

Report

1) Name of Inspecting officer:	Mr. Prem Prakash
2) Designation	Dy. Controller of Mines
3) Accompanying mine official with designation	Mr. Suresh Kulal, V.P (Operations) Mr. Amit Kaisukar Mine Manager Mr. Ramaprasad.K.V. Geologist
4) Date of Inspection	19-09-2017 for verification of Star Rating
5) Date of Previous Inspection	19-04-2017

**I. GENERAL INFORMATION**

Sl.No	Particulars	Details
1	Name of the Mine	Kalane Iron Ore Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total 32.25 Ha Forest: Nil Non Forest:32.25 Ha
3	Minocode	30MSH28029
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/6218/2011
5	Name of the lessee, Address, phone, email and fax number	Minerals and Metals, 34, Ashutosh, Napeansea Road, Mumbai-400 036. Phone: 022 23645046, 022 23636207 <a href="mailto:srivasta@bom5.vsnl.net.in">srivasta@bom5.vsnl.net.in</a>
6	Village	Kalane
7	Taluka/Mandal	Dodamarg
8	District	Sindhudurg
9	Pincode	416 511
10	State	Maharashtra
11	Post office	Kalane
12	Nearest police station	Dodamarg
13	Nearest Railway station	Sawantwadi
14	Date of Grant of Mining Lease	6.03.2009
15	Date of Execution	16.3.2009
16	Date of opening of Mine	19.03.2009
17	Date of first Renewal, if applicable and its period & expiry	-
18	Date of second Renewal, if applicable and its period & expiry	-
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	-
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Mr. Sandeep Shrivastava Minerals and Metals 34, Ashutosh, Napeansea Road, Mumbai 400 036. Phone: 022 23645046, 022 23636207 <a href="mailto:srivasta@bom5.vsnl.net.in">srivasta@bom5.vsnl.net.in</a>
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Mr.Manoj V Thakur Kalane Iron Ore Mine Village Kalane, Taluka: Dodamarg, Dist: Sindhudurg. (M.S). Phone: 9769965711. Date of Appointment: 16.03.2009
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Mr.Amit Kaisukar Kalane Iron Ore Mine Village Kalane, Taluka: Dodamarg, Dist: Sindhudurg. (M.S).

		Phone:8408042276 Date of Appointment: 22.02.2017
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Mr.Suresh Kulal, B. Tech. Mining Engineering, 27 years experience Kalane Iron Ore Mine Village Kalane, Taluka: Dodamarg, Dist: Sindhudurg. (M.S). Phone:9769965790 Date of Appointment: 01.06.2011
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan Approval Letter No: MP/MAN-373(MAH)/GOA/98-99 dated 16/3/2009 and Modified Mining Plan Approval letter No: MP/SIND/GOA/Fe-156-SZ dt 03.02.2011
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. Approval letter No: MSH/MECH-53(MAH)/GOA/2013-14 dated 20.03.2014, 2014-15 to 2018-19.
27	Mineral(s) granted in lease and proved for mining	Iron Ore
28	Method of Mining (Opencast / Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Non Captive

## II. SCIENTIFIC MINING

[i.r.o.year (2016-17) or cumulative, as applicable.]

Sl. No	Item	Proposals (2016-17)	Actual Work (2016-17)	Remarks
<b>A. EXPLORATION:-</b>				
1a	Backlog of Previous Year	7 BH with 420 m drilling	5 Nos with 242 m	During 2014-15 to 2016-17, 24 bore holes were proposed and 24 boreholes drilled.
1b	Exploration Over Lease area for Geological Axis 1 or 2	-	-	Exploration will be proposed under G1 and G2 during next 5 year period
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Expenditure Rs.4.20 lakh	Expenditure Rs.3.39 lakhs	Cumulative Rs.72,96,390/- for 4334.7 m drilling
1d	Balance area to be explored to bring Geological axis 1 or 2	-	-	Around 5 Ha. And will be proposed for exploration during next 5 year period

1e	Balance reserves as on 01/04/2017		-	In Tons (111 Code) 8,91,191 (211 Code) 16,24,000 TOTAL 25,15,191
1f	General remarks of inspecting officer on geology, exploration etc.			satisfactory

B. DEVELOPMENT				
2a	Location of development w.r.t. lease area	As per development plan	As per development plan	Nil
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	---	No top soil is available	Nil
2c	Stripping ratio : ore to OB ratio	O:OB = 1: 0.99	O:OB = 1: 0.98	Nil
2d	Quantity of topsoil generation in m <sup>3</sup>	Nil	Nil	Nil
2e	Quantity of overburden generation	7,35,460 Tons	7,00,506 Tons	Nil
C. EXPLOITATION				
3a	Number of Pit Proposed for Production	One	One	Nil
3b	Quantity of ROM mineral production proposed	7,41,874 Tons	7,11,857 Tons	Nil
3c	Recovery of Sailable/ Usable Mineral from ROM Production	100%	100%	Nil
3d	Quantity of mineral reject generation	Nil	Nil	NA
3e	Grade of mineral reject generation and threshold value declared	NA	NA	NA
3f	Quantity of sub-grade mineral generation	Nil	Nil	NA
3g	Grade of sub-grade mineral generation	Nil	Nil	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Method	Mechanised Method	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	During the year : Nil	Nil	NA
3j	Provision of drilling & blasting in mineral benches	Not proposed	Not Done	NA
3k	Provision of mining machineries in mineral benches	Provided	Provided	NA
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yes	yes	Nil
3m	Total area covered under excavation/pits	15.0 Ha	15.0 Ha	Proposed at the end of 5 years.
3n	Ore to OB ratio for the pit/mine during the year	O:OB = 1: 0.99	O:OB = 1: 0.98	Nil

3o	Total area put in use under different heads at the end of year	22.01 Ha	About 21 ha	Proposed at the end of 5 years.
3p	Production of ROM mineral during last five-year period, as applicable	2014-15; 7,37,884 Tons 2015-16: 7,35,490Tons 2016-17: 7,41,874 Tons	2014-15; 7,37,681Tons 2015-16: 7,35,421 Tons 2016-17: 7,11,857 Tons	Scheme of Mining is approved for the period 2014-15 to 2018-19
<b>D. SOLID WASTE MANAGEMENT - DUMPING</b>				
4a	Separate Dumping of Topsoil, OB and Mineral Rejects (Rule 32,33)	yes	yes	
4b	Location of Topsoil, OB and Mineral Rejects Dumps	Not proposed	Not done	Nil
4c	Number of Dumps within Lease	Nil	Nil	1 No old dead O/B dump is within ML
4d	Location of Dumps, within Ultimate Pit Limit	Nil	Nil	
4e	Number of Active & Alive Dumps	Nil	Nil	Back-filling
4f	No of Dead Dumps	Nil	Nil	One earlier created small dead dump is located within ML which is afforested.
4g	No of Dumps Established	Nil	Nil	
4h	Whether Retaining Wall or Garland drain along Dumps are there	Nil	Nil	Dump is stabilised
4i	Length of Retaining Wall or Garland drain along Dumps	Nil	Nil	NA
4j	No of Settling tanks	Nil	Nil	One settling tank
<b>E. SOLID WASTE MANAGEMENT - BACKFILLING</b>				
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	Mineral fully extracted	Backfilling continued on exhausted part of the pit	Back filling in progress
5b	Area under backfilling of mined out area	3.8 Ha	3.8 Ha	Cumulative area
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	Top soil generation is not proposed	Top soil is not generated	NA
5d	Total area fully reclaimed and rehabilitated	-	-	Reclamation of the pit by backfilling is in progress.
<b>F. PROGRESSIVE MINE CLOSURE PLAN:-</b>				
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	Yes	-
6b	Management of worked/ mined out benches i) Area available for rehabilitation (Ha)	Nil	Nil	-

	ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year			
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	4.0 Ha	i) Around 3.8 Ha is covered under backfilling. ii) Voids filled by waste iii) About 2.0 Ha iv) Nil v) Nil	Cumulative 3.8 Ha area is covered under backfilling in the exhausted part of the pit and it is still in progress.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	Not proposed	NA	NA
6e	Compliance of Environmental monitoring (core zone & buffer zone)	proposed	Done	NA
<b>G. MINERAL CONSERVATION:-</b>				
7a	ROM mineral dispatch or grade wise sorting within lease area	Fe 50% to 55%	Fe 50% to 55%	-
7b	Method of Grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	-
7c	Different grade of mineral sorted out at mines	Fe 50% to 55%	Fe 50% to 55%	-
7d	Any beneficiation process at mines	Nil	Nil	-
<b>H. ENVIRONMENT:-</b>				
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Not done	NA
8b	Concurrent use or storage of topsoil	Top soil not available	NA	NA
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Overburden waste is proposed for back filling	Overburden waste is being backfilled.	Surface dumping of OB is not done.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Overburden waste is proposed for backfilling within the pit	Restoring of the land is by backfilling of overburden waste material is being done,	-
8e	Phased restoration, reclamation & rehabilitation of lands affected by mining operations (Pits, dumps etc)	Pit reclamation by backfilling proposed	Backfilling within the pit is being followed.	Dump rehabilitation by plantation being carried out
8f	Baseline information on existence of plantation & additional plantation done	3000 Nos	Planted 3000 Nos	-
8g	Survival rate	70%	70%	-

8h	Water sprinkling on roads to control airborne dust	Proposed	Being done	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			satisfactory

III. COMPLIANCE OF RULE-45:-		
9a	Status of Submission of Monthly & Annual Returns	Submitted
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Annual Return for year 2016-17 submitted on-line and in general, the same is in order.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	
9d	Scrutiny of Annual return on afforestation	
9e	Scrutiny of Annual return on mineral reject generation	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	
9i	Scrutiny of Annual return on fixed assets	
9k	Scrutiny of Annual return on mining machineries	

IV. Status of compliance of MCDR, 2017 including therewith the rectification of outstanding violation of the rules.

Date of last inspection	Violation pointed out	Compliance reported
19.04.2017	Rule 11(1) of MCDR 2017, vide letter No. MAH/SDG/Fe-46/GOA, dt 26/4/2017	Complied on 4.8.2017
19-09-2017	Nil	NA

(P. PRAKASH)  
DCOM