

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/NAG/MN-308/NGP

Mine code : 40MSH14030

- (i) Name of the Inspecting : **204**) **SNEHANKIT H. CHATTE**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Deependra Nath, Legal Heir of Late Ravindra Nath
Official with
Designation
- (iv) Date of Inspection : 18-Nov-21
- (v) Prev.inspection date : 05-Mar-20

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KIRNAPUR (2.88H)**
- (b) **Registration NO.** : **IBM/5535/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : NAGPUR
Village : KIRNAPUR
Taluka : SAONER
Post office : KOTHURNA
Pin Code : 441001
FAX No. :
E-mail :
Phone : 9822462552
- (f) Police Station :
- (g) First opening date : 19-Nov-05
- (h) Weekly day of rest : SUN
2. Address for : 58, THE MALL, CANTONMENT
correspondance KAMPTEE
3. (a) Lease Number : MSH0366
- (b) Lease area : 2.88
- (c) Period of lease : 20
- (d) Date of Expiry : 17-Nov-25
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : RAVINDRA NATH
 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Owner : RAVINDRA NATH
 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Mining Engineer

Name : RAVISHANKAR GHANGARE, Full Time
 Qualification : DIP. IN MINING & MINE SURVEYING
 Appointment/ : 20-Nov-05
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	27-Jan-05
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	30-Aug-11
		Mining Scheme rule 12 MCDR1988	14-Jul-16
		MP modif under 17(3) MCR 2016	12-Jul-18
		MP review under 17(1) MCR 2016	13-Aug-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Five exploratory boreholes were proposed in the year 2020-21	Lessee has not carried out any exploration in the present plan period	Violation is pointed out for the same under Rule 11(1) of MCDR-2017
1b	Exploration over lease area for geological axis 1 or 2	Exploration was proposed for G-1 level	Lessee has not carried out the exploration in the present plan period. However, total area explored under G-1 level is 1.89 Ha	Violation is pointed out for the same under Rule 11(1) of MCDR-2017
1c	Exploration Agencies and Expenditure in lakh rupees during the year	By lessee	Lessee has not carried out the exploration in the present plan period.	Violation is pointed out for the same under Rule 11(1) of MCDR-2017
1d	Balance area to be explored to bring Geological axis in 1 or 2	0.98Ha	Lessee has not carried out the exploration in the present plan period.	Violation is pointed out for the same under Rule 11(1) of MCDR-2017
1e	Balance reserve as on 01/04/20	Mineral Reserves as on 01.04.2020 (111)-108059 Tonnes Feasibility M Resources (211)-36307 Tonnes Total- 144366 tonnes	Mineral Reserves as on 01.04.2020 (111)-108059 Tonnes Feasibility M Resources (211)-36307 Tonnes Total- 144366 tonnes	Same as per approved mining plan dated 13.08.2020

1f	General remarks of inspecting officers on geology, exploration etc	The Kirnapur deposit occurs, nearer the contact of Sitasaongi and Munsar formation. The manganese ore formation is associated with quartzite & mica schist. In the present plan period lessee has proposed 5 boreholes to explore entire area under G-1 level and also to know the depth continuity of the ore body, the exploration is not carried out as per the proposal and violation is pointed out for the same. Mine was suspended on 12.03.2021 hence no further development have been done by the lessee
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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 in the existing pit only. The proposed Co-ordinates are N-2369300to N-2369490&E-294900toE-295015	Working has been carried out, between the co-ordinates N-2369326 to N-2369460 and E-294908 to E-294990	The working has been carried out within the proposed co-ordinates only. Mine was suspended on 12.03.2021. During inspection no working found at mine site

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, separate benches are made in Ore and OB. The working was proposed in the existing pit only, so top soil bench was not proposed	Separate benches are made in Ore and OB	Total 6 benches are made in the lease area, three are in OB and three are in ore
2c	Stripping ratio or ore to OB ratio	1:2.25 for the nil plan period	Nil	production was carried out in already broken area
2d	Quantity of topsoil generation in m3	Not proposed	Nil	Working has been carried out in the broken up area only
2e	Quantity of overburden generation in m3	77418 CUM	Nil	Working has been carried out in the broken up area only
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			In the year 2020-21, the working was carried out within the proposed co-ordinates only but the Mine was suspended on 12.03.2021. During inspection no working found at mine site.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one	one	
3b	Quantity of ROM mineral production proposed	7450 T	3530 t	Lessee has produced 3530T tones from insitu working
3c	Recovery of sailable/usable mineral from ROM production	90%	90%	

3d	Quantity of mineral reject generation	5%	5%	
3e	Grade of mineral rejects generation and threshold value declared.	LESS THAT 10% OF MN	LESS THAT 10% OF MN	
3f	Quantity of sub grade mineral generation.	5%	nil	used for blending
3g	Grade of sub grade mineral generation	10-20%Mn	10-20%Mn	
3h	Manual / Mechanised method adopted for segregating from ROM	manual	manual	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	nil	nil	
3j	Provision of drilling and blasting in mineral benches	Drilling proposed using 32 mm dia Jack hammer drills. Blasting through Ammonium nitrate in small dia cartridged form	as per the proposal	the Mine was suspended on 12.03.2021. During inspection no working found at mine site.
3k	Provision of mining machineries in mineral benches	Proposed combination of Hydraulic Excavator and tipper	as per the proposal	the Mine was suspended on 12.03.2021. During inspection no working found at mine site.

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6.0 mtr bench height was proposed	Bench height is maintained at 3.00 to 4.00 mtr	
3m	Total area covered under excavation/pits	1.213 Ha, in the present plan period	Total area covered under excavation is 1.2Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:2.25	nil	working was carried out in already broken up area/ pit
3o	Total area put in use under different heads at the end of year	mining- 1.213Ha, waste disposal- 0.48Ha, Infrastructure- 0.066Ha	Area under Mining-1.2Ha, Waste dump-0.350, Infrastructure-0.066	
3p	Production of ROM mineral during the last five year period as applicable	2020-21 = 7450 Tonnes 2019-20 = 26540tonnes 2018-19 = 6540tonnes 2017-18 = 5295tonnes 2016-17 = 5295tonnes	2020-21 = 3530 tonnes 2019-20 = 1680 tonnes 2018-19 = 4742 tonnes. 2017-18 = 883 tonnes 2016-17 = 1011 tonnes	
3q	General remarks of inspecting officers on method of mining etc.			Lessee has adopted category A-open cast mining. Mine was closed due to suspension of mining activity issued vide office order letter dated 12.03.2021. During inspection no working found at mine site

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Only OB dump is proposed in the present plan period. No top soil and mineral reject is proposed in the present plan period	nil, as working is carried out in already excavated pit
4b	Location of topsoil, OB and mineral reject dumps	Waste dump was proposed between the co-ordinates N-2369490 to N-2369525 and E-294900 to E-294970	Generation of OB is nil, however the location of dumping having co-ordinates are co-ordinates, N-2369510 to N-2369520 and E-294920 to E-294965
4c	Number of dumps within lease area and outside of lease area	Two old dumps are existing within the lease area, waste dump in the Northern side of the lease area and Ore stock in the North-Eastern part of the lease area. In the present plan period waste dumping was proposed in the old dump existing in the northern side of the lease area	Two dumps are exist within the lease area. Dumping was made as per the proposal
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL	Outside the UPL
4e	Number of active and alive dumps.	Two	Two
4f	Number of dead dumps.	not proposed	nil

4g	Number of dumps established.	Two	Two	
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal of retaining wall and garland drain	nil	
4i	Length of Retaining wall or garland drain all along dumps	not applicable	nil	
4j	Number of settling ponds	not proposed	nil	
4k	Specific comments of inspecting officer on waste dump management			no OB was generated during the proposal period as working was carried out in already broken pit, Lessee has adopted category A-open cast mining. Mine was closed due to suspension of mining activity issued vide office order letter dated 12.03.2021. During inspection no working found at mine site

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.	Not proposed	nil	
5b	Area under backfilling of mined out area	not proposed	nil	

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	not proposed	nil	
5d	Total area fully reclaimed and rehabilitated	not proposed	nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Present working is not reached upto the proved depth and no proposals were made for reclamation and rehabilitation in the present plan period. Lessee has adopted category A-open cast mining. Mine was closed due to suspension of mining activity issued vide office order letter dated 12.03.2021. During inspection no working found at mine site

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Before 1st july of every year	not submitted	violation for the said violation dated was already pointed out/ issued by previous inspecting officer and Mine was closed due to suspension of mining activity issued vide office order letter dated 12.03.2021

6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	No proposal	nil	
6d	No. of saplings planted during the year	70 nos	nil	violation for the said deviation was pointed out by issuing Violation
6e	Cumulative no .of plants	620 nos saplings in the present plan period	No plantation was made in the present plan period	violation issued
6f	Any other method of rehabilitation	no proposal	nil	
6g	Cost incurred on watch and care during the year	NIL	NIL	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	NIL	NIL	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NIL	NIL	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	NIL	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	NIL	NIL	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	NIL	NIL	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	NIL	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes, Air, Water and Noise monitoring was proposed in Core and Buffer zone	NIL	Violation was already pointed out for the same by previous I/O

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	The progressive Mine Closure plan is not implemented as per the proposals. Plantation was not made as per the proposal. Lessee has not carried out environmental monitoring in core and buffer zones and also not submitted yearly report on implementation of PMCP for the year 2020-21. Violation is pointed out Under rule 11(1)& for, 26(2)& 43V1 was already issued by prev. I/O. Mine was closed due to suspension of mining activity issued vide office order letter dated 12.03.2021
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual grade wise sorting within the lease area	Manual	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Grade wise sorting into three grades	Three grades are sorting within the lease area. Below 25%Mn ore, 25 to below 35%Mn ore and 35 to below 46% Mn ore.	The quantity of 35to below 46% ore is very less compare to other available grades

7d	Any beneficiation process at mines .	NIL	NIL	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Lessee blended low grade ore for which direct market is not available with the high grade material as per the requirement of the buyers

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	nil	
8b	Concurrent use or storage of topsoil	No proposal	nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes	found correct	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation was not carried out proposed on the waste dump		Violation issued

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Base line information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan document	Most of the lease area is broken up and lessee has made very less plantation within the lease area. In the present plan period no plantation was made within the lease area and violation was also pointed out for the same
8g	Survival rate	NIL	NIL
8h	Water sprinkling on roads to control airborne dust	YES, PROPOSED	through small hired tankers
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		Most of the lease area was degraded by the mining activities. The mine was closed due to suspension order dated 12.03.2021. No plantation was made in the present plan period to develop green belt and violation is pointed out for the same

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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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	The lessee has submitted Monthly returns up to October, 2021 & Annual return for the year 2020-21	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer and Manager-Shri Mirza Bang, Geologist-Nil	Mining Engineer and Manager-Shri Mirza Bang, Geologist-Nil	Violation was already pointed out by previous inspecting officer under Rule 55(1) (C) (i) of MCDR-2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area covered under working- 2.88Ha, Waste dump- 0.35 Ha, Infrastructure -0.006Ha	Area under Mining- 1.70Ha, Waste dump-0.350, Infrastructure-0.066	total area utilized under different heads, is given more than the total lease area. Violation was already pointed out by previous inspecting officer under Rule 45(7) of MCDR-2017. However the mine got suspended on 12.03.2021
9d	Scrutiny of Annual return on afforestation	NIL	NIL	
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	ROM- openingstock-0 T, Production- 3530 T, Closing - 2331.294 T Gradede Below25% Mn ore, OS-361.964 T, Production- 3530 T, dispatch- 3201.55 T and CS-690.414 T, 35 to below 46% Mn ore, OS-35.54 T, Production & Dispatch-NIL, CS-35.54T	Figures are mismatching	Violation for the similar instances was already issued by previous Inspecting Officer. The mine was already under suspension vide order dated 12.03.2021.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Average, sale value of below 25% Mn ore is given as, Ex- mine price is shown as Rs- 1270.00/T and cost of Production- 280.31/T	appears incorrect	Violation for the similar instances was already issued by previous Inspecting Officer. The mine was already under suspension vide order dated 12.03.2021.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed assets is shown as zero	Shown One back hoe excavator and 02 dumpers in the annual returns, but under capital structure value of Machinery including transport is shown as zero	Violation for the similar instances was already issued by previous Inspecting Officer. The mine was already under suspension vide order dated 12.03.2021.
9k	Scrutiny of Annual return on mining machineries	Back Hoeexcavator- 01, Dumpers-2	seems correct	

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	06-Dec-21			
MCDR17	Rule 27(1)	06-Dec-21			
MCDR17	Rule 35(2)	06-Dec-21		17-Feb-22	

Date :

(SNEHANKIT H. CHATTE)

Indian Bureau of Mines