

MCDR INSPECTION REPORT**General**

S. N.	Particulars	Details
1	Name of the Mine	Old SatukMine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	8.684 ha Forest- Nil , Non forest- 8.684 ha
3	Mine code	40MSH14015
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 LTD, 1-A Katol Road, Nagpur 0712-2806100
6	Village	Satuk
7	Taluka/Mandal	Paraseoni
8	District	Nagpur
9	Pincode	441106
10	State	Maharashtra
11	Post office	Satuk
12	Nearest police station	Nagardhan
13	Nearest Railway station	Ramtek
14	Date of Grant of Mining Lease	1903
15	Date of Execution	1903
16	Date of opening of Mine	1903
17	Date of first Renewal, if applicable and its period & expiry	-
18	Date of second Renewal, if applicable and its period & expiry	Lease I : 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 T.K.Pattnaik, Director (commercial) MOIL Bhavan, Katol Road, Nagpur. Dt of appointment as owner: 04.09.16
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri A.V.Masade, MOIL LTD, Munsar mine. PH:07114-202501
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri Manoj Kumar,Beldongrimine, Satuk post, Paraseonithesil, Nagpur dist. 07102-202022
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri D.Thakur, Manager (Mines), Diploma in mining, Dt of joining: oct 2016
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.	NGP/MN/MPLN-258 dt03.06.2005.
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/MPLN-525 /NGP dt10.01.2013
27	Mineral(s) granted in lease and proved for mining	Manganese ore
28	Method of Mining(Open cast, Underground)	Open cast
29	Category (Fully Mechanised, Others or Manual)	Semi mechanized(A-OTFM)
30	Captive/Non Captive	Non captive

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year 2014-15 2015-16	1 Nil	1 Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	1	1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NA	NA	No area left for further exploration with in the lease
1e	Balance reserves as on 01.04.2016		518681 tonnes	
1f	General remarks of inspecting officer on geology, exploration etc.			No exploration proposals during the year 2015-16.

Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	O/c Dev for 2015-16 is 75078 cum	O/c Dev for 2015-16 is 34702 cum	Lessee informed that the shortfall in development is due to less demand of Mn ore in market
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Topsoil- 01 Ob-02 Mineral-01	Topsoil- 01 Ob-02 Mineral-01	
2c	Stripping ratio or ore to OB ratio	1:10	1:10	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	75078	34702	Due to less demand of Mn ore in market
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.			Less than 50% of the proposed development has achieved for the year 2015-16.

Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	01	01	
3b	Quantity of ROM mineral production proposed 2015-16	39347	12376	Due to less demand of Mn ore in market
3c	Recovery of salable/usable mineral from ROM production	39347(50%)	12376 (25%)	Due to rock bands and intrusions the recovery is less.
3d	Quantity of mineral reject generation	5113	9221	
3e	Grade of mineral reject generation and threshold value declared	10-12%	<12%	
3f	Quantity of sub-grade mineral generation	19675	9221	
3g	Grade of sub-grade mineral generation	17-18%	17-18%	
3h	Manual / Mechanised method adopted for segregating from ROM	Semi mechanized	Semi mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-	No	No	Production is less due to less market demand. Recovery

SN	Item	Proposals	Actual work	Remarks
				encounter of internal rack bands.
3j	Provision of drilling & blasting in mineral benches	NA	NA	
3k	Provision of mining machineries in mineral benches	NA	NA	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	
3m	Total area covered under excavation/pits	3.27	3.27	
3n	Ore to OB ratio for the pit/mine during the year	1:10	1:10	
3o	Total area put in use under different heads at the end of year	4.356 ha	4.356 ha	
3p	Production of ROM mineral during scheme period, as applicable	120184	68200	
3q	General remarks of inspecting officer on method of mining etc.			

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	Dumped on footwall side of lease i.e north west	Dumped on footwall side of lease i.e north west	
4c	Number of dumps within lease area and outside lease area	05 (waste & mineral reject dump)	05 (waste & mineral reject dump)	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Details given at end of report	Details given at end of report	See Note 4d: at the end of the report.
4e	Number of active & alive dumps	03	03	
4f	Number of dead dumps	02	02	
4g	Number of dumps stabilised	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there	Yes	Yes	Garland drains already existing
4i	Length of Retaining wall or garland drain all along dump	Nil	Nil	Garland drains already existing
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			

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	NA	NA	No back filling is proposed in this scheme
5b	Area under backfilling of mined out area	NA	NA	
5c	Consistent use of topsoil for restoration or	NA	NA	

5d	Total area fully reclaimed & rehabilitated	NA	NA	
5e	General remarks of inspecting officer on backfilling, reclamation etc			No proposals in the approved SoM

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.	NA	NA	No proposals
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	i) Nil ii) Nil iii) Nil iv) Nil v) Nil vi) Nil	I. Nil II. Nil III. Nil IV. Nil V. Nil VI. Nil	Plantation will be done after mine closure.
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	i) Nil ii) Nil iii) Nil iv) Nil v) Nil	i) Nil ii) Nil iii) Nil iv) Nil v) Nil	Voids will be used as water reservoir in the future
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) Nil ii) Nil iii) Nil	i) Nil ii) Nil iii) Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of air, water and noise is done	Quarterly monitoring of air, water and noise is done	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations			Done as per approved document

Mineral Conservation

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Grade wise sorting within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual	Manual	
7c	Different grade of mineral sorted out at mines	Yes	Yes	
7d	Any beneficiation process at mines	No	No	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues			Storage area of different grade of mineral further needs to be improved by mine management.

Environment

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NA	NA	As per approved SoM
8b	Concurrent use or storage of topsoil	No proposal in this scheme	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Waste rock is dumped separately in earmarked dumps	Waste rock is dumped separately in earmarked dumps	Will be used for filling the voids during mine closure.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Restoration will be done during mine closure period.	Restoration will be done during mine closure	
8f	Baseline information on existence of plantation & additional plantation	Nil	Nil	
8g	Survival rate	NA	NA	No proposal
8h	Water sprinkling on roads to control airborne dust	Yes	Sprinklers and water tankers are deployed	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Quarterly monitoring of environmental parameters as per as per approved document is being done in core and buffer zones

Compliance of Rule 45

SN	Item	Comments	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto sept 2016 A.R. submitted for the year 2015-16	Rule 45 MCRD are complied with

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	0		Mine work is controlled by Beldongri Manager and no separate recruitment for this mine

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Available as given in annual return	Not applicable	
9d	Scrutiny of Annual return on afforestation	Available as given in annual return	No proposals	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Available as given in annual return	As per returns received	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Available as given in annual return	As per returns received	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Available as given in annual return	As per returns received	
9i	Scrutiny of Annual return on fixed assets	Available as given in annual return		
9k	Scrutiny of Annual return on mining machineries	Available as given in annual return		

Note 4d:

Dump No.	Dump type TS/OB/MR/SGM	Area (Hect.)	Height (M)	Angle
WD-1	MR	1.52	8.00	70
WD-2	OB	0.49	12	72
WD-3	OB	0.08	9	65
BD-4	SGM	0.05	6	68
BD-5	SGM	0.14	1.8	65

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

This mine was earlier inspected on 30/01/2016 for MCDR. There no outstanding violations on this mine. During the current inspection there are no violations pointed out/observed.

Date:

Dr. Omkesha Murthy MG
Senior Mining Geologist