INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

Check up inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE-201/BNG **Mine code : 30KAR03180**

(i) Name of the Inspecting Officer and ID No. : **J103) V. JAYAKRISHNA BABU**

(ii) Designation : Controller of Mines

(iii) Accompaning mine Official with Designation : Shri. Shridhar Hegde Agent, Shri.Bhishmadeb Sahoo Gen

(iv) Date of Inspection : 09/05/2022

(v) Prev.inspection date : 15/10/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SMIORE ML-2678(OLD2580)**

(b) Registration NO. : **IBM/35/2011**

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : KARNATAKA
District : BELLARY
Village : DEOGIRI,SB HALLI,RAM
Taluka : SANDUR
Post office :
Pin Code :
FAX No. : (080) 23613169,08395260473
E-mail : eps@sandurgroup.com
Phone : (080) 23613166,08395260301

(f) Police Station : Sandur

(g) First opening date : 01/01/1954

(h) Weekly day of rest : SUN

2. Address for correspondance : M/s THE SANDUR MANGANESE & IRON ORES LTD
NO.9, BELLARY ROAD, SADASHIVANAGAR,
BANGALORE - 560080

3. (a) Lease Number : KAR1516
(b) Lease area : 1860.1
(c) Period of lease : 20
(d) Date of Expiry : 31/12/2033

4. Mineral worked : MANGANESE ORE Associated
IRON ORE Main

5. Name and Address of the

Lessee : SANDUR MANGANESE & IRON ORES LTD
DEOGIRI (PO)-583 112 SANDUR
BELLARY KARNATAKA
Phone:08395-271025/28/29/40
FAX :08395-271066

Owner : SRI Md ABDULSALEEM (DIRECTOR MINES)
DEOGIRI SANDUR TQ BALLARI
BELLARY KARNATAKA
Phone: 08395-271025/28
FAX : 08395-271066

Agent : SHRIDHAR P HEGDE
DEOGIRI SANDUR BELLARY
BELLARY KARNATAKA
Phone: 08395-271025/28/29/40, 9448497925
FAX : 08395-271066

Mining Engineer
Name : SUNIL KUMAR GS,Full Time
Qualification : B.E.MINING
Appointment/ Termination date : 06/09/2015

Geologist
Name : Rajesh M Katral,Full Time
Qualification : M.Sc (Geology),
Appointment/ Termination date : 19/06/2005

Manager
Name : Prakash Babu
Qualification : FCC
Appointment/ Termination date : 01/07/2021

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

Mining Scheme rule 12 MCDR1988	22/10/2002
Mining Scheme rule 12 MCDR1988	15/01/2013
Renewal under rule 22 MCR1960	05/12/2013
MP modif under MCR 1960	01/09/2015
MP modif under MCR 1960	19/08/2016
MP review under 17(1) MCR 2016	07/12/2017
MP review under 17(1) MCR 2016	05/10/2018
Modif.approved Mining Scheme	02/09/2021
MP modif under 17(3) MCR 2016	12/04/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	No Backlog	
1b	Exploration over lease area for geological axis 1 or 2	50 DTH Holes amounting to total of 1385 mts proposed at G1 level.	54 DTH Holes drilled at 50 Mtrs grid interval amounting to total of 2064 mts.	Mineralised zone has been covered under G1 and G2 Level of exploration.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Departmental & External 10.00 lakhs	SMIORE 16.00 lakhs	Drill rigs from SMIORE sister concern M/s LIPL was carried out.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Proposal during the modified plan period.	Hence actual work not carried out.	Area under G3 covering 512 Ha to be explored to G2/G1 category and another 397 Ha which is under G4 is not accessible as covered under steep valleys, cliffs, gorges and thick/dense vegetation with wild life habitats and exploration cannot be pursued there.
1e	Balance reserve as on 01/04/20	Iron Ore (+45 % Fe) Proved: 7,87,44,030 Probable: 13,12,243 Hematitic Siliceous Ore (+35-45 % Fe) Proved: 1,12,47,644 Manganese (+10%Mn) Proved: 1,50,33,422 Probable: 73,133	Iron Ore (+45 % Fe) Proved: 7,87,44,030 Probable: 13,12,243 Hematitic Siliceous Ore (+35-45 % Fe) Proved: 1,12,47,644 Manganese (+10%Mn) Proved: 1,50,33,422 Probable: 73,133	

1f	General remarks of inspecting officers on geology, exploration etc	The reason for not covering the entire ML under exploration due to non - acceessibility of area. Thus 397 Ha of ML area remains unexplored.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development proposal locations for Manganese ore: JLK: N 1658652 TO 1658424, E 673420 TO 676364 JLK N 1658400 TO 1658667, E 673600 TO 673640 YRD: N 1658652 TO 1658424, E 673420 TO 676364 YRD: N 1658400 TO 1658667, E 673600 TO 673640 RMK: N 1658652 TO 1658424, E 673420 TO 676364 RMK: N 1658400 TO 1658667, E 673600 TO 673640 CBG: N 1657800 TO 1658030, E 671550 TO 671930 SK: N 1657800 TO 1658030, E 671550 TO 671930 KMK(E): N 1659011 TO 1659127, E 668250 TO 668652 KMK: N 1659011 TO 1659127, E 668	Development Actual locations for Manganese ore: JLK: N 1658652 TO 1658424, E 673420 TO 676364 JLK N 1658400 TO 1658667, E 673600 TO 673640 YRD: N 1658652 TO 1658424, E 673420 TO 676364 YRD: N 1658400 TO 1658667, E 673600 TO 673640 RMK: N 1658652 TO 1658424, E 673420 TO 676364 RMK: N 1658400 TO 1658667, E 673600 TO 673640 CBG: N 1657800 TO 1658030, E 671550 TO 671930 SK: N 1657800 TO 1658030, E 671550 TO 671930 KMK(E): N 1659011 TO 1659127, E 668250 TO 668652 KMK: N 1659011 TO 1659127, E 66825	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in topsoil, overburden and mineral Proposed.	Separate benches in topsoil, overburden and mineral maintained.	
2c	Stripping ratio or ore to OB ratio	Mn Ore: 24.27 Fe Ore: 1.17	Mn Ore: 25.59 Fe Ore: 0.79	Deviation in strip ratio of Mn is due to pockety and irregular Mn mineralization.
2d	Quantity of topsoil generation in m3	22,172 m3	25,403 m3	Out of generated topsoil generated 23,903 m3 has been used and 1,500 m3 Has been stocked which will be used during 2022-23 for afforestation.
2e	Quantity of overburden generation in m3	In Mn Pits: 28,58,256 m3 In Iron ore: 9,39,408 m3	Mn Pit: 30,37,893 m3 Fe pit: 6,13,583 m3	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The measures taken for systamatic development and mineral conservation are satisfactory.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Manganese ore:11 pits, Iron ore: 03 pits	Working in Manganese ore 11 pits and Iron ore 03 pits	
3b	Quantity of ROM mineral production proposed	Mn Ore: 2,54,000 MT Fe Ore: 16,00,000 MT	Mn Ore: 2,53,978.170MT Fe Ore: 15,65,668.00 MT	
3c	Recovery of sailable/usable mineral from ROM production	Saleable Mn Ore: 40% from RoM Fe Ore: 100 %	Saleable Mn Ore: 40% from RoM Fe Ore: 100 %	
3d	Quantity of mineral reject generation	Mn Ore: 50,800 MT Fe Ore: Nil	Mn Ore: Nil Fe Ore: Nil	

3e	Grade of mineral rejects generation and threshold value declared.	10 to 20% Mn Grade wise mineral reject	10 to 20% Mn Grade wise mineral reject	
3f	Quantity of sub grade mineral generation.	No proposal	NIL	
3g	Grade of sub grade mineral generation	No proposal	NIL	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method proposed for segregating of Mn Ore from Manganese ROM and Mechanized method proposed for Iron ROM	Manual method adopted for segregating of Mn Ore from Manganese ROM and Mechanized method proposed for Iron ROM	No Change
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal during the RY	Laboratory Bench Scale Beneficiation studies on upgradation of low-grade Iron ores carried out by M/s Delkor TAKRAF during October -2021	The test results are encourging & needs to be implemented.
3j	Provision of drilling and blasting in mineral benches	Provision of drilling & blasting made.	Drilling & Blasting is carried out in combination with Ammonium Nitrate, Slurry explosive and Nonel detonators.	100 mm dia, Spacing :4 Mtrs & Burden:3 Mtrs and height:8.25 Mtrs.
3k	Provision of mining machineries in mineral benches	Proposed mining machineries Excavator-60 No's, Wheel loaders:54 No's, Trucks-377 No's, Deep hole Drill-32 No's, Jack hammer-18 No's Water Tanker-44 No's	Mining machineries used Excavator-45 No's, Wheel loaders-31 No's, Trucks-232 No's, Water Tanker-24 No's Explosive Van-4 No's Air Compressor-11 No's Pumps (Elec.)-28 No's Others (Non-Elec.) -2 No's Screening Plant- 6 No's Crushing Plant- 3 No's	Deviation was as Proposed Machinery was for considering maximum handling during 3.85 MMTPA of Iron Ore Production

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Bench height & Bench width - 7.5 m	Actual Bench height - maximum 7.5 m Bench width - minimum 7.5 - 8 m	No deviation.
3m	Total area covered under excavation/pits	470.45 ha during the plan period	463.31 ha	
3n	Ore to OB ratio for the pit/mine during the year.	Proposed Mn Ore: 1: 24.27 and Fe Ore: 1: 1.49	Actual Mn Ore: 25.59 & Fe Ore: 1: 0.79	Ore to OB ratio is higherside.
3o	Total area put in use under different heads at the end of year	Area put to use in plan period Area under Mining- 470.45 ha Dumps-442.52 ha Stocks- 128.44 ha Top soil storage- 3.00 ha Roads- 32.16 ha Infrastructure -25.10 ha Township- 27.52 ha Others- 730.91 ha	Area put to use in plan period Mining- 463.31 ha Dumps-415.60 ha Stocks- 103.83 ha Top soil storage- 3.00 ha Roads- 29.66 ha Infrastructure-23.10 ha Township- 25.52 ha Others- 796.08 ha	

3p	Production of ROM mineral during the last five year period as applicable	Mn Ore- (in tonnes) 2017-18 2,54,000 2018-19 2,54,000 2019-20 2,54,000 2020-21 2,54,000 2021-22 2,54,000 Iron Ore- (in tonnes) 2017-18 16,00,000 2018-19 16,00,000 2019-20 16,00,000 2020-21 16,00,000 2021-22 16,00,000	Mn Ore- (in tonnes) 2017-18 2,53,023.50 2018-19 2,53,362.24 2019-20 2,53,053.06 2020-21 2,53,053.00 2021-22 2,53,978.00 Iron Ore- (in tonnes) 2017-18 15,81,000.00 2018-19 15,90,002.00 2019-20 15,95,000.02 2020-21 15,95,000.00 2021-22 15,65,668.00	Production proposed and acheived are within MPAP fixed by State Govt
3q	General remarks of inspecting officers on method of mining etc.			Satisfactory.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumps are proposed for top soil, OB and mineral reject	Separate dumps are maintained for top soil, OB and mineral reject	Top soil, OB and mineral reject are stacked separately.

4b	Location of topsoil, OB and mineral reject dumps	Proposed OB Locations for Manganese Pits: JLK: N 1659360 TO 1659660 E 675480 TO 675870 YRD: N 1658779 TO 1659094 E 674474 TO 674976 N 1659360 TO 1659660 E 675549 TO 675981, RMK: N 1657895 TO 1658240 E 673029 TO 673406, CBG: N 1657290 TO 1657680 E 671200 TO 671800, N 1657550 TO 1657800 E 670570 TO 670800, N 1657900 TO 1655260 E 670600 TO 671000, SK: 1657550 TO 1657800 E 670570 TO 670800 KMK(E): N 1657550 TO 1657800 E 670570 TO 670800, KMK: N 1657900 TO 1655260 E 670600 TO 671000, NK: 1658376 TO	Actual OB Locations for Manganese Pits: JLK: N 1659360 TO 1659660 E 675480 TO 675870 YRD: N 1658779 TO 1659094 E 674474 TO 674976 N 1659360 TO 1659660 E 675549 TO 675981, RMK: N 1657895 TO 1658240 E 673029 TO 673406, CBG: N 1657290 TO 1657680 E 671200 TO 671800, N 1657550 TO 1657800 E 670570 TO 670800, N 1657900 TO 1655260 E 670600 TO 671000 SK: SK: 1657550 TO 1657800 E 670570 TO 670800, KMK (E) N 1657550 TO 1657800 E 670570 TO 670800, KMK: KMK: N 1657900 TO 1655260 E 670600 TO 671000, NK: 16583
4c	Number of dumps within lease area and outside of lease area	Within lease area-88 OB dumps Outside mining lease area-Nil	Within lease area-88 OB dumps Outside mining lease area-Nil

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Waste Dumping in Manganese pits: JLK, YRD, RMK, CBG, SK, KMK(E), KMK, NK, KPTS Iron pits: KTIO (A & B), KVHIO, KH, AMK, RNP, KVH(BG), JLK. Back filling in JLK, KMK and KTIO-A pit.	Waste Dumping in Manganese pits: JLK, YRD, RMK, CBG, SK, KMK(E), KMK, NK, KPTS Iron pits: KTIO (A & B), KVHIO & Back filling in JLK, KMK and KTIO-A pit.	Minerals from the pits are exhausted and back filled.
4e	Number of active and alive dumps.	13 dumps	13 dumps	Total 13 dumps were active during the year 2021-22 in working pits. Considering even the non-working pits number of active and inactive dumps are 28.
4f	Number of dead dumps.	No proposal during the year	NIL	Cumulative 60 dumps are stabilized .
4g	Number of dumps established.	No proposal during the year	NIL	Cumulative 60 dumps are stabilized by coir matting and plantation.
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall and garland drain proposed all along the dumps.	1102.5 meters of retaining wall has been taken up and 1300 meters of earthen drain has been made.	Retaining wall and garland drain constructed and maintained all along the dumps.
4i	Length of Retaining wall or garland drain all along dumps	Proposed during the year Retaining Wall - 1470 mtrs Garland Drain - 1745 mtrs	Actual during the year Retaining Wall -1102.5 mtrs Garland Drain -1300 mtrs	Earthen drainage made as part of garland drain development .
4j	Number of settling ponds	1	NIL	50 No's of settling ponds constructed in the previous years.

4k	Specific comments of inspecting officer on waste dump management	The measures taken for waste management are Satisfactory.

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.	Proposed back filling after extracting the mineral fully.	Mineral extracted fully before starting back filling.	Permission for backfilling obtained from IBM/DMG.
5b	Area under backfilling of mined out area	7.98 ha	6.15 ha	Backfilling in progress at JLK pit & KTIO-A, KMK pits. Qty backfilled during 2021-22 is 207536 m3
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal for concurrent use of topsoil during back filling	Not Applicable	---
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Backfilling under Progress in 3 Pits.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Satisfactory.

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).	To be submitted by 1st July of every year	Annual report on PMCP submitted on 30.06.2021	AR submitted.

6b	Area available for rehabilitation (ha) .	7.98 ha available	6.15 ha backfilled	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.
6c	afforestation done (ha).	No Proposal	NIL	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.
6d	No. of saplings planted during the year	No Proposal	NIL	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.
6e	Cumulative no .of plants	No Proposal during RY	No Proposal during RY	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.

6f	Any other method of rehabilitation	Proposed as per approved R & R plan	Coir matting and gap plantation on dead dumps	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.
6g	Cost incurred on watch and care during the year	No Proposal	NIL	Mined out area taken up for back filling during the year 2021-22. As there is no afforestation carried out in backfilled area there is no cost incurred towards watch and aftercare during RY 2021-22.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No Proposal during RY	No Proposal during RY	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No Proposal during RY	No Proposal during RY	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No Proposal during RY	No Proposal during RY	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal during RY	Not carried out as there were no Proposal	

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No Proposal during the RY	Not carried out as there were no Proposal	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1,00,000	1,00,850	During the year 2021-22 Green Belt- 37,057 No's On Dumps-14,729 No's Avenue Plantation-5,182 No's Barren Area-41,882 No's Azadi ka Amruta Mahotsav- 2,000 No's
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	23.00 ha	22.69 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	Rs 33.55 lakhs has been spent towards plantation during RY 2021-22
6p	Compliance of environmental monitoring (core zone and buffer zone)	Environmental monitoring proposed in Core and Buffer Zone for AAQM, Fugitive emissions, Surface water, Ground water, Noise from MoEF & CC recognized laboratory and NABET approved.	Environmental monitoring has been carried out through MoEF & CC and NABET approved Lab Mineral Engineering Services for all the 4 seasons for Ambient air quality (core zone- 4 locations & buffer zone-6 locations), water quality (surface water - 5 locations & Ground water- 5 locations), Noise quality (core zone - 6 location & buffer zone - 6 locations)	All the environmental parameters were observed to be within the permissible limit
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed with in Lease area.	Grade wise sorting done manually with in Lease area for Mn ore and Grade wise sorting done mechanically with in Lease area for Iron ore.	All grades of Mn ore is being recovered.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual for Mn Ore and Mechanical for Iron ore.	Manual for Mn Ore and Mechanical for Iron ore is done	Screening & sizing is done manually for Mn ore & by deploying mobile crusher for Iron ore.
7c	Different grade of mineral sorted out at mines.	< 25 % Mn, +25% - 35 % Mn, + 35-45 % Mn. Iron Ore: +55-58, +58-60, +60-62, +62 % Fe	< 25 % Mn, + 25% - 35 % Mn, +35% - 45 % Mn. Iron ore: +55-58, +58-60, +60-62, +62 % Fe	Sorting done for Manganese Manually
7d	Any beneficiation process at mines .	No proposal	No such beneficiation process carried out in the mines	Crushing, dry screening and manual separation of Mn ore from ROM
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			The measures taken for mineral conservation are Satisfactory.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	22,172 m3	25,403 m3	--
8b	Concurrent use or storage of topsoil	Storage/Use	Stored/used during RY	Out of generated topsoil 23903 m3 has been used and 1500 m3 has been stocked which will be used during 2022-23 for afforestation.

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden proposed	Separate dumps for overburden maintained	Waste and Mineral rejects are stacked separately
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB and waste proposed for backfilling	Backfilling of mined out area covering 6.15 ha carried out during RY	Qty backfilled during the year 2021-22 is 2,07,536 m3 in mined out pits. .
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposal for Backfilling of mined out pits covering 7.98 ha	About 6.15 ha of minedout pits covered by backfilling.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information on existence of plantation available Cumulatively at beginning of the year 32,87,228 saplings planted within lease.	Within ML area 100850. No's of saplings planted @ 80% survival	3388078 No's of saplings are done till 31.03.2022
8g	Survival rate	65%	80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on haul roads to control airborne dust	Water sprinkling is done regularly on haul roads and mine faces to suppress the dust	27 No's water tankers of different capacity is deployed
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The measures taken for protection of environment in the ML area & in surroundings are Satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks

9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to April-22 A.R. submitted upto FY 2020-21	Annual return submitted on 29.06.2021	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Mining- Shri.Bachalappa.K, Mining Engineer- Shri.Sunil Kumar GS, Geologist- Shri. Rajesh M Katral	Manager Mining- Shri.Bachalappa.K, Mining Engineer- Shri.Sunil Kumar GS, Geologist- Shri. Rajesh M Katral	Annual return for the Year 2021-22 is yet to be submitted. Information given in sl. No 9b to 9k are based on AR submitted for the year 2020-21.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under mining: 460.45 ha, Reclaimed/Rehabilitated-110 ha, Waste disposal-305.60 ha, Occupied by plant, buildings, residential, welfare buildings and roads-77.28 ha, Afforestation-82.84, Other Purpose-5.50 ha, Work Done Under Progressive mine closure plan during the year-0.0270 ha.	Area under mining: 460.45 ha, Reclaimed/Rehabilitated-110 ha, Waste disposal-305.60 ha, Occupied by plant, buildings, residential, welfare buildings and roads-77.28 ha, Afforestation-82.84, Other Purpose-5.50 ha, Work Done Under Progressive mine closure plan during the year-0.027 ha.	
9d	Scrutiny of Annual return on afforestation	50,025 No's saplings are done	50,025 No's saplings are done	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mn Ore: 1,14,718 (10-20% Mn) Tonnes Fe Ore: 6,52,032 (35-55% Fe) Tonnes	Mn Ore: 1,14,718 (10-20% Mn) Tonnes Fe Ore: 6,52,032 (35-55% Fe) Tonnes	

9f	Scrutiny of Annual return on ROM stock and/or graded ore	Manganese ore: ROM; Opening stock-29726.83 Tones, Production-253053.06 Tones, Closing stock-29563.61 Tones. Iron ore: ROM; Opening stock-12119 Tonnes, Production-1595000.02 Tones, Closing stock-11018.12 Tones	Manganese ore: ROM; Opening stock-29726.83 Tones, Production-253053.06 Tones, Closing stock-29563.61 Tones. Iron ore: ROM; Opening stock-12119 Tonnes, Production-1595000.02 Tonnes, Closing stock-11018.12 Tones	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Manganese: Cost of Production- Rs 5030 per Tons, Sale value-8037.49 Rs/T and Ex. Mine price- 12773.5 Rs/T. Iron ore: Cost of Production- Rs 396 per Tons, Sale value-2576.84 Rs/T and Ex. Mine price-3442.80Rs/T.	Manganese: Cost of Production- Rs 5030 per Tons, Sale value-8037.49 Rs/T and Ex. Mine price-12773.5 Rs/T. Iron ore: Cost of Production- Rs 396 per Tons, Sale value-2576.84 Rs/T and Ex. Mine price-2150.95 Rs/T.	The cost of production for Mn is high due to manual sorting & other establishment charges.
9h	Scrutiny of Annual return on fixed assets	11.66 crores	11.66 crores	

9k	Scrutiny of Annual return on mining machineries	Excavator-45 No's, Wheel loaders-31 No's, Trucks-206 No's, Water Tanker-27 No's Explosive Van-4 No's Air Compressor-17 No's Pumps (Elec.)-28 No's Others (Non-Elec.) -2 No's Crusher-9 No's	Excavator-45 No's, Wheel loaders-31 No's, Trucks-206 No's, Water Tanker-27 No's Explosive Van-4 No's Air Compressor-17 No's Pumps (Elec.)-28 No's Others (Non-Elec.) -2 No's Crusher-9 No's

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(**V. JAYAKRISHNA BABU**)

Indian Bureau of Mines