INDIAN BUREAU OF MINES
MINERALS DEVELOPMEMT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/NAG/MN-137/NGP **Mine code : 40MSH14010**

(i) Name of the Inspecting Officer and ID No. : **M017) ASHISH MISHRA**

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

(iii) Accompaning mine Official with Designation : Shri Dekate, Mines Manager, Shri Sachin Ramteke

(iv) Date of Inspection : 19/07/2019

(v) Prev.inspection date : 14/10/2018

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MUNSAR**

(b) Registration NO. : **IBM/5711/2011**

(c) Category : A Manual

(d) Type of Working : Underground

(e) Postal address

State : MAHARASHTRA
District : NAGPUR
Village : MANSAR
Taluka : RAMTEK
Post office : KHAIRI BIJEWADA
Pin Code : 441106
FAX No. :
E-mail :
Phone :

(f) Police Station :

(g) First opening date : 01/07/1962

(h) Weekly day of rest : MON

2. Address for correspondance :

3. (a) Lease Number : MSH0071
(b) Lease area : 108.63
(c) Period of lease : 60
(d) Date of Expiry : 30/06/2022

MSH0085
25.15
40
13/05/2022

MSH0097
.97
50
31/03/2020

4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S MANGANESE ORE (INDIA) LTD.
3, MOUNT ROAD EXTENSION
POST BOX NO. 34, NAGPUR
(MP) NAGPUR MAHARASHTRA
Phone:
FAX :

Owner : DEEPANKAR SHOME
1-A, MOIL BHAVAN KATOL ROAD
NAGPUR NAGPUR MAHARASHTRA
Phone:
FAX :

Agent : A. V. MASADE
MUNSAR MINE RAMTEK NAGPUR
NAGPUR MAHARASHTRA
Phone:
FAX :

Mining Engineer
Name : SACHIN RAMTEKE,Full Time
Qualification :
Appointment/ Termination date : 01/07/2017

Geologist
Name : DEBONATH MOHANTA,Full Time
Qualification :
Appointment/ Termination date : 01/07/2018

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

Renewal under rule 22 MCR1960	06/05/2003
Renewal under rule 22 MCR1960	06/05/2003
Mining Scheme rule 12 MCDR1988	21/08/2006
Renewal under rule 24 MCR1960	14/06/2007
Mining Scheme rule 12 MCDR1988	12/08/2009
Mining Scheme rule 12 MCDR1988	29/11/2010
Mining Scheme rule 12 MCDR1988	14/12/2010
Mining Scheme rule 12 MCDR1988	16/04/2013
MP review under 17(1) MCR 2016	30/05/2017
MP review under 17(1) MCR 2016	14/08/2017
MP review under 17(1) MCR 2016	14/08/2017

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog. No boreholes were proposed to be drilled in the year 2018-19.	In the year 2018-19, 8 DTH boreholes were drilled (not to grid) having meterage drilled as 220 m. These boreholes were drilled from -130 L in the underground.	In last approved SOM period from 2012-13 to 2016-17 period, 20 boreholes with 6000 meterage were proposed to be drilled in the lease area. Against the proposals, 01 borehole was drilled in 2012-13, 18 in 2013-14 and 19 in 2014-15. Total 38 boreholes with 6088 meterage have been drilled.
1b	Exploration over lease area for geological axis 1 or 2	G-1, G-2 and G-3	G-1, G-2 and G-3	Reserves/resources have been considered for insitu and dump both as per the exploration carried out in the area. In-situ reserves are under G-1 category and Dump reserves are considered under G-2 category. G-3 resources have been considered for possibility of orebody below the underground working following the trend of orebody and other rocks. Exploration is being carried out to prove this depth perisistancy and conversion of G-3 resources into G-1 or G-2.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration is proposed. Hence, not applicable.	Exploration through 8 boreholes was carried out by MOIL with approximate expanditure of Rs 13 Lakhs.	

1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	Laterally the area has been proved for occurence of ore. Ore zone is being established for depth persistancy. Approximately 46% of the overall lease area is mineralized that has already been established under G-1 category of UNFC.
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2019 are as given in the actual work details.	111- 2054887 T 121- 205625 T 211- 407015 T 221- 303188 T 222- 1549231 T 332- 801955 T 333- 281190 T	
1f	General remarks of inspecting officers on geology, exploration etc		The Manganese ore horizon in the area is of composite nature characterised by inter banding of manganiferous quartizite, gondite and Manganese ore. The ore horizon occur at stratigraphic contact with quartz-mica schists on the hanging wall side and muscoveitesillimanite schist on the footwall side. It is continuous orebody with rock patch intrusions in between that is used as support in underground.	The Mn-ore in Munsar mine area is finely crystalline to massive in nature. The ore forming minerals are Braunite with Psilomelane and little Pyrolusite. Though the area has been proved for lateral extent, for proving further depth continuity, 52 more boreholes are proposed during 2017-18 to 2021-22 period with 50m grid interval and 8200 meterage out of which 16 boreholes with 460 m meterage have beein drilled in the year 2017-18 & 18-19.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

2a	Location of development w.r.t.lease area	Development was proposed in 70'L, between Ch 2000 & Ch 3750, and at -30' L, -130' L & -230'L. Vertical shaft has been sunk upto 5th (-330') level. In addition to this, sinking of second vertical shaft at Ch. 5100 is in progress. Additionally, mineralized dumps are proposed for recovery of minerals.	2nd Vertical Shaft development achievement is 60 m against the proposals of 40 m. Ore Transpost Chute for second shaft was proposed for 60 m vertical development, achievement is 30 m. Shaft X-cut was proposed to be developed for 2nd shaft was 40 m, achievement is 70 m. Apart from this total Vertical development proposals were 140 m, achievement is 245 m. Total horizontal development proposals were 776 m, achievement is 670 m. (All figures in RMT)	Against the Horizontal development proposed at various levels for 776 RMT, actual achievement is 670 RMT and vertical developments are 245 RMT against the proposals of 140 RMT. Vertical Development was on higher side due to rock intrusions within stope. Horizontal development is in lower side due to higher vertical development required for preparation of stopes and also due to rock intrusions in the stopes.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable as the working is Underground and Dump working only.	Not applicable	
2c	Stripping ratio or ore to OB ratio	Not applicable as the working is Underground and Dump working only.	Not applicable	
2d	Quantity of topsoil generation in m3	Not applicable as the working is Underground and Dump working only.	Not applicable	
2e	Quantity of overburden generation in m3	Not applicable as the working is Underground and Dump working only.	Not applicable	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Vertical Development proposed from the underground workings remained on higher side in comparison to the proposals as in underground workings, developments contribute towards exploratory mining and due to intrusions of rock zone, higher development was needed to follow the trend of orebody in the area. Opencast workings shall commence only after getting permisiion from MoEFCC. Depending on the type of deposit and mode of occurence, development is adequate.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not applicable as the working is Underground and Dump working only.	Not applicable	
3b	Quantity of ROM mineral production proposed	Underground ROM: 50000 T Dump Working: 45000 T	Underground ROM: 49144 T Dump Working: 600 T	Dump workings mainly contribute towards LGHS (Low Grade High Silica) material and due to low demand, and higher thrust towards insitu developments and exploration, dump production was quite low.

3c	Recovery of sailable/usable mineral from ROM production	Saleable Mineral recovery: 60% of the ROM, Out of rest 40%, 20% shall be intercalated waste that will be used for backfilling and 20% shall be the mineral rejects that will be stacked separately for future usage.	100% recovery	Mineral in the working area was found to be 20% to 35% grade Mn (in-situ blended grade) which was readily saleable and hence, generation of mineral rejects stood as Nil.
3d	Quantity of mineral reject generation	2018-19: 20000 T	2018-19: NIL	Mineral in the working area was found to be 20% to 35% grade Mn (in-situ blended grade) which was readily saleable and hence, generation of mineral rejects stood as Nil.
3e	Grade of mineral rejects generation and threshold value declared.	Threshold Value: Min 10% Mn, Mineral Rejects Grade: 15% Mn (average)	Nil	
3f	Quantity of sub grade mineral generation.	Not applicable	Nil	
3g	Grade of sub grade mineral generation	Not applicable	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting of ROM within lease area.	Manual sorting.	ROM is brought to the OCF (Ore Cleaning Floor) where it is being sorted manually by gangs of 5-10 persons at a time and then graded stacks are made.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposals.	Nil	
3j	Provision of drilling and blasting in mineral benches	Not applicable as the working is Underground and Dump working only.	Nil	In underground, Drilling is being done by means of drills with 110 mm hole diameter. Existing blast practices involves use of detonating fuse initiation with cord relay delay detonators and NONEL's using mainly slurry explosive. The usual blast pattern is spacing at 2.5m and burden at 2.0 m with charge factor at 0.4 kg/m3 for the ore body.
3k	Provision of mining machineries in mineral benches	Not applicable as the working is Underground and Dump working only.	Nil	Mine working involves Drilling and blasting by 110 mm diameter drills, then blasted muck is loaded into tubs and hoisted to the surface OCF. Front end Loader, Backhoe are deployed for dump workings. water tanker and tippers are used at surface.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not applicable as the working is Underground and Dump working only.	Nil	Level intervals, size of pillars, support system etc. have been selected based on the occurence of the orebody and in compliance to DGMS safety norms. Method of stoping as cut and fill is suitable for mining the orezone.

3m	Total area covered under excavation/pits	9.0 ha as per the 5 years proposals given for 2017-18 to 2021-22.	8.0 ha	8.0 ha pit area is under old pits, 1.0 ha additional area was proposed in the proposal period of 2017-18 to 2021-22. However, it was subjected to getting approval from MoEFCC for opencast workings. Till date, no approval has been accorded by MoEFCC and pit area remained unchanged.
3n	Ore to OB ratio for the pit/mine during the year.	Not applicable as the working is Underground and Dump working only.	Nil	
3o	Total area put in use under different heads at the end of year	Total area put to use as on 01.04.2019 is given under actual work.	Area under: Pits- 8.0 ha Waste Dumps-20.25 ha Mineralised Dumps-10.40 ha Mineral Storage- 4.0 ha Township & Infrastructure-9.886 ha Roads-2.0 ha Others (U/g opening, OCF etc.)-1.0 ha Total- 55.536 ha	Out of the abovementioned area, 21.925 ha area has been reclaimed through plantation, 3.2 ha area (approximately) has been reclaimed by conversion of pit into water reservoir (KL Pit) and 1.125 ha area is covered under backfilling (135'L Pit).
3p	Production of ROM mineral during the last five year period as applicable	2017-18: 50000 T 2016-17: 83330 T 2015-16: 50000 T 2014-15: 50000 T 2013-14: 50000 T	2017-18: 30743 T 2016-17: 36666 T 2015-16: 23194 T 2014-15: 18467 T 2013-14: 23202 T	

3q	General remarks of inspecting officers on method of mining etc.	Method of mining is Category A as average daily number of persons employed in the mine is 349 (>175). Working is semi-mechanised. It is an underground mine where dump working is also going on for recovery of minerals. Method of stoping is cut and fill. All operations are suitable as per the occurrence of orebody in the area and capital investments.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not applicable as the working is Underground and Dump working only.	Waste and Mineral rejects generated are being dumped/stacked separately and no intermixing is allowed. Part of waste is being used for underground filling of voids. Top soil is not excavated and earlier excavated top soil has been utilized for plantation. During the year 2018-19, mineral reject generation was Nil.	

4b	Location of topsoil, OB and mineral reject dumps	Top Soil-No dumps Waste- 5 dumps at E16580 to E16900 and N13400 to N13700 (2 dumps), E16500 to E16700 and N13900 to N14200, E16000 to E16200 and N14300 to N14600 & E15300 to E15500 and N14900 to N15100 Mineral Reject: 5 Dumps at E16800 to E16900 and N13400 to N13600, E14800 to E15600 and N14500 to N15600 (4 Dumps)	As per the proposals.	
4c	Number of dumps within lease area and outside of lease area	All dumps within lease area	All dumps within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable as the working is Underground and Dump working only.	Not applicable	
4e	Number of active and alive dumps.	All dumps are active	All dumps are active dumps	Presently, waste generated in the development of 2nd shaft is being used for backfilling of 135'L pit.
4f	Number of dead dumps.	Nil	Nil	
4g	Number of dumps established.	Nil	Nil	Progressing Reclamation work is under process but no dump has been completely stabilized yet.

4h	Whether Retaining wall or garland drain all along dumps are there.	No proposals for further construction, only repair and maintenance of existing retaining wall and garland drains to be done pre-monsoon and post-monsoon.	As per the proposals.	Total approximate length of garland drains and retaining walls present all along the dump is 2000 m.
4i	Length of Retaining wall or garland drain all along dumps	2000 m	2000 m	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			Progressing Reclamation work is under process but no dump has been stabilized yet. Overall 21.925 ha area has been reclaimed through plantation, 3.2 ha area (approximately) has been reclaimed by conversion of pit into water reservoir (KL Pit) and 1.125 ha area is covered under backfilling (135'L Pit).

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.	After exhaustion of mineral from the opencast pits/old exhausted pits, generated waste is backfilled to restore its topography. Also, after exhaustion of mineral in underground stopes, waste is used alongwith sand for backfilling the voids.	As per the proposals, backfilling of underground voids is being done with waste generated underground. Waste brought at surface (generated in shaft sinking) is being utilized in backfilling of old exhausted pits-135' L Pit at the eastern side of the lease area.
5b	Area under backfilling of mined out area	133000 cum waste to be generated is proposed to backfill the mined out area of 135'L pit in the 5 years proposal period of 2017-18 to 2021-22.	Around 0.5 ha area has been backfilled till 2018-19.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable as the working is Underground and Dump working only. Backfilled area shall be rehabilitated by plantation after getting clearances from MoEFCC for opencast workings and after completion of backfilling work.	Nil

5d	Total area fully reclaimed and rehabilitated	Clear Proposals for total area under reclamation and rehabilitations are not available. It is proposed to backfill - 135'L pit through 13300 cum waste to be generated from the mine and from 2nd Shaft development but area is not mentioned year-wise.	In total, 21.925 ha area has been reclaimed through plantation, 3.2 ha area (approximately) has been reclaimed by conversion of pit into water reservoir (KL Pit) and 1.125 ha area is covered under backfilling (135'L Pit).	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling work is under process for 135'L pit as per the proposals. After getting approval from MoEFCC, opencast working shall be commenced in the area and generated top soil shall be used for plantation. In the last 5 years period of 2012-13 to 2016-17, waste generated from underground was approximately 16724 cuM out of which around 12124 cuM was utilized for underground void filling. KL pit, having approximate area of 3.2 ha has been reclaimed by making water reservoir.

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).	As per Rule 26(2) of MCDR'17, report on work carried out under PMCP is to be submitted by 1st July every year.	Yes, report has been submitted.
6b	Area available for rehabilitation (ha) .	133000 cum waste to be generated is proposed to backfill mined out area of 135'L pit in the 5 years proposal period of 2017-18 to 2021-22. Apart from this, waste land reclamation through plantation is proposed for approximately 0.5 ha land with 1000 number of saplings during the 5 years proposal period with 200 saplings per year.	Backfilling carried out on 0.5 ha area in 2018-19 and as on 01.04.2019, total backfilled area is 1.125 ha. Apart from this plantation work is being carried out on dumps (in-filling) with 1000 saplings and 0.75 ha waste land available in the area with 1500 saplings.
6c	afforestation done (ha).	0.1 ha plantation was proposed for the year 2018-19.	0.75 ha of plantation over waste lands available near old OCF area and central part has been carried out alongwith in-filling plantation of waste dumps with 1000 saplings.
6d	No. of saplings planted during the year	200 saplings were proposed to be planted in 2018-19	In 2018-19, plantation details are as below: Within Lease Area: 2500 saplings with 75% survival Outside Lease Area: 1000 saplings with 80% survival

6e	Cumulative no .of plants	Cumulative Number of Plants proposals not available as the mine is quite old.	Cumulative number of plants as on 01.04.2019: 92590 saplings/trees planted over 39.10 ha area, 71486 saplings/trees survived with 77% survival rate (covering all 4 leases in Munsar). 21.925 ha area is under plantation in the 108.63 ha lease area.	
6f	Any other method of rehabilitation	Backfilling of Mined out lands, Water reservoir and plantation on waste dumps, on waste land available within the lease area.	Method of rehabilitation is as enumerated in the proposal part.	
6g	Cost incurred on watch and care during the year	Proposed expenditure on watch and care during 2018-19: Rs 150000/-	Actual expenditure on watch and care during 2018-19: Rs 3,50,000/- (approximately)	This actual expenditure includes cost incurred in plantation, environment monitoring and repair work of garland drains and retaining walls. Cost incurred in backfilling could not be included as it was included in mining costs.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Voids available for backfilling: Approximately 2 ha area under 135'L Pit	Backfilled area in 2018-19: 0.5 ha, upto 2018-19, approximately 1.125 ha area has been backfilled.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Proposed backfilling area : Mined out part of 135'L pit.	Backfilled area in 2018-19: 0.5 ha, upto 2018-19, approximately 1.125 ha area has been backfilled by utilizing waste generated in the development of 2nd shaft.	

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No such proposals yet.	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposals for the year 2018-19	Nil	KL pit in the eastern part of the lease area having approximate area of 3.2 ha has already been converted into water reservoir. Approximate dimensions of the pit is 400-500 m L X 50-70 m W X 18 m D. Approximate water capacity is 3 Lakh cum.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposals apart from backfilling of 135'L pit by waste generated from 2nd shaft.	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Proposals: 0.1 ha between N14300 to N14400 and E16000 to E16100	Actual: 0.75 ha between N14300 to N14400 and E16000 to E16100 and near old OCF area	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Proposed area to be rehabilitated: 0.1 ha	Actual: 0.75 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation and green belt development	As per the proposals	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	Environment monitoring is being done quarterly in the core zone and buffer zone as per MoEF guidelines.

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		PMCP compliance is up to date and efforts are being made by the lessee to restore the area to its actual topography. Plantation has been carried out over waste dumps for stabilization and Garland drains and retaining walls are there to arrest any slippage or washoff. Environment monitoring is also being done quarterly in the core and buffer zone as per MoEFCC guidelines.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within the lease area and dispatch	As per the proposals	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting	Manual sorting	
7c	Different grade of mineral sorted out at mines.	(i) 25% to below 35% Mn and (ii) 35% to below 46% Mn and Mineral Rejects	(i) 25% to below 35% Mn and (ii) 35% to below 46% Mn	Apart from the above, less than 15% Mn containing material is being stacked separately as mineral rejects. However, complete mineral exploited was blended and sold and no mineral rejects were generated.
7d	Any beneficiation process at mines .	No such process or proposals	Nil	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation aspect has been thoroughly covered as even 8% Mn containing Mineral rejects are being stacked though threshold value is 10% of Mn. Mineralised dumps are also being exploited for recovery of mineralised content.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not applicable as the working is Underground and Dump working only.	Nil	
8b	Concurrent use or storage of topsoil	Not applicable as the working is Underground and Dump working only.	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate stacking/dumping is proposed for waste and mineral rejects. Alongwith this, backfilling through waste is also proposed.	As per the proposals.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes, Backfilling of mined out pit is proposed by utilizing the waste generated. Also approximately 30% of the waste material generated is being used for underground filling of voids.	As per the proposals.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes, proposals for backfilling of 135' L pit by waste generated from 2nd shaft development is proposed.	Dumps are being reclaimed and stabilized through plantation. Mined out pit (135'L pit) is being backfilled as per the proposals.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes, baseline information on plantation has been carried out in EIA study. Additional lantation proposed was 200 saplings in the year 2018-19.	Additional plantaion carried out in the year 2018-19 was 2500 saplings.
8g	Survival rate	Survival rate proposed is approximately 75%	Actual survival rate is 77% overall. In the year 2018-19, survival rate was 75%.
8h	Water sprinkling on roads to control airborne dust	Yes	6000 Ltr water tanker is deployed for sprinkiling of water over OCF and working areas, haul roads.

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around the area is good. Lessee has done extensive plantation work and reclamation of old exhauted pits is underway. Also, one solar plant of 5MW capacity is proposed to be set up in the North-eastern part of the adjacent lease area to establish green energy source.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual Returns are required to be submitted before 1st July of every year for preceding year Monthly returns are required to be submitted on or before 10th of every month for preceding month	Annual Returns are submitted online upto 2018-19 Monthly Returns are submitted online upto Aug'2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: SHRI S. B. RAMTEKE Geologist: SHRI D MOHANTA Manager: SHRI D R DEKATE	All the mentioned persons were associated during the inspection and the information is correct as per the available office records (Notice of appointment).	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area details furnished are as below: Reclaimed/Rehabilitated: 26.25 ha Used for waste disposal: 20.25 ha Occupied by plant, buildings, residential, welfare buildings & roads: 13.886 ha Other Purpose: 11 ha Work done under progressive mine closure plan during the year: 1.25 ha	Complete information has been furnished as per the format. Additionally, around 10.40 ha area in under mineralised dump.
9d	Scrutiny of Annual return on afforestation	Within Lease Area: 2500 saplings with 75% survival Outside Lease Area: 1000 saplings with 80% survival	Plantation carried out details were found complete and correct for the plantation within lease area. Outside lease area plantation could not be verified.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral rejects with Grade: Nil	Correct information furnished as complete ROM was blended and graded.

9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening Stock and closing stock- Nil, Production- 49144 T (Underground Working) Opening Stock and closing stock- Nil, Production- 600 T (Dump Working) Graded Ore: 25% to below 35% Mn: Opening Stock- 559.314 T, Production- 49531 T, Dispatch- 46855.81 T, Closing Stock- 3234.504 T 35% to below 46% Mn: Opening Stock- 3.14 T, Production- 213 T, Dispatch- 215.58 T, Closing Stock- 0.56 T	Complete and correct information furnished.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale Value: 25% to below 35% Mn: Rs 428738118.8/- 35% to below 46% Mn: Rs 3044192.34/- Ex-Mine Price: 25% to below 35% Mn: Rs 9150.16/- per T 35% to below 46% Mn: Rs 14120.94/- per T Cost of Production: Rs 8473.32/- per T	Complete and correct information furnished.	Sample sale invoices were also checked during inspection for each grade dispatched from the mine.

9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs): 324026622/- Apart from this, capital structure details has been given for land, plant, buildings etc.	Complete and correct information has been given.
9k	Scrutiny of Annual return on mining machineries	Details furnished as per the extent of mechanization given in the approved MP.	Complete and correct information furnished.

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 :

(**ASHISH MISHRA**)

Indian Bureau of Mines