

REVIEW AND UPDATION OF MINING PLAN REPORT

Mine File No: MAH/SDG/Fe-47/ Goa

S. N.	Particulars	Details
1	Name of the Mine	Phanaswade Iron Ore Mine.
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	99.43 Ha. , Non- Forest.
3	Mine code	NA
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/20630/2016
5	Name of the lessee, Address, phone, email and fax number	Lessee: 1. Shri Shrinivas V. Dempo & 2. Smt. Neela V. Dempo. Address: Dempo Villa, Althino, Panaji. Goa 403 001 E-mail: www.dempos.com Phone: 0832-2441300 Fax: 0832-225098/ 2228588
6	Village	Phanaswade
7	Taluk/Mandal	Sawantwade
8	District	Sindhudurg
9	Pin code	416 510
10	State	Maharashtra
11	Post office	Sawantwade
12	Nearest police station	Sawantwade
13	Nearest Railway station	Thivim
14	Date of Grant of Mining Lease	20.12.2006
15	Date of Execution	31.03.2016
16	Date of opening of Mine	Mining operation is not commenced.
17	Date of first Renewal, if applicable and its period & expiry	Not applicable.
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	Not appointed
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Not appointed
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Not appointed
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Not appointed
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Not applicable as the mining operation is not commenced so far.

25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	<ul style="list-style-type: none"> ➤ 1st Mining Plan approved dated 30.05.2007 ➤ Mod. Mining Plan approved dated 21.01.2013 ➤ Mod. Mining Plan approved dated 19.08.2016 for the period 2016-17 to 2020-21. ➤ Mod. Mining Plan approved dated 26.06.2018 for the period 2016-17 to 2020-21.
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	RMP approved dated 11.11.2020 for the period 2021-22 to 2025-26. No specific condition mentioned.
27	Mineral(s) granted in lease and proved for mining	Iron Ore.
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanized, Others or Manual)	Fully mechanized.
30	Captive/ Non captive	Non-captive.
31	Date of inspection	12.10.2020
32	Name and designation of the Inspecting Officer	Shri Krishnendu Chatterjee, Senior Mining Geologist.
33	Name of accompanying mine officials with designation	S/Shri Prashant Gulabrao Wagadre-QP and Prakash Krishna Joshi, lessee representative.

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	14 nos. of borehole proposed.	Nil	19 nos. of trial pits and 48 nos. of boreholes so far.
1b	Exploration over lease area for Geological axis 1 or 2.	G1 proposed up to the end of approved Mod. Mining Plan ending 2020-21.	Area covered under G1 & G2 stage: 20 Ha.	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Proposed exploration Agency: Lessee.	Nil during 2019-20. Earlier exploration was carried out by M/s MECL.	Expenditure incurred Rs. 297.7 lakh against core borehole drilling
1d	Balance area to be explored to bring Geological axis in 1 or 2	G1 proposed over the mineralized areas	G1 & G2.	Entire mineralized area is yet to be explored.
1e	Balance reserves as on <u>01.04.2020</u>		8.89 million tonnes of Banded Iron Magnetite (UNFC Cat. 111)	As on 01.04.2020; Avg. Grade 23.39% Fe & 6.36% FeO.
1f	General remarks of inspecting officer on geology, exploration etc.	This new ML was executed on 31.03.2016 and lease area is explored by 19 nos. of trial pits and 48 nos. of boreholes so far. Entire mineralized area is yet to be explored. At present lessee in a process to obtain Environmental Clearance of the granted ML area.		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Western side of the ML area. 800N to 1600N 1700 E to 1900 E.	Nil	Mining operation is not commenced so far.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Separate benches in OB and ore proposed.	Nil	
2c	Stripping ratio or ore to OB ratio	1: 0.31	Nil	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	136180 m3	Nil	BD:2.75tonnes/m3
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	This ML was executed on 31.03.2016 and mining operation is not commenced so far. At present, lessee in a process to obtain Environmental Clearance from the MoEF & CC.		

Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	Single pit proposed at western side of the ML area.	Nil, virgin lease area.	
3b	Quantity of ROM mineral production proposed	2.1 million tonnes during 2019-20.	Nil	
3c	Recovery of salable/usable mineral from ROM production	100% Recovery proposed.	Nil	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	No proposal	Not Applicable.	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Not Applicable.	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method proposed.	Nil	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Wet processing Plant proposed at northern side of the ML area.	Nil	Expected recovery of magnetite ore concentrate 30% from ROM feed.
3j	Provision of drilling & blasting in mineral benches	Proposed in respect of hard formation,	Nil	
3k	Provision of mining machineries in mineral benches	HEMM proposed in mineral benches	Nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10m bench height proposed.	Nil	

3m	Total area covered under excavation/pits	16.71 Ha. upto the end of Mod. MP period ending 2020-21.	Nil	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.31	Nil	
3o	Total area put in use under different heads at the end of year	Area under mining: 16.71 Ha. Dump: 7.62 Ha. Infrastructure: 0.37 Ha. Road: 2.80 Ha. Tailing Pond: 20.28 Ha.	Road: 1.36 Ha. Other Heads: Nil	
3p	Production of ROM mineral during last five-year period, as applicable	2016-17: Nil 2017-18: 1050,000 2018-19: 1500,000 2019-20: 2104,000 (in tonnes)	Mining operation is not commenced so far.	
3q	General remarks of inspecting officer on method of mining etc.	This ML was executed on 31.03.2016 and the area is not broken up for mining so far. At present, lessee in a process to obtain Environmental Clearance from the MoEF & CC.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of OB proposed.	Nil	
4b	Location of topsoil, OB & mineral reject dumps	Separate dumping of OB proposed at western side of the ML area.	Nil	
4c	Number of dumps within lease area and outside lease area	01 proposed within ML area.	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Proposed outside UPL	Nil	
4e	Number of active & alive dumps	01 active dump	Nil	
4f	Number of dead dumps	No proposal	Nil	
4g	Number of dumps stabilized	No proposal	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	Proposed	Nil	
4i	Length of Retaining wall or garland drain all along dump	Total 395 m	Nil	
4j	Number of settling ponds	01 no	Nil	
4k	Specific comments of inspecting officer on waste dump management.	As on date of inspection the deposit was found to be virgin. Mining operation is not commenced so far.		

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	Nil	
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	Nil	
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Mining operation is not commenced so far, deposit is virgin.		

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.	Proposed.	Not applicable since Mining operation is not commenced so far	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	2.50 Ha.	Nil	
6d	No. of saplings planted during the year	2500 nos.	Nil	
6e	Cumulative no. of plants	9000 nos.	Nil	
6f	Any other specific method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch & care during the year	Rs. 125,000/-	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D)	No proposal	Not applicable	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings	No proposal	Not applicable	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area	No proposal	Not applicable	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable	

6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No proposal	Not applicable	
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No proposal	Not applicable	
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha)	No proposal	Not applicable	
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	Not applicable	
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed.	Nil	
6q	General remarks of inspecting officer on PMCP compliance & progressive closure operations	PMCP compliances are not applicable since the deposit is not broken up for mining so far. At present, lessee in a process to obtain Environmental Clearance from the MoEF & CC.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM is proposed for wet beneficiation within the ML area.	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Nil	
7c	Different grade of mineral sorted out at mines	Proposed for generating concentrate having Fe 64 to 67%	Nil	
7d	Any beneficiation process at mines	Yes, wet processing Plant proposed at northern side of the ML area.	Nil	Processing plant is not installed so far.
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Avg. ROM feed quality proposed 23% Fe & 6% FeO. Concentrate recovery proposed 30% w.r.t. ROM feed. Processing plant is proposed to be installed within the ML area at northern side.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generation proposed.	Nil	
8b	Concurrent use or storage of	No proposal.	Nil	

	topsoil			
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed.	Nil	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed during conceptual stage.	Not applicable.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposed during conceptual stage.	Not applicable.	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Proposed.	Baseline information on existing plantation within the ML area is submitted.	
8g	Survival rate	Not specified.	Nil	
8h	Water sprinkling on roads to control airborne dust	Proposed.	Nil	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mines area is good. Mining operation is not commenced so far, deposit is virgin.		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Mining operation is not commenced so far. Mine Code is not generated.		Compliance of Rule 45 is not applicable as of now.
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	Nil		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Nil		
9d	Scrutiny of Annual return on afforestation	Nil		
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil		
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil		
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Nil		

9i	Scrutiny of Annual return on fixed assets	Nil		
9k	Scrutiny of Annual return on mining machineries	Nil		

Date:

(KRISHNENDU CHATTERJEE)
Indian Bureau of Mines
