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.	: **K02**) **Kalmata.M.K.**
(ii)	Designation	: Regional Mining Geologist
(iii)	Accompaning mine Official with Designation	: Shri Umakant Bhujade, Mine Manager, Shri D.Mohanta, G
(iv)	Date of Inspection	: 17-SEP-21
(v)	Prev.inspection date	: 18-JUN-21

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	: mm.ms@moil.nic.in
		Phone	: 9405428054
	(f)	Police Station	:
	(g)	First opening date	: 01-JUL-62
	(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-JUN-22

MSH0097
.97
51
31-MAR-20

MSH0085
25.15
50
13-MAY-32

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~~ P.V.V. patnaik.
1-A, MOIL BHAVAN KATOL ROAD
NAGPUR NAGPUR MAHARASHTRA
Phone:
FAX :

Agent : ~~A. V. MASADE~~ R.U. Singh
MUNSAR MINE RAMTEK NAGPUR
NAGPUR MAHARASHTRA
Phone:
FAX :

Mining Engineer
Name : ~~SACHIN RAMTEKE, Full Time~~ U. Bothra
Qualification : B.E. Mining
Appointment/ Termination date : 01-JUL-17

Geologist
Name : DEBONATH MOHANTA, Full Time
Qualification :
Appointment/ Termination date : 01-JUL-18

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

Renewal under rule 22 MCR1960	06-MAY-03
Renewal under rule 22 MCR1960	06-MAY-03
Mining Scheme rule 12 MCDR1988	14-DEC-10
Mining Scheme rule 12 MCDR1988	16-APR-13
MP review under 17(1) MCR 2016	30-MAY-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploratory boreholes were proposed in the year 2020-21.	No exploration has been carried out in the year 2020-21.- Further, total 52 exploratory boreholes were proposed in the plan period 2017-18 to 2021-22, out of which only 36 boreholes were drilled so far.	During previous inspection DCOM was pointed out violation for lagging in exploration, so no fresh violation was pointed out for the same. During inspection, Lessee produced proof of floating tenders for exploration drilling by outsourced agencies to complete the backlog of exploration proposed for the scheme period.
1b	Exploration over lease area for geological axis 1 or 2	Proposal was given to explore entire mineralized area under G-1 level.	Exploration has been carried out in G-1 level.	Total 36 exploratory boreholes were drilled in the plan period 929217-18 to 2021-22). Action for explore entire mineralized area under G-1 level was in process.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal was given.	Exploration was carried out by M/S MOIL (lessee).	Information on expenditure incurred on exploration is not available.
1d	Balance area to be explored to bring Geological axis in 1 or 2	10.85Ha under G-1 level	5.00Ha in the present plan period.	Total mineralized area is 20.8 Ha only, out of which 9.95Ha is explored under G-1, 7.45 Ha, under-G-2 and 3.4Ha under G-3, level.

1e	Balance reserve as on 01/04/20	Reserves/resources as per the approved document dated 30.05.2017 is as follows. Proved Reserves (111) 2191288 T, Probable M reserves (121) 205625T Remaining Reources: 2862843 T, Total 5259756 T	Reserves/resources as on 01.04.2021. Proved M Reserves (111) 1998308T Probable M reserves (121) 205625T Remaining Reources: 2862843 T, Total 5066766 T	In the approved document dated 30.05.2017, reserves were estiamted as on 01.04.2016, So reserves/resources were updated by depeleting insitu production carried out- from 2016-17 to 2020-21. total 192980 tonnes of insitu ROM production was made in the said period.
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 occurs at stratigraphic contact with quartz-mica schists on the hanging wall side and muscovite sillimanite schist on the footwall side. It is continuous orebody with rock patch intrusions in between that is used as support in underground."	Total mineralized area is 20.8 Ha only, out of which 9.95Ha is explored under G-1, 7.45 Ha, under-G-2 and 3.4Ha under G-3, level. Total boreholes proposed in the present plan period were 52, out of which only 36 boreholes were complted on the day of inspection. Since the violation letter for lagging in exploration was pointed out by DCOM no fresh violation was issued. Further, action for completing the exploration proposals is under progress,

Development :

Sl.No.	Item	Propasals	Actual work	Remarks

2a	Location of development w.r.t.lease area	In the year 2020-21 development was proposed at -30,-130,-230 & -330 level. With total development of 1364 Mtr.(H/R-450 mtr, Ore drive-420 Mtr, Cross cut-270 mtr and Winzes-224Mtr)	In the year 2020-21, the following development is mad, Ore drive-250Mtr, Cross cut-62 mtr,Winzes-88mtr, stope preparation-210 mtr.	"522 RMT horizontal developments achieved against proposed 1008 RMT in 2020-21. And Vertical development was achieved 88 RMT against proposed 224 RMT. Excess 105 RMT vertical developments was achieved in 2019-20. Horizontal development is in lower side due to rock intrusions in the stopes and work hampered on account of COVID situations."
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable. The working is proposed by under ground method.	Not applicable. The working is proposed by under ground method.	
2c	Stripping ratio or ore to OB ratio	Not applicable. The working is proposed by under ground method.	Not applicable. The working is proposed by under ground method.	
2d	Quantity of topsoil generation in m3	Not applicable. The working is proposed by under ground method.	Not applicable. The working is proposed by under ground method.	
2e	Quantity of overburden generation in m3	Not applicable. The working is proposed by under ground method	Not applicable. The working is proposed by under ground method	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	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 permission from MoEFCC. Depending on the type of deposit and mode of occurrence, development is adequate.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not applicable. The working is proposed by under ground method.	Not applicable. The working is proposed by under ground method.	Development was proposed as per following at - 30' L, -130' L & - 230'L. and working has been carried out as per the proposal.
3b	Quantity of ROM mineral production proposed	"Underground ROM: 50000 T Dump Working: 45000 T in the year 2020-21."	"Underground ROM: 40726 T Dump Working: NIL"	"Dump workings mainly contribute towards LGHS (Low Grade High Silica) Mn ore and due to low demand, and higher thrust towards in-situ developments and covid situation in the year, dump production was nil. Lessee has operated the mine through underground exploitation only in 2020-21. "

3c	Recovery of sailable/usable mineral from ROM production	60% rcovery was proposed for U/G mining.	99.58%(almost 100 percent)	Mineral in the working area was found to be below 25% and 25% to below 35% grade Mn (in- situ blended grade) which was readily saleable and hence recovery is increased.
3d	Quantity of mineral reject generation	20,000 T in the year 2020-21	Nil	Mineral in the working area was found to be below 25% and 25% to below 35% grade Mn (in- situ blended grade) which was readily saleable and hence recovery is increased.
3e	Grade of mineral rejects generation and threshold value declared.	Mineral reject, Below 15%Mn & Threshold value +10%Mn.	Below 10% Mn	
3f	Quantity of sub grade mineral generation.	Not proposed.	Nil	
3g	Grade of sub grade mineral generation	Not Applicable.	Not applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting within the lease area	Manual sorting within the lease area	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	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.
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 occurrence of the orebody and in compliance to DGMS safety norms. Method of stoping as cut and fill is suitable for mining the ore zone."

3m	Total area covered under excavation/pits	9.0 ha as per the 5 years proposals given for 2017-18 to 2021-22.	8.0Ha	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 under different heads as on 01.04.2021 is given in the actual work details.	Area under: Pits (Old) - 8.0 ha Waste Dumps-16.20 ha Mineral Storage- 2.04 ha Mineral Separation Plant - 0.03 ha Township-6.886 ha Roads-2.15 ha Infrastructure-4.808 ha Others (Solar Plant)-15.582 ha Total area put to use - 55.696 ha.	Out of the total 108.63 ha lease area, 42.95 ha area has been reclaimed through plantation, 2.44 ha area has been reclaimed by conversion of pit into water reservoir (KL Pit).
3p	Production of ROM mineral during the last five year period as applicable	2020-21: 50000 T 2019-20: 50000 T 2018-19: 50000 T 2017-18: 50000 T 2016-17: 50000 T"	2020-21: 40726 T 2019-20: 49966 T 2018-19: 49144 T 2017-18: 30743 T 2016-17: 22401 T "	In addition to U/g mining, there was a proposal to produce 45000T /year (2018-19 to 2021-22) from the dumps, against the said proposals lessee has made following dump production in the plan period. 2018-19-600T , 2017-18 -19244T, 2016-17-23087T

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 2020-21, mineral reject generation was 169 Tonne only.	

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 proposal.	
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 as the working is Underground and Dump working only	
4e	Number of active and alive dumps.	All dumps are active.	All dumps are active.	
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.	Total Length of garland drain within the lease area is 3.58 km, 3580 m; Total length of Retaining wall is 1040 meter; Garland drain location: MD1 to WD-4; DSU plant to lease boundary at east through mine colony and 2nd Vertical shaft. Location of Retaining wall: DSU plant to 2nd Vertical shaft and from crusher at back side of administrative building to pit office at 1st vertical shaft.	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed.	Nil in the year 2020-21	Total Length of garland drain within the lease area is 3.58 km, 3580 m; Total length of Retaining wall is 1040 meter;
4j	Number of settling ponds	Not proposed.	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 42.95 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 1.575 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 along with 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) up to 2019-20 was 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 approximately 1.0 ha area of 135'L pit in the 5 years proposal period of 2017-18 to 2021-22.	Around 1.575 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.	In total, 42.95 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 1.575 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 2016-17 to 2020-21, waste generated from underground was approximately 16893 cuM out of which around 12293 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.	Report on PMCP was submitted before due date.

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. Further in he year 2019-20 and 2020-21, 4200 and 3600 saplings were planted on the waste dumps.	
6c	afforestation done (ha).	No such proposal were made in the approved document.	Gap filling palntation in the dupms were made covering an area of approximately 1.2 Ha.	Total area covered by plantation(Including plantation made on dumps) 42 Ha.
6d	No. of saplings planted during the year	No such proposals were given for the year 2020-21.	3600 saplings were planted on the inactive part of the waste dump.	
6e	Cumulative no .of plants	No such proposal was given in the present plan period (2017-18 to 2021-22)	Total plantation made in the plan period (2017-18 to 2020-21) is 12300 saplings.	Total plantation mad so far is 104890
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	No such proposal was given.	expenditure on watch and care during 2020-21: Rs 3,50,000/- (approximately)	This actual expenditure includes cost incurred in plantation, environment monitoring and repair work of garland drains and retaining walls.
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	Not proposed.	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposals.	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. Approximatewater capacity is 3 Lakh cum.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposals.	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)	No such proposals.	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposals	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, proposed in core and buffer zone.	Environment monitoring is being done quarterly in the core zone and buffer zone as per MoEF guidelines.	Results are within permisible limits.
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 of ROM within the lease.	As per the proposal.	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting of ROM	Manual sorting of ROM	
7c	Different grade of mineral sorted out at mines.	No such proposal were given.	25 to below 35%Mn ore and 35 to below 465 Mne ore.	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 proposals.	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		Mineral conservation aspect has been thoroghly 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 proposal	
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 proposal	
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.	Additionally 12300 saplings were planted in the present plan period.	Total plantation made so far is 104890
8g	Survival rate		Actual survival rate is 72 to 77% overall.	
8h	Water sprinkling on roads to control airborne dust	Yes, proposed.	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 exhausted pits is underway. Also, one solar plant of 5MW capacity is proposed to be set up in the North-eastern part of the 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	A monthly return shall be submitted before the tenth day of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.	Lessee is regularly submitted Monthly and annual returns within time limit as presecribed under Rule 45 of MCDR-2017	Submitted Annual Returns for the year 2020-21 and Monthly returns upto August-2021.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: SHRI U Bothra , Geologist: SHRI Debnath Mohanta Manager: SHRI U M Bhujade	The information given in the AR submitted for the year 2020-21 is found correct.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area reclaimed- 2.10Ha, Used for waste disposal- 20.250Ha, Infrastructure - 13.844, Other Purpose ((U/G OPENING+ OCF =1.2 HA, MINERAL STORAGE = 4 HA, AREA UNDER U/G MINING = 8.5 HA)- 13.700Ha.	Area under: Pits (Old) - 8.0 ha Waste Dumps-16.20 ha Mineral Storage- 2.04 ha Mineral Separation Plant - 0.03 ha Township-6.886 ha Roads- 2.15 ha infrastructure- 4.808 ha Others (Solar Plant)-15.582 ha	The said land use details are based on the latest survey, so data given in the AR and actual are not matching. Further, lessee has shown old pit is other details.
9d	Scrutiny of Annual return on afforestation	3600 saplings.	Data furnished on plantation is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Generation of mineral reject was shown as nil.	No mineral reject was generated in the year 2020-21.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM U/G: OS and CS-NIL. Production- 40726T, Gradewise details, 25 ot below 355Mn ore, OS- 4992.754 T, Prodution- 39957T, Despatch- 39294.800T and CS- 5654.954 , 35 to below 46%Mn ore, OS:- 60.480, Prod:- 600.000 , Despatch:- 616.470 and CS:- 44.010.	The details of stocks, production and dispatch figures given in the annual returns are found in order.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Exmine price and sale value was showan as Rs- 8849.57/T for 25 to below 355 Mn ore, Rs-12696.67/T for 35 to below 46% Mn ore and cost of production- Rs 11345.13/T	The details of Exmine price and cost of production are found correct.
9h	Scrutiny of Annual return on fixed assets	Value of fixed assets was shown as Rs-836252273	The details found correct.
9k	Scrutiny of Annual return on mining machineries	Front loader-01 , Back hoe -01, Ventilation fans-02, Mine cars -02, Air compressor-04, Pumps-11, Blast host drill (32mm) - 15	The details of machineries are found correct.

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 :

(**Kalmata.M.K.**)

Indian Bureau of Mines