

MCDR INSPECTION REPORT

General

S. N.	Particulars	Details
1	Name of the Mine	Chikla Mine
	Date of Inspection	6/9/2018
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	150.64 ha Forest –70.07 Ha, Non Forest -80.58 Ha)
3	Minecode	40MSH05001
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5711/2011
5	Name of the lessee, Address, phone, email and fax number	MOIL Limited, MOIL Bhawan, I A Katol Road, Nagpur 440013. Phone 0712 2592272
6	Village	Chikla
7	Taluka/Mandal	Tumsar
8	District	Bhandara
9	Pincode	441907
10	State	Maharashtra
11	Post office	Sitasaongi
12	Nearest police station	Ghobarwahi
13	Nearest Railway station	Ghobarwahi
14	Date of Grant of Mining Lease	--
15	Date of Execution	--
16	Date of opening of Mine	---
17	Date of first Renewal, if applicable and its period & expiry	1/7/2002 to 30/6/2022
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	D Shome, Director (P&P), MOIL LTD, I A Katol Road, Nagpur 440013. Phone 0712 2592272 13.09.2017
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Rajesh Bhattacharya Chikla Mine, P.O.Sitasaongi, , Tahsil : Tumsar, Dist. Bhandara, Pin Code:441907 Rajeshbatta2002@ yahoo.com 07183-220515
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri A.K Chukse, 07114 202127 01.02.2017 ShriA. K. Chauksey Chikla Mine, P.O.Sitasaongi, , Tahsil : Tumsar, Dist. Bhandara, Pin Code:441907 mm.ch@moil.nic.in 07183-220515
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Prashant Dakre Chikla Mine, P.O.Sitasaongi, , Tahsil : Tumsar, Dist. Bhandara, Pin Code:441907
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.	Renewal under rule 22 MCR1960 30/05/2003

		Mining scheme rule 12 MCDR1988 22/7/2008 Mining scheme rule 12 MCDR1988 22/7/2013 MP review under rule 17(1) MCR2016 30/6/2017
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan under rule 17(1) of MCR-2016 is approved on 30/6/2017 for the period 2017-18 to 2021-22
27	Mineral(s) granted in lease and proved for mining	Manganese ore
28	Method of Mining(Open cast, Underground)	Underground and dump mining
29	Category (Fully Mechanised, Others or Manual)	mechanized
30	Captive/Non Captive	Non captive

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2	2	
1b	Exploration over lease area for Geological axis 1 or 2.	G1	G1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Proposed exploration to be done by M/s MOIL Ltd. (lessee itself).		Exploration done by M/s MOIL Ltd. with an expenditure of Rs 2301846/=
1d	Balance area to be explored to bring Geological axis in 1 or 2	At -770 Level.		
1e	Balance reserves as on 01.04.2018	2392927 T		Under 111 and 121
1f	General remarks of inspecting officer on geology, exploration etc.	08 no of boreholes are proposed to be drilled at different levels, during the scheme period from 2017-18 to 2021-22		

Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of UG development w.r.t. lease area	Two types of Developments were proposed in the approved SOM Underground and Dump working:	yes	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No proposal		
2c	Stripping ratio or ore to OB ratio	nil	nil	
2d	Quantity of topsoil generation in m3	No top soil generation as method of working is underground.		
2e	Quantity of overburden generation in m3	8155m3	9528	
2f	Underground development (in RMT)	1010	1308.35	
	General remarks of inspecting officer on development w.r.t. type of deposit etc	Presently the workings are limited to Underground and dump workings only		

Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	nil	nil	OC mining not carried out
3b	Quantity of ROM mineral production proposed	175000	162745	
3c	Recovery of salable/usable mineral from ROM production	80 %	yes	
3d	Quantity of mineral reject generation	nil	nil	
3e	Grade of mineral reject generation and threshold value declared	nil	nil	Threshold value 10%Mn
3f	Quantity of sub-grade mineral generation	35000	7625	
3g	Grade of sub-grade mineral generation	17-18%	yes	
3h	Manual / Mechanised method adopted for segregating from ROM	Crushing and screening plant installed	Both Manual (Short hand pick Method) & mechanical	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	nil		
3j	Provision of drilling & blasting in mineral benches	Proposed in underground levels for extraction of ore	yes	
3k	Provision of mining machineries in mineral benches	For underground workings, 16 cft and 24 cft tubs are there which shall be loaded manually with the blasted muck. These tubs shall be hauled through Loco and hoisted through cage winding system at the mine	yes	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	nil	nil	
3m	Total area covered under excavation/pits	No additional area proposed during the period from 2017-18 to 2021-22		
3n	Ore to OB ratio for the pit/mine during the year	nil	nil	
3o	Total area put in use under different heads at the end of year	21. 0395 Ha		

SN	Item	Proposals	Actual work	Remarks
3p	Production of ROM mineral during last five-year period, as applicable	2013-14: 240587 T 2014-15: 262574 T 2015-16: 242552 T 2016-17: 241080 T 2017-18 175000 T —	95142T 105069 115683 129515 162745	Proposals include opencast ROM proposals also and actual is for underground only as working is limited to underground mining and dump working.
3q	General remarks of inspecting officer on method of mining etc.	Method of mining is underground by cut and fill method and also dump workings for exploitation of ore.		

Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes, separate dumps for waste and mineral rejects/sub- grade is proposed	yes	
4b	Location of topsoil, OB & mineral reject dumps	WD-1, and WD-2 (northern and southern side)	yes	
4c	Number of dumps within lease area and outside lease area	13 waste dumps 03 black dumps		
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	nil.	nil	No opencast working
4e	Number of active & alive dumps	09 waste dumps 03 black		During 17-18 year WD-5 active
4f	Number of dead dumps	04 inactive		WD-1to WD-4
4g	Number of dumps stabilised	04		WD-1to WD-4
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	To be built at the toe of dumps	yes	
4j	Number of settling ponds	nil	nil	
4k	Specific comments of inspecting officer on waste dump management	There are total 16 dumps within the lease area, out of which 4 dumps are stabilized through plantation. Dumps are located within pit limits for open cast that will be shifted upon commencement of opencast operations. Dumps located at the ML boundary such as WD-1,2,8,9 etc are equipped with protective structures like garland drains and retaining walls at the toe end.		

Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	nil	nil	
5b	Area under backfilling of mined out area	nil	nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	nil	nil	
5d	Total area fully reclaimed & rehabilitated	nil	nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc	Backfilling has not yet started as mineral is available in the ML area and opencast mining is yet to commence .Reclamation and rehabilitation works was done over the inactive dumps.		

Progressive Mine Closure Plan

SN	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.	yes	yes	
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 v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	nil	nil	
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	nil nil	nil nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	2000 saplings for the year 2017-18		
6e	Compliance of Environmental monitoring (core zone & buffer zone)	All the Environmental parameters are being monitored and are within the limits		
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Progressive closure for available land/area is being done properly. Till permission for opencast workings is not obtained, mined out area may not be available for any backfilling and reclamation activities. Environment monitoring is also being		

SN	Item	Proposals	Actual work	Remarks
		done properly as per the guidelines in this regard.		

Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	yes	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual and mechanised	yes	
7c	Different grade of mineral sorted out at mines	35-46% Mn containing Mineral is being dispatched and 10-20% Mn is being stacked		
7d	Any beneficiation process at mines	Crushing and screening plant for size-wise and grade-wise recovery of ROM		
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Mineral is being extracted from underground and from dump working. Sub- grade/Mineral rejects presently not saleable having 10-20% Mn is being stacked separately for future usage.		

Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	nil	nil	
8b	Concurrent use or storage of topsoil	nil	nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for waste, mineral rejects/sub-grade	yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste rock is being used in U/G for back filling		Around 30% of the waste generated from underground is being used for filling purposes in underground and rest 70% is brought to the surface for dumping
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation is being done from time to time and till date 336686 saplings are planted by the lessee.		
8f	Baseline information on existence of plantation & additional plantation	2000 Saplings		
8g	Survival rate	80%		
8h	Water sprinkling on roads to control airborne dust	By using water tankers		
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	To keep the aesthetic beauty ,336686 saplings are planted till date		

Compliance of Rule 45

SN	Item	Comments	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto july 2018. A.R. submitted upto 2017-18	

SN	Item	Details given in A.R.	Observation of I/Officer	Remarks
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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes	Provided	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	yes	Provided	
9d	Scrutiny of Annual return on afforestation	yes	Provided	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	yes	Provided	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	Provided	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	yes	Provided	
9i	Scrutiny of Annual return on fixed assets	yes	Provided	
9k	Scrutiny of Annual return on mining machineries	yes	Provided	

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

A) Status of Violation of earlier inspection nil

B) violation observed during the inspection nil

KEWAL KRISHAN

Sr. Mining Geologist

(Name of inspecting officer with designation and date)