

MCDR INSPECTION REPORT

S. N.	Particulars	Details
1	Name of the Mine	Hulikatte manganese ore mine (ML No. 2571)
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	32.23 Ha. , Non- forest
3	Mine code	40KAR07009
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/6384/2011
5	Name of the lessee, Address, phone, email and fax number	M/S Bharat Parikh & Co. # 703/179, Sri Shankara Krupa 4 th main, 5 th Cross Anjaneya layout Devangere 577 004 Phone: 9820085191 E-mail: bpco.co@gmail.com
6	Village	Hulikatte
7	Taluk/Mandal	Devanagari
8	District	Devanagari
9	Pin code	577004
10	State	Karnataka
11	Post office	Hulikatte
12	Nearest police station	Anaji
13	Nearest Railway station	Devanagari, 30 Km
14	Date of Grant of Mining Lease	12.04.1985
15	Date of Execution	30.09.1985
16	Date of opening of Mine	07.05.1987
17	Date of first Renewal, if applicable and its period & expiry	December 2007, 20 years from 30.09.2005 Expiry: 50 years from 12.04.1985
18	Date of second Renewal, if applicable and its period & expiry	Not Applicable.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Nil
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri H.R. Nagraj # 703/179, Sri Shankara Krupa 4 th main, 5 th Cross Anjaneya layout, Devangere 577 004 Phone: 9820085191 E-mail: bpco.co@gmail.com Date of Appointment: 01.12.2012
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri P.D. Vasanth Kumar Rai Hulikatte manganese ore mine Hulikatte post, Via Anaji, Devanagari Taluk & District. Phone: 8970208348 Date of Appointment: 01.01.2013

23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri P.D. Vasanth Kumar Rai Diploma in mining, 2 nd class mines manager competency certificate holder. Total experience: more than 10 years. Phone: 8970208348 Date of Appointment: 01.01.2013
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	No Geologist is found to be appointed under Rule 42. A violation letter is issued to the lessee vide letter no. KNT/CTD/MN 113/BNG dated 16/07/2015
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan is approved vide letter no. 279/131/89/BNG dated 31/01/2005. No specific condition is given.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Scheme of Mining is approved vide letter no. 279/131/89/BNG dated 25/07/2011 for the period of 2010-11 to 2014-15. No specific condition is given.
27	Mineral(s) granted in lease and proved for mining	Manganese
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	Other than fully Mechanized.
30	Captive/ Non captive	Non-captive
31	Date of inspection	17.06.2015
32	Name of accompanying mine officials with designation	S/Shri P.D. Vasanth Kumar Rai, Mines Manager & K. Pakeerappa, Mines foreman.

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	Nil	Exploration completed during 2012-13
1b	Exploration over lease area for Geological axis 1 or 2.	G1 & G2	G1 & G2	Total mineralized area is 11.00 Ha, which is almost exploited by open pit.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specified	By lessee	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not specified		
1e	Balance reserves as on 01.04.2015	No proposal	Cat. 111: 135,200 tonnes	Mn% 10 to 28
1f	General remarks of inspecting officer on geology, exploration etc.	No deviation w.r.t exploration is observed during the course of MCDR inspection on 17.06.2015.		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	From N1150 to N800 & from E 520 to E1200	From N1150 to N800 & from E 520 to E1200	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	O/B: 2- 3nos. Mineral: 5nos.	O/B: 5nos. Mineral: 3nos.	
2c	Stripping ratio or ore to OB ratio	1: 0.99	1: 0.99	
2d	Quantity of topsoil generation in m ³	Nil	Nil	
2e	Quantity of overburden generation in m ³	39,668 tonnes	14961 tonnes	ROM handling & subsequent development was less during 2014-15.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	No deviation w.r.t development is observed during the course of MCDR inspection on 17.06.2015.		

Exploitation

S.N.	Item	Proposals (2014-15)	Actual work (2014-15)	Remarks
3a	Number of pits proposed for production	Single pit	Single pit	
3b	Quantity of ROM mineral production proposed	40,062 tonnes	15,112 tonnes	
3c	Recovery of salable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not Applicable	Nil	
3f	Quantity of sub-grade mineral generation	6,677 tonnes	Nil	
3g	Grade of sub-grade mineral generation	25 to 27% Mn	Not Applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Other than fully mechanized	Other than fully mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	
3j	Provision of drilling & blasting in mineral benches	Proposed for hard formation only	Found to be carried out.	Entire ROM is initially dry screened, followed by washing to remove fine clay waste.

3k	Provision of mining machineries in mineral benches	Hydraulic excavator: 1 no. Tipper: 2nos.	Hydraulic excavator: 1 no. Tipper: 2nos.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench Height : 9m, width 9m	Height : 5 - 6 m, width 8 - 10 m	
3m	Total area covered under excavation/pits	10.57 Ha.	Single pit of 9 Ha. measuring 450m(L) x 200m (W) x 40m(D)	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.99	1:0.99	
3o	Total area put in use under different heads at the end of year (in Ha.)	Mining-10.57 Dumps-5.91 Roads- 0.70 Afforestation-1.24 Mineral storage-1.45 (in Ha.)	Mining-9.0 Dumps- 2.09 Roads- 0.50 Afforestation-2.48 Mineral storage 1.00 (in Ha.)	
3p	Production of ROM mineral during last five-year period, as applicable	2010-11: 40,062 2011-12: 40,062 2012-13: 40,062 2013-14: 40,062 2014-15: 40,062 (in tonnes)	2010-11: 29,000 2011-12: 24,000 2012-13: 16,012 2013-14:31,360 2014-15: 15,112 (in tonnes)	Production deviation was – (minus) 62.27% during 2014-15. However, stripping ratio is found to be maintained.
3q	General remarks of inspecting officer on method of mining etc.	No deviation w.r.t exploitation is observed during the course of MCDR inspection on 17.06.2015.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	OB dumped in designated dumps	OB dumped in designated dumps	Top Soil devoid in the mining area
4b	Location of topsoil, OB & mineral reject dumps	N800 to 1100, E500 to 800, RL 700-730, SW of the working pit	N800 to 1100, E500 to 800, RL 700-730, SW of the working pit	Dimension of active dump: 80m x 30m x 5m Dimension of inactive dump: 300m x 120m x 30m
4c	Number of dumps within lease area and outside lease area	Single active dump, Within lease area.	Single active dump, Within lease area.	One active & one inactive, partially stabilized dump are present.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump is outside UPL	Dump is outside UPL	

4e	Number of active & alive dumps	1 active dump	1 active dump	
4f	Number of dead dumps	01	01	
4g	Number of dumps stabilized	01	01	Partially stabilized
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	406m length of Retaining wall during end of the Scheme period.	450m Retaining wall is constructed along the toe of the dumps.	
4j	Number of settling ponds	Not specified	03 settling pond	
4k	Specific comments of inspecting officer on waste dump management.	No deviation w.r.t dump management is observed during the course of MCDR inspection dated 17.06.2015		

Solid Waste Management-Backfilling

S.N.	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Not Applicable	
5b	Area under backfilling of mined out area	No proposal	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Not Applicable	
5d	Total area fully reclaimed & rehabilitated	No proposal	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc	This chapter is not applicable, because mineral is not found exhausted in the working pits & hence backfilling is not necessary as of now.		

Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual work	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.	1 st July of every year.	Annual report of 2013-14 is found to be submitted by the lessee as per prescribed format dated 05/07/2014	
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants	i) Not specified ii) 1.24 Ha. iii) 625 iv) 18900nos. v) Not specified	i) Not applicable. ii) 2.48 Ha. iii) 3000nos. inside ML iv) 33,000 nos. v) Nil	

	v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	vi) Not specified	vi) Not Available.	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	No Proposal	Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No proposal	Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	One Season Ambient Air Quality, Surface Water monitoring and noise monitoring	Ambient Air Quality, Surface Water monitoring, noise monitoring found to be carried out on monthly basis.	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	No deviation w.r.t PMCP compliance is observed during the course of MCDR inspection dated 17.06.2015.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting of ROM	Found to be maintained	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Hydraulic excavator & tipper combination is used for mineral excavation & loading.
7c	Different grade of mineral sorted out at mines	25 to 27% Mn +27%Mn	Below 25%Mn, & 25 to 35% Mn	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No deviation w.r.t mineral conservation is observed during the course of MCDR inspection dated 17.06.2015.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	Mining area is devoid of any Topsoil
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	OB to be stacked separately	OB Stacked Separately	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	OB & Waste will be used during Final Mine Closure for back filling	Not applicable	Mineral is not found exhausted in the working pits
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Will be complied during Final Mine Closure	Not applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Tree species found within ML area are Eucalyptus, Prospits, Juleflora, Acasia, Azhader chana indica etc. Additional Plantation proposed in 1.24 Ha. area during the scheme period ending 2014-15.	2.48 Ha. area is covered under Green belt. Cumulative 33,000 nos. of plantation is carried out inside the ML area.	
8g	Survival rate	70 -80%	60-70%	
8h	Water sprinkling on roads to control airborne dust	Proposed	Complied with using water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Entire ML is non forest, patta land with thin to moderate vegetation. Most of the ML area is found to be degraded by mining & allied activities. Mining operation is carried out above ground water level. Aesthetic environment outside the ML area is not found to be affected by the mining operation. Healthy population of natural vegetation can be seen outside the ML area.		

Compliance of Rule 45

S.N.	Item	COMMENTS	Remarks	
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to May 2015 A.R. Submitted up to 2014-2015		
S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: M. Thimappa Mines Manager: Shri P.D. Vasanth Kumar Rai Geologist: Nil	Mining Engineer & Manager: Shri P.D. Vasanth Kumar Rai (Diploma in Mining). No Geologist is found to be appointed as on date of inspection.	A violation of Rule 42(1) (i) is issued to the party vide letter no KNT/CTD/MN 113/BNG dated 16.07.2015
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under current O/C working: 15 Ha. Used for waste disposal: 2 Ha. Reclaimed: 3 Ha. Mineral stock: 9.23 Ha.	Area covered under O/C workings, dumping & mineral stock appears to be furnished incorrectly.	A violation of Rule 45 (5) (b) (ii) is issued to the party.
9d	Scrutiny of Annual return on afforestation	Within ML:3000	Plantations were found to be carried out along the green belt & inactive dump slope.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	No mineral reject generation.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Below 25% Mn Stock: 96 tonnes 25-35% Mn stock:680 tonnes	Below 25% Mn Stock: 96 tonnes 25-35% Mn stock:680 tonnes	As per monthly Return of May 2015.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex mine price <25% Mn: Rs. 1800/ tonne 25-35% Mn: Rs. 5250/ tonne Production cost: Rs. 2760/ tonne	Appear to be correct.	
9i	Scrutiny of Annual return on fixed assets	Fixed assets: Rs. 1325,337	Office building, Mining machineries & dry screen is found to be present within the ML area.	

9k	Scrutiny of Annual return on mining machineries	01 Hydraulic excavator of 0.8 cubic meter capacity.	01 Hydraulic excavator	
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Details of violations observed during current inspection and compliance position of earlier violation pointed out:

1. During present inspection on 17.06.2015, Rule **42(1) (i) & 45 (5) (b)(ii)** are found violated and the same was pointed out to the party vide letter no. KNT/CTD/MN 113/BNG dated 16/07/2015.
During last MCDR inspection dated 09/09/2014 by Shri RPCR Naidu- Asst. Mining Engineer (Retd.) no violation was pointed out.
2. Boundary pillars are **found to be constructed** as per the specifications prescribed vide CCOM's Circular No. 2/2010(addendum) dated 21/09/2011

Sd/-

KRISHNENDU CHATTERJEE
Junior Mining Geologist

(Name of inspecting officer with designation and date)
