, OB and mineral reject dumps	Waste dump 1: 2400E/2750E & 2525N/2850N and Sub grade dump-1A: 3725N/4100N & 1235E/1515E	Waste dump 1: 2400E/2750E & 2525N/2850N and Sub grade dump-2A: 2200N/2800N & 2000E/2700E	Subgrade/mineral reject generated during mining is not dumped as per proposal. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
4c	Number of dumps within lease area and outside of lease area	Waste dump 1: 2400E/2750E & 2525N/2850N and Sub grade dump-1A: 3725N/4100N & 1235E/1515E	There is three sub grade dump and one waste dump within lease area.	Subgrade/mineral reject generated during mining is not dumped as per proposal. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste dump 1: 2400E/2750E & 2525N/2850N and Sub grade dump-1A: 3725N/4100N & 1235E/1515E	There is three sub grade dump and one waste dump within lease area.	Sub grade dump no- 1 is lies within ultimate pit limit wich has been proposed for rehandling during approved plan period.
4e	Number of active and alive dumps.		There is one active waste dump no1. There is also three sub grade dumps in lease area.	There is total 04 dumps in the lease area.
4f	Number of dead dumps.	Not proposed.	There is no dead dump.	There is no dead dump.
4g	Number of dumps established.	Not proposed.	There is no dead dump.	There is no dead dump.
4h	Whether Retaining wall or garland drain all along dumps are there.	of 400*1*1.3m	No proposed retaining wall and garland drain have made as the proposed sub grade dump 1A not created.	Deviation of retaining wall and garland drain pointed out through violation letter dated 01/03/2019.

4 i	Length of Retaining wall or garland drain all along dumps	of 400*1*1.3m	No proposed retaining wall and garland drain have made as the proposed sub grade dump 1A not created.	Deviation of retaining wall and garland drain pointed out through violation letter dated 01/03/2019.
4j	Number of settling ponds	Not proposed.	Nil.	There is no proposal of settling tank in 2017-18.
4k	Specific comments of inspecting officer on waste dump management	_	within lease area. Slope of the dumsp have been stabilised by	Subgrade/mineral reject generated during mining is not dumped as per proposal. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

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.		Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
5b	Area under backfilling of mined out area	3.6 ha was proposed for backfilling with reclamation & rehabilitation.	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
5d	Total area fully reclaimed and rehabilitated	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

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) .	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	proposed for packfilling with reclamation &	
6c	afforestation done (ha).	5.5 ha	Area covered under plantation is 8.1 ha.	Area covered under plantation is 8.1 ha.
6d	No. of saplings planted during the year	13500 saplings.	In 2017-18, total 14230 nos. of saplings have been planted by lessee.	In 2017-18, total 14230 nos. of saplings have been planted by lessee.
бе	Cumulative no .of plants	Not specified.	Cumulative nos. of saplings planted in the lease area is about 652050.	Cumulative nos. of saplings planted in the lease area is about 652050.
6f	Any other method of rehabilitation	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
6g	Cost incurred on watch and care during the year	Not specified.	Around Rs 41.97 lakh cost incurred on watch and care.	Around Rs 41.97 lakh cost incurred on watch and care.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

бi	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3.6 ha was proposed for backfilling with reclamation & rehabilitation.	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area		Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed.	Nil.	No waste land is proposed for rehabilitation.

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed.	Nil.	No waste land is proposed for rehabilitation.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed.	Nil.	No waste land is proposed for rehabilitation.
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.	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Gradewise sorting.	Gradewise sorting is being practiced.	Gradewise sorting is being practiced.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanised.	Mechanised.	Mechanised sorting is being practiced.
7c	Different grade of mineral sorted out at mines.	45-58%Fe & +58% Fe.	Different grades of minerals sorted out at mines are 45-58%Fe & +58% Fe.	Different grades of minerals sorted out at mines are 45-58%Fe & +58% Fe.

7d	beneficiation	_	The ROM produced from the mining operations are processed through dry circuit plan and wet circuit plant. as per the requirement.	The existing capacity of dry circuit plant is 5MTPA and capcity of wet plant is 5MTPA.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	sorting of 45-	Different grades of minerals sorted out at mines are 45-58%Fe & +58% Fe. Blast hole drill cuttings are sampled and analyzed in the laboratory using inductively coupled plasma spectrometer for iron values. Depending upon the analysis results mine faces demarcated as ore, subgrade/mineral reject and waste zone.	Cut off grade of mines is +58% Fe.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed.	Nil.	There is no top soil generation.
8b	Concurrent use or storage of topsoil	Not proposed.	Nil.	There is no top soil generation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for overburden and mineral reject.	Separate dumping for overburden and mineral reject are maintained.	Separate dumping for overburden and mineral reject are maintained.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	3.6 ha was proposed for backfilling with reclamation & rehabilitation .	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	3.6 ha was proposed for backfilling with reclamation & rehabilitation.	Nil.	Backfilling not carried out as proposed. Shortcoming is pointed out through violatio letter no. ORI/IRON/KJR/MCDR-32/BBS, dated 01/03/2019.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	13500nos. of saplings.	Total 14230 nos. saplings have been planted in 2017-18.	Total 14230 nos. saplings have been planted in 2017-18. Cumulative 652050 nos. have been planted by lessee.
8g	Survival rate	Not specified.	As reported survival rate is 90%.	As reported survival rate is 90%.
8h	Water sprinkling on roads to control airborne dust	Three water sprinkler	Three water sprinkler are used to control air borne dust.	Three water sprinkler are used to control air borne dust.
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area	13500 nos. of saplings in 2017-18.	Aesthic beauty in and aroun mines area is maintained. In 2017-18, total 14230 nos of saplings have been planted by lessee. As reported cumulative no. of trees planted by lessee is about 652050 nos.	Aesthic beauty in and aroun mines area is maintained by plantation.

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	Mining engineer-10, Geologist-5, Surveyor-1	Mining engineer-10, Geologist-5, Surveyor-1	Mining engineer- 10, Geologist-5, Surveyor-1
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	•		Pit-388.655 ha, waste dump-25.792 ha, Infrastructure, roads-70.319, Others-134.488 ha
9d	Scrutiny of Annual return on afforestation		14230 nos. of saplings.	14230 nos. of saplings.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	MR-1.75 MT, 52.47% Fe.	MR-1.75 MT, 52.47% Fe.	MR-1.75 MT, 52.47% Fe.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	y of Closing stock: Closing stocks are not return on Lump- furnished correctly. ock and/or 354135.017T, + ore 65Fe & Fine- 260146.206T, +65% Fe., ROM closing stock- 1533315.0T		Closing stocks are not furnished correctly. Shortcomings are pointed out through violation letter.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	_	Ex mine price-Rs 921.45/-	Ex mine price-Rs 921.45/-
9h	Scrutiny of Annual return on fixed assets		Fixed asset Rs 6678286298/-	Fixed asset Rs 6678286298/-
9k	Scrutiny of Annual return on mining machineries	cum, dumpers- 50/60./100T,	Shovel-5.7/5.9 cum, dumpers-50/60./100T, Drill machine-100mm dia., Grader, Water Tanker etc.	Shovel-5.7/5.9 cum, dumpers- 50/60./100T, Drill machine-100mm dia., Grader, Water Tanker etc.

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

Violation observed				Show c	ouse position	
Rule N	10.	Issued on	Compliance of	on	Rule NO.	Issued on Compliance on
MCDR17	Rule 11(1)	01/03/2019				
MCDR17	Rule 45(5)(01/03/2019				

Date : (DAYANAND UPADHYAY)

Indian Bureau of Mines