INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

Review and updation of Mining Plan REPORT

Bangalore regional office

Mine file No : KNT/CTD/MN/107/BNG Mine code: 40KAR07023

Name of the Inspecting: S47) DR. Sudhakara T.L

Officer and ID No.

(ii) Designation : Senior Mining Geologist

(iii) Accompaning mine : Sri.Ishwar N Kolar, Mines Manager, Sri.Shankar B, Min

Official with

Designation

(iv) Date of Inspection : 26/07/2023 Prev.inspection date : 07/01/2022

PART-I : GENERAL INFORMATION

Mine Name : SMT.SUSHEELAMMA MINE (a)

: IBM/44732/2022 (b) Registration NO.

(C) Category : A Other than Fully Mech.

(d) Type of Working : Opencast

(e) Postal address

> State : KARNATAKA District : CHITRADURGA

Village : C.B.KERE & D.B.KERE

Taluka : HOSADURGA : D.B.KERE Post office : 577533 Pin Code

FAX No. : 08133-256394 (F), E-mail : huliyarbabu@gmail.com Phone : 08133 - 256394, 91417718

(f) Police Station : SRIRAMPUR First opening date : 07/01/1981 (q)

(h) Weekly day of rest : THU

: V.SUSHEELAMMA Address for

correspondance OPP KEB OFFICE, SHANKARPURAM EXTENSION,

HULIYAR, C.N.HALLI TQ, TUMKUR - 572218.

: -KAR0388- ML No. 2626/2639 Lease Number (a)

: 40.46 (40.07 Ha as per CEC) (b) Lease area

: 20- 50 years Period of lease (C)

: -14-/-04-/-202-1 14/04/2031 (d) Date of Expiry

Mineral worked : IRON ORE Associated

> MANGANESE ORE Main

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5. Name and Address of the

Lessee : SJMP HOLDINGS LLP

308 , SWISS COMPLEX, RACE

COURSE ROAD, BANGALORE BANGALORE KARNATAKA

Phone: FAX :

Owner : K.R.Srinivas, Managing Partner.

#52, 2nd Cross, Huda Office Lane, College Road, Hospet - 583201 BELLARY KARNATAKA

Phone: 9449855436

FAX :

Mining Engineer

Name : B.SHANKAR, Full Time

Qualification : B.E.IN MINING Appointment/ : 01/06/2022

Termination date

Geologist

Name : M.MOHAN, Full Time

Qualification :

Appointment/ : 01/06/2022

Termination date

Manager

Name : ISHWAR N KOLAR

Qualification :

Appointment/ : 01/06/2022

Termination date

6. Date of approval of Mining : Existing rule 11 MCDR1988 13/02/1998
Plan/Scheme of Mining Renewal under rule 24 MCR1960 26/07/2005
Modif.of approved Mining Plan 28/09/2010
MP modif under MCR 1960 30/06/2014
Mining Scheme rule 12 MCDR1988 29/09/2015
MP review under 17(1) MCR 2016 17/02/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Bore Hole -16 Nos. 800 Mt	Bore Holes - 32 Nos. 2377 Mts	Core drill holes (2022-23)
1b	Exploration over lease area for geological axis 1 or 2	G-1	G-1	The entire lease area is explored under G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Geo Tech Expolration, Nagpur	Geo Tech Exploration, Nagpur Rs.11413555.00	Appears to be in order and as per AR-2022-23.
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserve as on 01/04/20		i) Iron Ore - 2,22,720.00 MT ii) Manganese Ore - 19,925.00 MT	
1f	General remarks of inspecting officers on geology, exploration etc		Out of the lease area of 40.07 Ha; about 5.32 Ha is mineralized of Iron ore, manganese ore-9.64Ha and remaining 25.11Ha is Soil cover, limestone and dolomite. Based on the Exploratory core boreholes data, the lease area consists of Hematitic Iron Ore Reef (HIO) with average strike length of 500m, 15m-25m width and average depth 100.00m, Hematitic Siliceous Iron ore (HSIO) is 500m in length, 15-25m width and 100m depth, Manganese ore is 600m length, 30m to 50m width and depth 100m.	area is fully explored by way of Core bore holes and 14.96 Ha is proved for mineralization and 25.11Ha is non mineralized.

Development :

Exploitation:

Sl.No. Item

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Remarks

2a	Location of development w.r.t.lease area	E663721- E663747 N1514170- N1514083 E663800- E668372 N1514298- N1514362 & E663817- E663933 N1514343- N1514473	E663721-E663747 N1514170-N1514083 E663800- E668372 N1514298-N1514362 E663817-E663933 N1514343- N1514473	&	Mining operation has resumed in the month of June 2022 and proposed working locations for the year 2021-2022 as well as 2022-23 (both lateral and vertical extensions are fully achieved without proposed workings in Pit-5 of B-Block. Violation issued.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil-0 O.B.: E663576 N1513535 Mineral: East to West	Topsoil-0 O.B.: E663576 N1513535 Mineral: East to West		Top Soil-0 bench, OB-1 Bench & Mineral-2 benches.
2c	Stripping ratio or ore to OB ratio	a) Iron Ore: 1:0.714 b) Mn 1:7.20	a) Iron Ore: 1:0.96 b) Mn 1:9.0		
2d	Quantity of topsoil generation in m3	NIL	NIL		No Top Soil generation reported during the reporting year.
2e	Quantity of overburden generation in m3	29,234 M3	43000 M3		
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc				The deposit of Iron & Manganese Ore is being mined in 5 different open pits which is suitable for the type of deposit containing different ore bands and pocket deposits in the Mining lease area.

Propasals Actual work

3a	Number of pit proposed for production	Iron Ore: 02 No Manganese Ore: 03 No's	Iron Ore :02No's Manganese Ore : 02 No's	5-Pits were proposed for production during the RY. However, 4 pits only are worked thereby achieving entire proposed working locations for the year 2021-2022 as well as 2022-23 (both lateral and vertical extensions without proposed workings in Pit-5 of B-Block. Violation issued.
3b	Quantity of ROM mineral production proposed	Iron Ore: 62000.00 Manganese Ore: 2999.00	Iron Ore: 62000.00 Manganese Ore: 2999.00	Proposed production fully achieved.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	-
3d	Quantity of mineral reject generation	NIL	NIL	-
3e	Grade of mineral rejects generation and threshold value declared.	NIL	NIL	-
3f	Quantity of sub grade mineral generation.	NIL	NIL	-
3g	Grade of sub grade mineral generation	NIL	NIL	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method adopted for segregating ROM	Dry screening deployed for segregating from ROM	1 Jaw crushed & 1 Metso screening unit of 150 tph capacity is deployed in the mine for segregating iron ore product of different marketable sizes like lumps and fines.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NIL	NIL	NIL
3j	Provision of drilling and blasting in mineral benches	NIL	NIL	NIL
3k	Provision of mining machineries in mineral benches	s. Wheel Loader: 2Nos	Hydraulic Excavator:03Nos. Wheel Loader: 2Nos Trucks: 05 Nos Screening Plant: 01 Water tanker-2	The proposed Mining Machineries were found deployed in the mine on the day of inspection.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height:6mt Width:12mt	Height:6mt Width:12mt	Height of the benches both in ore burden and mineral are suitable for the type of deposit as well as machineries deployed and are as per the proposals.
3 m	Total area covered under excavation/pits	4.006	3.445	-
3n	Ore to OB ratio for the pit/mine during the year.		a) Iron Ore : 1:1.064 b) Mn 1:7.20	Proposed: a) Iron Ore: 1:0.714 b) Mn 1:7.20. Achieved: a) Iron Ore: 1:0.96 b) Mn 1:9.0
30	Total area put in use under different heads at the end of year	Area under Mining:4.006, Mineralstorage: 0.441, Over burden dump:1.544 Roads: 0.992 Plant, infrastructure, buildings:0.75	Area under Mining: 3.445 Ha Mineral storage:1.0 Ha Over burden dump:0.739 Ha. Plant, infrastructure, buildings:1.092 Ha.	Minor variation in Mining and Mineral storage extent than proposed.

3p	Production of ROM mineral during the last five year period as applicable	2022-23:	Mining operation resumed only in the month of June 2022.
3 q	General remarks of inspecting officers on method of mining etc.		Open cast mining method with shovel tipper combination without deep hole drilling &blasting is suitable method for the type of deposit. However, the lessee has proposed for development with drilling and blasting proposals in the draft modifications to the AMP.

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 of waste & mineral in designated area carried out	Separate dumps for waste as proposedis made. No top soil dumps or mineral reject dumps are available in the ML area.
4b	Location of topsoil, OB and mineral reject dumps	OB: E663606 N1513984 E663632 N1514069 Mineral Stock E663607- E663646 N1514182- N1514219 & E663608- E663656 N1514213 - N1514235	OB: E663606 N1513984 E663632 N1514069 Mineral Stock E663607- E663646 N1514182-N1514219 & E663608-E663656 N1514213-N1514235	As per proposals.

4c	Number of dumps within lease area and outside of lease area	Active Dump within lease: 01 No.	Active Dump within lease: 01 No.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	E663922- E663974 N1514515 N1519629	E663922-E663974 N1514515 N1519629	
4e	Number of active and alive dumps.	01 No.	01 No.	Active dump WML-1 OML-Nil
4f	Number of dead dumps.	NIL	NIL	NIL
4g	Number of dumps established.	NIL	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	Proposed	Constructed	Yes. Retaining wall and garland drains available.
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall-43Mtr Garland drain- 43Mtr	Retaining Wall-43Mtr Garland drain-43Mtr	As per proposals.
4j	Number of settling ponds	NIL	NIL	NIL
4k	Specific comments of inspecting officer on waste dump management			Waste dumping is done systematically over 0.79 ha and height of 10m with protective retaining walls and garland drain of 43m length each.

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.	Concurrent back filling on part of float area: 8345 Sq.Mtrs	Not done	Float Ore area excavated up to 2.5 m depth beneath which mineral existence is further continued and proved by detailed core drilling. Hence no concurrent back filling carried out.
5b	Area under backfilling of mined out area	8345 sq.mt	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	
5d	Total area fully reclaimed and rehabilitated	NA	NA	NIL
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Float Ore area excavated up to 2.5m depth and beneath which mineral existence is further continued which is proved by detailed core drill hence no concurrent back filling carried out.

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).	Annual report submitted on time	Submitted on time 28.06.2023	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	0.429	0.16	Violation issued.

6d	No. of saplings planted during the year	1000 No.	500 No.	Violation issued.
6e	Cumulative no .of plants	NIL	500 No's	Mines was suspended by Hon'ble supreme court order and Mining operations resumed only in June 2022.
6f	Any other method of rehabilitation	NA	NA	NIL
6g	Cost incurred on watch and care during the year	20,000.00	20,000.00	Appears to be in order.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	8345 sq.mt	NIL	Backfilling not carried out as existence of mineral beneath is proved by exploration
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	Float Ore area excavated up to 2.5 m depth beneath which mineral existence is further continued which is proved by detailed core drilling. Hence no concurrent back filling carried out.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	NA	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	

61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NA	NA	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NA	NA	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NA	NA	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular Environmental Monitoring of Air & Water.	Carried out by Authorized agency: Sneha Test Lab, Bengaluruevery quarter.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			All the Progressive Closure Operations are carried out, except for concurrent backfilling due to mineral existence beneath and lacking in proposed plantation activities for which violations are pointed out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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Method of gradewise mineral sorting i.e. manual or mechanical. Different grade of mineral sorted out at mines. To Different grade of mineral sorted out at mines. Different grade of mineral sorted out at mines. To General remarks of inspecting officer on Mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral sorted out at mines. To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation issues To General remarks of inspecting officer on mineral conservation and beneficiation of Ore is done or proposed.	7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral dispatch or grade-wise sorting Within Lease Area	ROM Mineral is processed by crushing and grade wise sorting as Iron Ore Lumps and Fines and manganese separately stocked within lease area.	Sorting of Mineral is carried out within the lease which is stacked separately with required physical size and grade wise.
of mineral sorted out at sorted out at mines. Sorted out at mines. ii) Mn Ore: Grade 10% to 35% Grade 10% to 45% 7d Any beneficiation process at mines . 7e General remarks of inspecting officer on Mineral conservation and beneficiation issues The entire Ore of Iron and Manganese produced is suitably blended to achieve marketable grade thereby taking care of Mineral conservation aspect. No beneficiation of Ore is done or	7b	wise mineral sorting i.e. manual or		screening is engaged for sizewise of mineral sorting ii) Manganese ore: dry screening engaged for mineral sorting and further persons are deployed to remove	mechanically sorted as lumps and fines blended to marketable grade. Manganese ore is both sorted mechanically and
beneficiation process at mines . 7e General remarks	7c	of mineral sorted out at	Grade Fe:35% to 62% ii) Mn Ore: Grade 10% to	Fe:45% to 62% ii) Mn Ore: Grade 10% to	
of inspecting officer on	7d	beneficiation	NA	NA	NIL
	7e	of inspecting officer on Mineral conservation and beneficiation			Iron and Manganese produced is suitably blended to achieve marketable grade thereby taking care of Mineral conservation aspect. No beneficiation of Ore is done or

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NA	NA	

Sl.No.

Item

Propasals

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8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for over burden, waste rock, fines done	Separate dumps for waste material on over burden, fines done	Over burden is dumped separately and Iron ore lumps & fines & Mn lumps & fines are stacked separately before it is dispatched.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA	NA	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA	NA	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		500 No.	
8g	Survival rate		80%	
8h	Water sprinkling on roads to control airborne dust		Water sprinkling on all along roads carried out throughout shift	Regular Water sprinkling on roads to control airborne dust is done.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is good.
Comp	liance of Rule	45.		
compilation of Rate 13.				

Actual work

Remarks

9a	Status of submission of Monthly and Annual returns	M.R.Submitted up to June 2023 A.R.Submitted up to March 2023	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri. B.Shankar. Mining Geologist: Shri.M. Mohan.	Both the officials were present on the day of inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	0.739 Ha. Waste Disposal:0.32	Area under Mining: 3.445 Ha Mineral storage:1.0 Ha Over burden dump:0.739 Ha. Plant, infrastructure, buildings: 1.092 Ha.
9d	Scrutiny of Annual return on afforestation	500 saplings with 80% survival rate.	Violation issued for not achieving the proposed extent of afforestation.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore		
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		Ex-Mine Price declared is incorrect and not tallying with the sale value for which violation is issued.
9h	Scrutiny of Annual return on fixed assets		Depreciation on fixed assets/mining machineries not accounted properly for which violation is issued.

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9k Scrutiny of machineries

FRONT END LOADER 1.300 inspection.

BACK HOE 1.000 The reported machineries Annual return on CUM- 3No's, we found deployed in the mining FRONT END mine on the day of

> CUM -2 No's, HAULAGE/Tipper s :300 HP -5 No's, GENERATOR (DIESEL) 200 ŃWH- 1, CRUSHER 150 TPH -1, JEEP/TRACTOR 260 HP-2 No's.

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Details of violations observed during current inspection and compliance position of violation pointed out					
Viola	Violation observed Show couse position				
Rule NO.	Issued on Compliance	on Rule NO.	Issued on Compliance on		
MCDR17 Rule 11	(1) 14/08/2023	MCDR17 Rule	45(7)14/08/2023		
MCDR17 Rule 45(7)(a)14/08/2023					

Date: (DR. Sudhakara T.L)

Indian Bureau of Mines