CHECKUP INSPECTION REPORT

For the year 2023-24

SL. No.	Particulars	Details		
1	Name of the Mine	Subbarayanahalli Iron Ore Mine, ML.No.2629		
2	Total Lease Area (Ha) with breakup of Non-	80.06На		
	forest and forest land	Forest Land		
3	Minecode	30KAR03069		
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/4369/2011		
5	Name of the lessee, Address, phone, email and fax number	Karnataka State Minerals Corporation Limited 'A' Block, 5 th Floor, Shanthinagar Bengaluru-560027		
6	Village	Subbarayanahalli		
7	Taluka/Mandal	Sandur		
8	District	Ballari		
9	Pincode	583119		
10	State	Karnataka		
11	Post office	Sandur		
12	Nearest police station	Sandur		
13	Nearest Railway station	Yashvantnagar		
14	Date of Grant of Mining Lease	13.04.1999		
15	Date of Original Grant	13.04.1999		
16	Date of opening of Mine	13.04.1999		
17	Date of first Renewal, if applicable and its period & expiry	13.04.1999 20 years 12.04.2019 further lease extensionValid upto 12.04.2049 (50 Years) (Lease Extension as per MMD&R Amendment Act-2015)		
18	Date of second Renewal, if applicable and its period & expiry	NA		
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	NA		
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri.JayavibhavaSwamy,IAS Managing Director Karnataka State Minerals Corporation Limited 'A' block, 5 th Floor, Shanthinagar Bengaluru-560027 Land Phone: 08022278814/15/16 Cell:-+91 9448456789 Fax No.08022213172 Mail ID: md.ksmcl@gmail.com Date of Appointment:: 03.07.2023		
21	Name of the Mine Agent with Address,	Sri.MallikarjunSarapur		

	phone, email, fax number and date of appointment	Agent / General Manager (P) Karnataka State Minerals Corporation Limited 'A' block, 5 th Floor, Shanthinagar Bengaluru-560027 Land Phone: 08022278814/15/16 Cell:-+91 8763673728 Fax No.08022213172 Mail ID: mallikarjunsarapur@gmail.com
22	Ni	Date of Appointment:01.12.2020
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri. M.R.K.Bagawan Mines Manager Karnataka State Minerals Corporation Limited Subbarayanahalli Iron Ore Mine Subbarayanahalli Village Sandur-583119 Bellary Dist. Cell:-+91 9448206986 Mail ID: mmliodsandur2@gmail.com Date of Appointment:24.07.2020
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri.Siddartha B BE in Mining Karnataka State Minerals Corporation Limited Subbarayanahalli Iron Ore Mines Subbarayanahalli Village Cell:-+91 9591201750 Sandur-583119 Bellary Dist. Date of Appointment:01.04.2024
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes, Sri. T. Ramakrishna – Geologist Karnataka State Minerals Corporation Limited Subbarayanahalli Iron Ore Mine Subbarayanahalli Village Sandur-583119 Bellary Dist. Date of Appointment:01.07.2015
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	1. Approved of Modification to the approved RUMP for the year 2018-19 to 2019-20 as per Supreme court order enhanced the quantityfrom 0.41MTPA to 1.34MTPA as per CEC Vide letter No.279/466/95/BNG/ Dt:04.03.2019 2.Approved of Review and Updation of Mining Plan for the year 2020-21 to 2024-25 vide letter No.279/466/95/BNG/262 Dated: 12.02.2020 (period from 2020-21 to 2024-25)
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Approval of "Review &Updation of Mining Plan" vide letter 279/466/95/BNG/262 Dated: 12.02.2020 (period from 2020-21 to 2024-25)
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining (Opencast, Underground)	Open Cast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non-Captive	Non-Captive
31	Date of inspection	25.09.2024
32	Name of accompanying mine officials with	1. Shri. MallikarjunSarapur, Agent

designation	2. Shri.M.R.K.Bagawan , Mines Manager.	
	3.	Shri.T.Ramakrishna, Geologist.
	4.	Shri.Y.M.ThriyambakaShastry, Dy.Manager (survey)
	5.	Shri.Sidharth B , Mining Engineer

Exploration:-

SL.No.	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks	
1a	Backlog of previous year	-	-	The entire Mining lease area is explored under G1 level of exploration.	
1b	Exploration over lease area for Geological axis 1 or 2.	G1- 71.69 Ha. G2 -1.37 Ha.	-	The Entire 73.06 Ha area covered under exploration. The 7.00 Ha. Area which falls under temporary dump yard (73.06 + 7.00 = 80.06 Ha.)(North side of the lease boundary)Dump-D1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	-	-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not applicable	-	-	
1e	Balance reserves as on 31.03.2024	-	Proved = 6,33,03,498 MTs Probable =29,23,416MTs Prefeasibility Resources = 60,45,046MTs	As per the AR: 2023-2024 submitted.	
1f	General Remarks of inspecting officer on geology, exploration etc.,	Quartzite's, of 550Mtrs. slope of the the slope sid	ore deposit occurs in the area in the form of reef with Banded Ferruginous s, Phyllite. The ore body is exposed over a strike length of 1120 Mtrs. & Width rs. The dip varies between 15° to 25°, towards East. The dip of Ore body and he hill are in same direction & angle. Therefore, the Ore body is spread all over side. Lumps Fines ratio is 38:62. The entire Lease area is laterally explored under of exploration by 65 core bore holes over 4429 mtrs in the past.		

Development:-

SL.N	Item	Proposals (year 2023-24)	Actual work(year 2023-24)	Remarks
0				
2a	Location of	The proposed location of	The actual location of	Working
	development	development	development: -	between
	w.r.t.from lease area	N-583.78m to N-1749.08m	N-596.00mto N-1544.00m	section 1- 1' to J-J'
		E-768.60to E-1500	E-788.00mtoE-1453.00 m	within the
				proposed
		Proposed working in between	Actual workings in between 925 m	grid

1/42087/2024 789/1/2024-SZ-IBM_SZ

2b	Separate benches in topsoil, overburden and mineral (Rule 15)	920m to 1046 m. No separate benches in topsoil, overburden and mineral proposed	R.L. to 1045 m. All the benches contain mineral & O/B	intervals and RL's as per the proposals		
2c	Stripping ratio or ore to OB	1:0.10	1:0.07	It is instructed to RO for issuing violation for not handling the BHQ moulds and not achieving the proposed stripping ratio.		
2d	Quantity of topsoil generation in Ts.	No proposal	Nil	_		
2e	Quantity of overburden generation in m ³	Cum = 67,760 Tonnes =1,35,521	Cum= 48,304 Tonnes = 96,608	The BHQ moulds are not handled.		
2f Exploita	General remarks of inspecting officer on Development of pit w.r.t type of deposit etc	The mine is developed as a single open pit operation. The benches are formed all along north-south direction and mining is advanced from east to west directions and new benches are formed at lower levels of eastern slope for further advancement towards west. The pit is suitably developed to the type of deposit.				

SL No	Item	Proposals (year 2023-24)	Actual work (year 2023- 24)	Remarks
3a	Number of pits proposed for production	L-1168.67m,W-628.17m, D-108m	Working in one pit only In Meters L-1150.06m,W-605.06m, D-82.00m	-
3b	Quantity of ROM mineral production proposed	13,39,998MTs	13,39,998 MTs	Proposed Production is fully achieved.
3c	Recovery of salable/usable mineral from ROM production	95% was Proposed recovery in ore	achieved	5% is considered as waste
3d	Quantity of mineral reject generation	No proposal	Not applicable	No mineral reject generated.

3e	Grade of mineral reject generation and threshold value declared	No proposal	Not applicable	During the site inspection it was observed for huge quantity of material that is being dumped separately on the existing dump booked under waste as reportedly the grade is lesser than the threshold values notified. RO is directed to depute officers to collect the samples for analysis. On verification by analysis the material handled/stacked needs to be reported in the AR suitably in future.
3f	Quantity of sub- grade mineral generation	No proposal	Not applicable	No sub grade mineral was generated.
3g	Grade of sub- grade mineral generation	No proposal	Not applicable	-
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized method proposed for segregating from ROM	Mechanized method adopted for segregating from ROM	Crusher plant (250T/H) – 1Unit (Make- PID5A45VHRD8711/Jaw Crusher) Screening plant (200T/H)– 3Units (Make- MS953EVO/Kleeman & PS1700/Power Screen)
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject.	No proposal	-	-
3j	Provision of drilling & blasting in mineral benches	Drilling & Blasting proposed in mineral benches	Drilling & Blasting carried out in case of hard strata encountered.	Explosives ANFO =49,950Kg. Slurry Explosives= 6 625Kg. OD= 151 Nos. Safety Fuse = 461Mtrs Detonator Fuse= 9375 Mtrs Excel Detonators (Nonel) = 2836 Nos.
3k	Provision of mining machineries in mineral benches	Mining Machineries 1)Excavator-10Nos. 2)Wheel loader - 7Nos. 3)Dumper/Tippers-33Nos. 4)water Tankers-10Nos. 5)Crushing unit-1No. 6)Screening unit- 2Nos. 7)Drilling Machine- 3Nos.	Mining Machineries 1)Excavator - 10 Nos. 2)Wheel loader – 8Nos3)Dumpers/Tippers - 18 Nos. 4)water Tankers - 7 Nos. 5)Crushing/Screening unit - 4 Nos. 6)Drilling Machine -3 Nos.	As per the AR: 2023-2024 submitted.

31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the Bench - 8Mtrs Width of the Bench - 10Mtrs	Bench height & width maintained as per proposal	The bench height & width are not maintained as proposed and RO is advised to issue the violation letter. Also RO may insist for carrying out slope stability study of the Mine benches immediately and submit the recommendations to this office.
3m	Total area covered under excavation/pits	Mining – 50.96Ha. Waste dump – 5.39 Ha.	Mining – 50.372 Ha. Waste dump – 4.35 Ha.	As per the AR-2023-24 submitted.
3n	Ore to OB ratio for the pit/mine during the year	1:0.10	1:0.07	Bulk density: Ore - 3.5 Waste-2.00
30	Total area put in use under different heads at the end of year	Mining - 50.96Ha., Waste dump- 5.39Ha., Infrastructure- 0.05 Ha. Road- 0.50Ha. Green belt - 3.05 Ha RW,GD,ST- 0.66Ha. Untouched Area -23.52 Ha.	Mining-50.372Ha., Waste dump- 4.35 Ha., Infrastructure- 0.05Ha. Road - 0.50Ha. Green belt - 3.05 Ha RW,GD,ST - 0.66Ha. Others - 23.52Ha.	
Зр	Production of ROM mineral during last five-	In Tonnes 2019- 13,39,998 20	In Tonnes 2019- 20 3,42,356.29	
	year period, as applicable	2020- 13,39,999 21 2021- 13,39,998	2020- 21 13,39,997 2021- 13,11,340	
		2021- 13,39,996 22 2022- 13,39,999	22 13,11,240	
		23 2023- 13,39,998	2023- 2023- 13,39,998	
		24	24 13,39,998	
3q	General remarks of inspecting officer on method of mining etc.		method. The cycle of mine development is by Drillin loading/hauling of ROM	is by opencast Mechanized operation for production and g + Blasting + Excavation + Waste to the predestinated and ROM processed in hing plant mechanically.

Solid Waste Management-Dumping: -

SL. No.	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	Separate dumping of O/B proposed	Separate dumping of O/B is carried out	No top soil & Mineral reject generated.
4b	(Rule 32, 33) Location of topsoil, OB &	Proposed Temporary Waste	Existing Tomporary Wasto	
40	mineral reject dumps	Dump (PTD-1) N-698.63m. to 868.68m.	Existing Temporary Waste Dump (PTD-1)	-
		&	N-703.00 m.to N-854.00 m.	
		E- 816.23 m.to E-890.09m.	&	
			E-819.00 m. to E-885.00m.	

4c	Number of dumps within lease area and outside lease area	1 Dump Within lease area No Dumps OutsideM.L.area	1 Dump Within lease area No Dumps Outside M.L.area	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	O/B Dump (PTD1) proposed within UPLNorth western side of the lease	ActiveO/B Dump (PTD-1) within UPL North western side of the lease	Entire M.L. Area is mineralized and hence temporary dumping was carried out.
4e	Number of active & alive dumps	1 Dump	1 Dump	Dumps are Temporary
4f	Number of dead dumps	3	3	Dump-1, Dump-2 & Dump-3 all are Temporary dumps.
4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	_
4i	Length of Retaining wall or garland drain all along dump	Proposed Retention wall 67.00 Mtrs. & Garland Drain 67.00 Mtrs. at PTD-1	Achieved Retention wall 67.00 Mtrs. & Garland Drain 67.00 Mtrs. at PTD-1	Carried out as proposed.
4j	Number of settling ponds	No proposal	Nil	5 No's Settling Tanks with in lease area are constructed in the past.
4k	Specific comments of inspecting officer on waste dump management.	The temporary waste dumps are managed satisfactorily by constructing retaining walls and garland drains.		

Solid Waste Management-Backfilling: -

SL.No.	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Nil	-
5b	Area under backfilling of mined out area	No proposal	Nil	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Nil	-
5d	Total area fully reclaimed &	No proposal	Nil	-

	rehabilitated			
5e	General remarks of inspecting officer on backfilling, reclamation etc.	No part of the Mine pit	is matured for carry	ying out back filling.

Progressive Mine Closure Plan:

SL.N.	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E(2). Details should be given in the format as given in Annexure-20.	Yes	Submitted (29.06.2024)	-
6b	Management of worked/mined out benches i) Area available for rehabilitation (Ha)	0.20	1.00	-
6c	ii) Afforestation done (Ha.)	-	-	-
6d	iii) No. of saplings planted during the year	400 Nos.	175 Nos. Total Amount of Rs.1,00,000/-	RO is advised to issue Violation for not achieving the proposed number of plantations.
6e	iv) Cumulative no. of plants	-	6845 Nos.	Appears to be correct.
6f	v) Any other specific method of rehabilitation	Nil	Nil	-
6g	vi) Cost incurred on watch & care during the year	Nil	Nil	Not reported
6h	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D)	Nil	Nil	-
6i	ii) Void filled by waste/tailings	Niil	Nil	
6j	iii) Afforestation on the backfilled area	Nil Nil	Nil	
6k	Rehabilitation by making water reservoir	Nil	Nil	
6l	Any other specific means	Nil	Nil	
6m	Compliance of Rehabilitation of waste land within lease i) Afforestation	Nil	Nil	
6n	ii) Area rehabilitated (ha)	Nil	Nil	
6o	iii) Method of rehabilitation	Nil	Nil	
6р	Compliance of Environmental	Season wise	Season wise	Monitoring done by

monitoring (core zone & buffer zone)	environmental monitoring of ambient air quality, water quality, noise& Soil samples proposed.	environmental monitoring of ambient air quality, water quality, noise& Soil samples carried out. All environmental parameters were observed to be within the permissible limit.	MSV Analytical Laboratories,Ballari
6q General remarks of inspecting officer on PMCP compliance & progressive closure operations		is satisfactory except for of saplings during the y	

Mineral Conservation:-

SL.No.	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise mechanical sorting proposed within the lease area	Grade wise mechanical sorting carried out within the lease area	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical Method of grade wise mineral sorting proposed	Grade wise sorting done mechanically within the M.L.area as per proposal	-
7c	Different grade of mineral sorted out at mines	Lumps & Fines 58% to 60% 60% to 62% 62% to 65%	Lumps & Fines 58% to 60% 60% to 62% 62% to 65%	-
7d	Any beneficiation process at mines	No proposal	-	No beneficiation process carried out except dry crushing & screening
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	The grade of the iron ore in the mine is good and the entire ore is processed and dispatched there by taking care of Mineral Conservation aspects. Beneficiation process does not arise.		

Environment:--

SL.No	Item	Proposals (year 2023-24)	Actual work (year 2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	No top soil was generated	Working within the broken-up area.
8b	Concurrent use or storage of topsoil	No proposal	Not applicable	-
8c	Separate dumps for	Separate temporary	Separate O/B dump	-

	overburden, waste rock, rejects and fines (Rule 33)	dump of O/B (PTD-1) of proposed in North western part of the M.L. Area	(PTD-1) carried out in North western part of the M.L. Area.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	Entire M.L.area is mineralized & nomining pit is matured for back filling
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	Protective& safety measures are being carried out for management of temporary dump (PTD-1).
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	No proposal	Nil	More than 6845 Nos. sapling were planted so far.
8g	Survival rate	Not available	80%	Appears to be correct.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on haul road to control airborne dust	Regular water sprinkling is done by water tanks to suppress the dust.	7 Nos. of 10 K.L. capacity of water tanker deployed in mine.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The aesthetic beauty in a	nd around the mines is goo	d.

Compliance of Rule 45

SL.No.	Item	Details given in A.R.	Observation of I/Officer	Remarks.
9a	Status of submission of Monthly and Annual returns	Monthly Returns Submittedupto August-2024 Annual Returns submitted for FY.2023-24 (29.06.2024)	In Order.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager. Sri.M.R.K.Bagawan MiningEngineer: Sri.Sharanananda Geologist:Sri.T.Ramkrishna	The reported officials were present on the day of inspection.	
9с	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining- 50.372Ha., Waste dump - 4.35 Ha., Infrastructure- 0.05Ha. Road- 0.50Ha. Others - 27.452Ha.	In Order.	
9d	Scrutiny of Annual return on afforestation	Within M.L. area-175Nos.of saplings and75% survival rate.	In order. RO directed to issue VL for not achieving the proposed 400 no's.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NIL	In Order.	
9f	Scrutiny of Annual return on	All in Tonnes	In Order.	

	ROM stock and/or graded ore	ROM Stock:- Opening stock-34,644 Production— 13,39,99 Closing stock — 34,64 Lumps processed 55% to 58% 58% to 60% 60% to 62% 62% to 65% Fines processed 55% to 58% 58% to 58%	8.00		
		60% to 62%	Nil		
		62% to 65%	875998		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of Production Rs.1242.19/Ton Lumps: Ex-mine Price- Rs. 5787/Ton 60-62% Fe Rs.4997/Ton 62-65% Fe Fines		In Order.	
9i	Scrutiny of Annual return on fixed assets	Rs.5153/Ton 62-65% Fe 10.37Crores including land, industrial, plant- machinery, capitalized expenditure& pre-production exploration etc.,		In Order.	
9k	Scrutiny of Annual return on mining machineries	Mining Machineries 1)Excavator - 10 Nos. 2)Wheel loader - 8 Nos 3)Dumpers/Tippers - 18 Nos. 4)water Tankers - 7 Nos. 5)Crushing/Screening unit- 4Nos. 6)Drilling Machine - 3Nos.		The reported machineries were found to be deployed at the mines.	

Previous Violation & their status

Years	Violations observed	Compliance
	Violation observed vide letter No.KNT/BLR/FE-	Complied through letter
	375/BNG/RF/261, Dated:24.08.2020	No.KSMCL/SIOM/Violation/IBM-Reply
		/2019-20/515 Dated:26.09.2020
	Violation observed vide letter No.KNT/BLR/FE-	Complied through letter
2020-21	375/BNG/-Vol-V, Dated:05.11.2020	No.KSMCL/SIOM/Violation/ IBM
		Replay/2020-21/638 dated:10.12.2020
	Violation observed vide letter No.KNT/BLR/FE-	Complied through letter
	375/BNG/-Vol-V, Dated:18.01.2021	No.KSMCL/SIOM/Violation/ IBM
		Replay/2020-21/1058, dated:12.02.2021
	Violation observed vide letter No.KNT/BLR/FE-	Complied through letter No.KSMCL/IBM/04/
2021-22	375/BNG-VOL-V Dated:10.03.2022	MP/SIOM/2022-23/74 Dated:11.04.2022
	Violation observed vide letter No.KNT/BLR/FE-	Complied through letter
2022-23	375/BNG-VOL-V Dated:01.06.2022	No.KSMCL/SIOM/Violation/IBM-reply/2022-
		23/514 Dated:09.09.2022

	Violation observed vide letter No.KNT/BLR/FE-375/BNG-VOL-V Dated:22.09.2022	Complied through letter No.KSMCL/SIOM/Violation/IBM-reply/2022- 23/633 Dated:27.10.2022
	Violation observed vide letter No.KNT/BLR/FE-375/BNG-VOL-V Dated:17.03.2023	Complied through letter No.KSMCL/SIOM/Violation/IBM-reply/2023- 24/234 Dated:26.04.2023
	Violation observed vide letter No.KNT/BLR/Fe/ 375/BNG/VoI-V /508 Dated:12.07.2023	Complied through letter No.KSMCL/SIOM/Violation/IBM-reply/2023- 24/484, Dated:23.08.2023
2023-24	Violation observed vide letter No.KNT/BLR/Fe/ 375/BNG/VoI-V Dated:08.11.2023	Complied through letter No.KSMCL/SIOM/Violation/IBM-reply/2023- 24/232, Dated:13.11.2023
	Violation observed vide letter No.KNT/BLR/Fe/ 375/BNG/VoI-V / Dated:13.09.2023	Complied through letter No.KSMCL/LEE/IBM/3/2024-25/693, Dated:26.06.2024

V. J. K. Babu, Controller of Mines (South Zone) (Name of inspecting officer with designation and date)