INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/TMK/CL-6/BNG Mine code : 12KAR19001

(i) Name of the Inspecting : $\mathbf{S19}$) SANDEEP KUMAR SINGH

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Shri N. Nagaraju, Managing Partner

Official with Designation

(iv) Date of Inspection : 29/01/2021
(v) Prev.inspection date : 30/06/2017

PART-I : GENERAL INFORMATION

1. (a) Mine Name : KAREKURICHI CLAY MINE

(b) Registration NO. : IBM/7139/2011

(c) Category : A Other than Fully Mech.

(d) Type of Working : Opencast

(e) Postal address

State : KARNATAKA

District : TUMKUR

Village : KAREKURCHI

Taluka : TITPUR

Post office : TIPTUR

Pin Code : 572216

FAX No. : E-mail :

Phone : 08131222319

(f) Police Station :
(g) First opening date :

(h) Weekly day of rest : SUN

2. Address for : B H ROAD, GUBBI - 572216

correspondance TUMKUR

3. (a) Lease Number :

(b) Lease area
(c) Period of lease
:

(d) Date of Expiry

4. Mineral worked : MANGANESE ORE Associated

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5. Name and Address of the

Lessee : JAYRAM MINERALS

TUMKUR KARNATAKA

Phone: FAX :

Owner : JAYARAM MINERALS

TUMKUR KARNATAKA

Phone: FAX :

6. Date of approval of Mining : MP review under 17(1) MCR 2016 05/10/2017

Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposals	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	14 nos. of boreholes with total meterage of 280 m and 26 nos. of trial pits proposed for the year 2019-20	No Exploration activities carried out as per the proposal	Violation issued.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not mentioned	Exploration was not carried out during the year 2019-20.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not mentioned	7.74 ha G-3 area to be upgraded to G-1/G-2	Violation issued for not carrying out exploration activities as per the proposal. Also, Exploration proposals incorporated in the upcoming plan period 2021-22(till 30.09.2021) to upgrade entire G3 area to G-1.
1e	Balance reserve as on 01/04/20	0.203 million tonnes with grade Mn-10%(min) as on 01.04.2017	81265 tonnes of Manganese Ore as on 1.04.2020	As per submitted hard copy of AR 2019-20. The Mineral Reserve & Resources are not updated as on 1.4.2020 after depletion of the production from the reserves of the last approved document. Violation issued under Rule 45(7)

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

i)14 nos. of boreholes with total meterage of 280 m and 26 nos. of trial pits proposed for the year 2019-20 against which no exploratory drilling and trial pit were carried out. Violation issued. ii) The details of Mineral Reserve & Resources as given in Sec 3 for Manganese ore in submitted copy of AR 2019-20 are not correct as per the last approved document. The production quantity for the year 2017-18, 2018-19 & 2019-20 to be depleted from the reserves and figures to be reported accordingly.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-213 to 334 E-217 to 266 (Sec DD'-EE')	The development carried out within the proposed extent.	Manganese ore`. Local grid co- ordinates.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches proposed in OB & mineral.	Separate benches maintained in OB & mineral	Ht of the bench - 6m.
2c	Stripping ratio or ore to OB ratio	:09(in Cum) (Manganese ore)	1:7.16(in Cum), Manganese Ore	Ore production- tons~3489.63 tons~1395 Cum , Waste- 25000 tons~10000Cum,
2d	Quantity of topsoil generation in m3	No Proposal	Nil	Nil

2e	Quantity of overburden generation in m3	12600	Cum	10000	Cum	As per submitted hard copy of AR 2019-20(25000 tons). Overburden generated for Manganese ore
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	_		_		The development in the mine for the Manganese pit carried out within the proposed extent as per the proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit proposed .(Pit no 2 for Manganese ore)	Actual working carried out in one pit. (Pit no-2) for Manganese ore.	Nil
3b	Quantity of ROM mineral production proposed	3500 tons of Manganese ore	3489.63 tons of Manganese ore produced	As per submitted hard copy of AR 2019-20.
3c	Recovery of sailable/usable mineral from ROM production	T - T	12 % (1395 Cum of Manganese ore from 11395 Cum of total excavation)	Nil
3d	Quantity of mineral reject generation	No proposal	200 tons.	There is no mineral Reject generation. The mineral reject quantity and grade have been reported erroneously in the submitted hard copy of AR 2019-20. Violation issued under Rule 45(7)

3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	Mn-16 %, Fe-40 %	There is no mineral Reject generation. The mineral reject quantity and grade have been reported erroneously in the submitted hard copy of AR 2019-20. Violation issued under Rule 45(7)
3f	Quantity of sub grade mineral generation.	No proposal	Nil	Nil
3g	Grade of sub grade mineral generation	No proposal	Nil	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sorting and sizing of the Manganese ore and mechanical screening proposed	Manual sorting , sizing & screening of the manganese ore carried out	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil	Nil
3j	Provision of drilling and blasting in mineral benches	No proposal for drilling & Blasting.	No drilling and blasting carried out.	Manganese ore mining is under soft zone which doesn't require drilling & blasting.
3k	Provision of mining machineries in mineral benches	Excavator and tipper combination proposed.	<pre>i)Excavator-0.7 Cum-1 no. ii) Tipper- 10 tons-2 nos.</pre>	Nil
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Height 6m for both OB & Mineral bench of manganese pit(Pit no 2)	6 m height maintained for both OB & Mineral bench of Manganese pit(Pit no 2)	Nil

3m Total area 3.803 ha at 4 ha. (As per the covered under the end of submitted hard excavation/pits plan period copy of AR 2019-2020-21. 20). The area covered under excavation/pits not reported correctly. Violation issued under Rule 45(7). 3n Ore to OB ratio 1:09(in Cum) 1:7.16(in Cum), Ore productionfor the pit/mine (Manganese Manganese Ore tons~3489.63 tons~1395 Cum , during the year. ore) Waste- 25000 tons~10000Cum 30 Total area put i) Covered under current As per land use i)Area under in use under (O/c) workings- 4 ha. reported in the different heads Mining- 3.803 ii)Waste disposal- 2 ha hard copy at the end of iv) Occupied by Plants, submitted for AR ha ii) Waste buildings, residential, 2019-20. The land year welfare& roads-0.5 ha. dump- 1.189 use in AR 2019-20 v)Other purpose- 5.24 ha have not been ha iii)Mineral reported correctly. storage- 1.338 Violation issued ha iv) under Rule 45(7) Infrastructure & roads- 0.277 ha. v)Green belt + R&R-1.393 at the end of plan period 2020-21. Production of 2016-17: Nil 2016-17: Nil (Manganese ore 3р ROM mineral 2017-18: 3500 2017-18: Nil production) during the last tons 2018-19: 2740 tons five year period 2018-19: 3500 2019-20: 3489.63 tons as applicable tons (in tonnes) 2019-20: 3500 tons (in tonnes)

3q General remarks _ of inspecting officers on method of mining etc.

i) The land use (area in ha) as given in Part-I (12) of AR 2019-20 are not reported correctly. Violation issued under Rule 45(7). ii)The mineral reject quantity and grade have been reported erroneously in AR 2019-20. Violation issued under Rule 45(7).

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping proposed for Waste.	Separate dumping maintained for Waste as per the proposal.	_
4b	Location of topsoil, OB and mineral reject dumps	Waste dump. N-177 to 244 E 202 to 311. (Waste dump for Manganese Pit(PWD-1))	Waste dump maintained within the proposed extent as per the proposal. (Waste dump for Manganese pit)	The part of OB/waste material, was found dumped in south western portion of the manganese pit. Violation issued
4c	Number of dumps within lease area and outside of lease area	1 Active	2 waste dumps (1 Active Manganese waste dump and 1 Clay waste dump) within the Lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Both waste dump proposed outside UPL	Both waste dumps outside UPL.	Nil
4e	Number of active and alive dumps.		1 active Waste -dump present (PWD-1) and used for waste dumping.	Nil
4f	Number of dead dumps.	Nil	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	& Garland	Retaining wall and garland drain construction have not been completed as per the proposal	Violation issued.
4i	Length of Retaining wall or garland drain all along dumps	•	Retaining wall, garland drain and Safety bund construction have not been completed as per the proposal	Violation issued.
4 j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			i)The part of OB/waste material, was found dumped in south western portion of the manganese pit. Violation issued. ii)The construction of 310 m retaining wall and 318 m garland drain has been proposed for the year 2017-18 and 445 m safety bund in 2019-20. It is observed during inspection that the retaining wall, garland drain and safety bund construction have not been completed as per the proposal. Violation issued

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.	No proposal	Nil	Nil

5b	Area under backfilling of mined out area	No proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			There is no specific backfilling reclamation proposal

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before 1st of July every year	Annual PMCP report for the year 2019-20 not submitted	Violation issued.
6b	Area available for rehabilitation (ha) .	0.30 ha (buffer zone, Haulage roads, office/canteen etc.)	0.30 ha (buffer zone)	As reported by the Lessee during inspection. The figures couldn't be verified as Annual PMCP report have not been submitted by the Lessee
6с	afforestation done (ha).	0.30ha	0.30ha	As reported by the Lessee during inspection.
6d	No. of saplings planted during the year	600 nos. of plants proposed	1000 nos. of plants inside ML area with 40 % survival rate.	As reported in submitted hard copy of AR 2019-20
бе	Cumulative no .of plants	600 nos. of plants.	1000 nos. of plants inside ML area with 40 % survival rate.	The cumulative plantation figures couldn't be verified and updated as Annual PMCP report have not been submitted by the Lessee

6f	Any other method of	No proposal	Nil	Nil
	rehabilitation			
6 g	Cost incurred on watch and care during the year	Rs. 40,000 proposed	As per the proposal	_
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	No proposal	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	Nil
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No proposal	Nil	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No proposal	Nil	Nil

60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	Nil	Nil
бр	Compliance of environmental monitoring (core zone and buffer zone)		Environmental monitoring carried out for Air, Water , Noise & Soil.	Environmental Report of Feb-2021 available. The environmental parameters within limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			i)Yearly report on PMCP setting forth the extent of protective and rehabilitative works carried out as per the approved Progressive mine closure plan, has not been submitted for the year 2019-20. Violation issued.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sorting & sizing and Mechanical screening of Manganese ore proposed	Manual sorting & sizing and manual screening carried out for Magnesite ore.	Hand screen used for screening.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Manual sorting & sizing and Mechanical screening of Manganese ore proposed	Manual sorting & sizing and manual screening of Manganese ore proposed	Size: - 6-10mm (Fines) -40 to +10mm(C-ore) Grade: - Mn-10%+
7c	Different grade of mineral sorted out at mines.	No grade wise sorting proposed	Nil	Nil
7d	Any beneficiation process at mines .	No proposal	Nil	Nil

7e General remarks _ of inspecting officer on Mineral conservation and beneficiation issues

No specific comments.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)		Nil	Nil
8b	Concurrent use or storage of topsoil	No proposal	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping proposed for Waste	Separate dump maintained for waste at the proposed location.	PWD-1
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	600 nos. of plants.	1000 nos. of plants inside ML area with 40 % survival rate.	The cumulative plantation figures couldn't be verified and updated as Annual PMCP report have not been submitted by the Lessee
8g	Survival rate	Not mentioned	40% survival rate both within ML.	As reported in submitted hard copy of AR 2019-20.

8h	Water sprinkling on roads to control airborne dust	sprinkling on	Water sprinkling carried out as per the proposal	One Water sprinkler of capacity 3 KL used in the mines for water sprinkling.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	_	_	The aesthetic beauty in and around the mine looks good.

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 Aug-2020. ***** A.R. of the year 2019-20 submitted on 01.07.2020	The online Annual return for the year 2019-20 has not been submitted by the Lessee; however, a hard copy of Annual Return is submitted to this office on 01/07/2020.	The online Annual return for the year 2019-20 has not been submitted by the Lessee; however, a hard copy of Annual Return is submitted to this office on 01/07/2020. Violation issued
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Nil. ii) Geologist- Nil iii) Manager- Nil	The Mining Engineer and Geologist are not appointed.	As per the provision of Rule (55), a whole time Mining Engineer and Geologist have to be appointed for category ''A'' mine. Violation issued under Rule 55
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		The land use (area in ha) in submitted hard copy of AR 2019-20 are not correctly reported as per the last approved document.	Violation issued.

9d	Scrutiny of Annual return on afforestation	1000 nos. of plants with 40 % survival rate within the ML area	Appears to be correct	As reported in submitted hard copy of AR 2019-20.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	200 tons with Mn-16 % & Fe-40 %.	There is no mineral Reject generation. The mineral reject quantity and grade have been reported erroneously in the submitted hard copy of AR 2019.	As reported in submitted hard copy of AR 2019-20. There is no mineral Reject generation. The mineral reject quantity and grade have been reported erroneously in the submitted hard copy of AR 2019-Violation issued.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	-	The ROM ore production and Closing stock have not been reported correctly	Violation issued
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	2785/ton	The Cost of Production under Direct Cost (Mining), VII (i)(b) of AR 2019-20, have not been reported correctly. The DMF & NMET amount to be also included in the Cost of production	As reported in submitted hard copy of AR 2019- 20.Violation issued
9h	Scrutiny of Annual return on fixed assets	Rs. 500172 including industrial, Plant & machinery & capitalized expenditure.	As reported in submitted hard copy of AR 2019-20.	Nil
9k	Scrutiny of Annual return on mining machineries	Provided.	Provided.	As reported in submitted hard copy of AR 2019-20

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
MCDR17 Rule 11(1)	11/02/2021	
MCDR17 Rule 26(2)	11/02/2021	
MCDR17 Rule 35(2)	11/02/2021	
MCDR17 Rule 55(1)(1	11/02/2021	
Rule 45(7)	11/02/2021	

Date:

(SANDEEP KUMAR SINGH)

Indian Bureau of Mines