

MCDR INSPECTION REPORT

General

S. N.	Particulars	Details
1	Name of the Mine	Kandri Mine
	Date of Inspection	13/9/2017
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	83.06 Ha Forest – 37.82Ha, Non Forest -45.24 Ha
3	Minecode	40MSH14008
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, I A Katol Road, Nagpur 440013. Phone 0712 2592272
6	Village	Kandri
7	Taluka/Mandal	Ramtek
8	District	Nagpur
9	Pincode	441401
10	State	Maharashtra
11	Post office	Kandri
12	Nearest police station	Munsar
13	Nearest Railway station	Ramtek
14	Date of Grant of Mining Lease	1898 year by CPMO
15	Date of Execution	1898 year by CPMO
16	Date of opening of Mine	1898 year by CPMO
17	Date of first Renewal, if applicable and its period & expiry	1982 year
18	Date of second Renewal, if applicable and its period & expiry	18.02.2005, 20 Years 01.07.2002 to 30.06.2022
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	Shri D Shome, Director (P&P) MOIL LTD, I A Katol Road, Nagpur 440013. Phone 0712 2592272 06.11.2015
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri R Bhattacharya, Chikla mine, Moil ltd, Maharashtra Mines, Tumsar thesil, Bhandara dist. 07183-220231, 09.04.2017 at Chikla Mine
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri R A Khan, Kandri Mine, Ramtek Tehsil, Nagpur dist 07114 202141, 01.02.2017 at Kandri Mine
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri D V Ratnaparkhi, Chief (Mines) B. E (Mining) with 1 st class certificate Kandri Mine, Ramtek Tehsil, Nagpur dist 09.06.2014 at Kandri mine
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Shri Anil Singh Rajput, Manager (Geo) 06.06.2017 at Kandri mine

25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	NGP/MN/MPLN-259/NGP dtd 01/04/2003
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	NGP/MN/MOLN-259/NGP dtd 16/01/2013
27	Mineral(s) granted in lease and proved for mining	Manganese ore
28	Method of Mining(Open cast, Underground)	Underground Mine and dump mining
29	Category (Fully Mechanised, Others or Manual)	Mechanised
30	Captive/Non Captive	Non captive

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

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2015-16 : 8 2016-17 : 8	2015-16 : 3 2016-17 : 3	
1b	Exploration over lease area for Geological axis 1 or 2.	G1		
1c	Exploration Agency & Expenditure in lakh Rupees during the year	MOIL LTD 49,20,000/-		
1d	Balance area to be explored to bring Geological axis in 1 or 2	15 % of total lease area is yet to be explored in G1		
1e	Balance reserves as on 01.04.2017	1568451 T		
1f	General remarks of inspecting officer on geology, exploration etc.	Back log boreholes will be drilled in the year 2017-18 by outsourcing.		

Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of U/G development w.r.t. lease area	at -150' L -250' L & -350' L	As per proposal	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Yes	nil	
2c	Stripping ratio or ore to OB ratio	1:10	nil	OC mining not carried out
2d	Quantity of topsoil generation in m3	nil		
2e	Quantity of overburden generation in m3	15000m3	nil	
2f	Underground development (in RMT)	347		
	General remarks of inspecting officer on development w.r.t. type of deposit etc	Development work carried out only at U/G only, OC mining not carried out		

Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	nil	OC mining not carried out
3b	Quantity of ROM mineral production proposed from underground	108600	76372	
3c	Recovery of salable/usable mineral from ROM production	83% (including fines)	yes	approximately
3d	Quantity of mineral reject generation	nil		
3e	Grade of mineral reject generation and threshold value declared	<10 %	<10 %	

SN	Item	Proposals	Actual work	Remarks
3f	Quantity of sub-grade mineral generation	17230 T	8182 T	
3g	Grade of sub-grade mineral generation	10-24 %		
3h	Manual / Mechanised method adopted for segregating from ROM	Manual		
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	nil		
3j	Provision of drilling & blasting in mineral benches	Yes	nil	The said activities were proposed in case of OC mining. But the same could not be started by the party
3k	Provision of mining machineries in mineral benches	Yes	nil	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	nil	
3m	Total area covered under excavation/pits	12.01 HA		
3n	Ore to OB ratio for the pit/mine during the year	1:10	0	
3o	Total area put in use under different heads at the end of year	59.86 ha.		
3p	Production of ROM mineral during last five-year period, as applicable	2012-13 95600 2013-14 96600 2014-15 95350 2015-16 94750 2016-17 108600	71460 71294 76336 69794 76372	
3q	General remarks of inspecting officer on method of mining etc.	It is an underground mine and the stoping operations are being carried out overhand flat back cut and fill method. The proposed OC mining could not be started by the party.		

Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	Yes	
4b	Location of topsoil, OB & mineral reject dumps	WD N950 TO 1150 E 220 TO 780 SGD N 950 TO 1010 E 880 TO 1050	As per proposal	WD - Waste dump SGD – sub grade dump
4c	Number of dumps within lease area and outside lease area	11		
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North East and North West side	As per proposal	
4e	Number of active & alive dumps	05		03 Black dump 01 waste dump 01 mineral reject dump
4f	Number of dead dumps	06		
4g	Number of dumps stabilized	nil		
4h	Whether Retaining wall or garland drain all along dumps are there	nil		Already done in the past years only maintenance is

			carried out from time to time
4i	Length of Retaining wall or garland drain all along dump	nil	
4j	Number of settling ponds	nil nil	
4k	Specific comments of inspecting officer on waste dump management	There are 5 no active/alive dumps. In case of dead dumps it is observed that the plantations is done there and are stabilized properly.	

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	No proposal of backfilling		

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		
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 ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Stope blocks at -250' L & -350' L from N 370 TO N470 & E 534 TO E 740 Waste rock and sand is used for back filling in U/G nil nil	yes Waste rock and sand is used for back filling in U/G nil nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation	nil	nil	

SN	Item	Proposals	Actual work	Remarks
	ii) Area rehabilitated (ha) iii) Method of rehabilitation			
6e	Compliance of Environmental monitoring (core zone & buffer zone)	All environmental parameters are monitored quarterly and are within the limits	All environmental parameters are monitored quarterly and are within the limits	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	It is being carried out as per the proposal		

Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting	Grade wise sorting	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	09 grades of different size and grade (25% -47 % Mn)	yes	
7d	Any beneficiation process at mines	nil	nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Separate mineral dumps were available with in the lease area and grade wise mineral sorting are done manually.		

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)	02	As per proposal	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Used for back filling in underground and pits	As per proposal	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	nil	nil	
8f	Baseline information on existence of plantation & additional plantation	60751 saplings are planted till 01.04.2017		1500 sampling during the year
8g	Survival rate	80 %	80 %	
8h	Water sprinkling on roads to control airborne dust	By using water tankers	As per proposal	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	60751 saplings are planted till 01.04.2017 to maintain the aesthetic beauty around the mining area.		

Compliance of Rule 45

SN	Item	Comments	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto Aug 2017 A.R. submitted upto 2016-17	

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

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)

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