MCDR INSPECTION REPORT

General

S. N.	Particulars	Details
1	Name of the Mine	Munsar Mine
	Date of Inspection	29.1.2018
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	108.64 (Total lease area of all the leases .97 Ha,5.74 ha, 25.15 ha and 108.64 ha Forest –22.24 Ha, Non Forest -118.25 Ha)
3	Minecode	40MSH14010
4	IBM Registration Number under rule 45 of MCDR, 1988	5711
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	Munsar
7	Taluka/Mandal	Ramtek
8	District	Nagpur
9	Pincode	441106
10	State	Maharashtra
11	Post office	Kandri
12	Nearest police station	Munsar
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	1962
18	Date of second Renewal, if applicable and its period & expiry	1982
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 R Bhattacharya, Chikla mine, Moil ltd, Maharashtra mines,Tumsar thesil, Bhandara dist. 07183-220231 09.04.2017
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri D R Dekate, Munsar mine, Munsar village, Ramtek tehsil, Nagpur dist 07114 202127 01.02.2017
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Sachin Ramteke, Dy.Chief (Mines) B. E (Mining) & MBA (Marketing), Exp: 12 years, Munsar mine, Munsar village, Ramtek tehsil, Nagpur dist 11.06.2013
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

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-257/NGP, Dated 06/05/2003
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/MPLN-257/NGP, Dated 16/04/2013
27	Mineral(s) granted in lease and proved for mining	Manganese ore
28	Method of Mining(Opencast, 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	nil	nil	
1b	Exploration over lease area for Geological axis 1 or 2.	nil	nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	nil		
1d	Balance area to be explored to bring Geological axis in 1 or 2	15% of the year is yet to be explored.		
1e	Balance reserves as on 01.04.2017	239691	13T	
1f	General remarks of inspecting officer on geology, exploration etc.	Based on the geology of the area the balance is to be explored as per guidelines.		

Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of UG development w.r.t. lease area	-30'L Ch 800 to ch. 1400 & CH.3300 TO 3600	-30'L CH 2250 TO 3250	
		-130'L CH.1500 TO CH. 800 CH 3050 TO 4050	-130'L CH 2450 TO CH 2850	
		-230'L CH.1500 TO 3250	-230'L CH 2450 TO CH 2850	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	yes	no	OC mining
2c	Stripping ratio or ore to OB ratio	1:10	NiL	not carried out
2d	Quantity of topsoil generation in m3	ni	1	
2e	Quantity of overburden generation in m3	11200m3	nil	
2f	Underground development (in RMT)	2609	659.90	
	General remarks of inspecting officer on development w.r.t. type of deposit etc	Development work was carried as per the proposal except OC mining.		

Exploitation

—- <u>r</u>						
	SN	Item	Proposals	Actual work	Remarks	
	3a	Number of pits proposed for	01	nil	OC	
		production			mining	
					not	
					carried	
					out	

SN	Item	Proposals	Actual	work	Remarks
3b	Quantity of ROM mineral	91680+23000clean ore	29737-	+22285clean ore from dump	
	production proposed	from dump			
3c	Recovery of salable/usable	60 %		61 %	
	mineral from ROM production				
3d	Quantity of mineral reject generation	21330		7333	
3e	Grade of mineral reject generation and threshold value declared	<10 %		<10 %	
3f	Quantity of sub-grade mineral generation	12000		6932	
3g	Grade of sub-grade mineral generation	10-20 %		10-20 %	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual		Manual	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject		NA		
3j	Provision of drilling & blasting in mineral benches	Yes		nil	The said activities
3k	Provision of mining machineries in mineral benches	Yes		nil	were proposed
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes		nil	in case of O/C mining but the same could not be started by the party.
3m	Total area covered under excavation/pits		8.0h	a	p.u.sj.
3n	Ore to OB ratio for the pit/mine during the year	1:13		nil	
30	Total area put in use under different heads at the end of year	67.60 Ha		67.60 Ha	
3p	Production of ROM mineral	ROM +ore from o	lump	ROM + ore from dump	Returns
_	during last five-year period, as	2012-13 - 50020+29000	<u> </u>	28135+28583	are being
	applicable	2013-14 - 58350+32000		23202+31227	submitted
		2014-15 - 58350+34000		18467+33090	jointly
		2015-16 – 58350+33000 2016-17 – 91680+23000		23194+32388 29737+22285	for all the four
		2010-17 - 91000+23000		29131+22263	leases.
3q	General remarks of inspecting	It is an underground mine	and the	stoping operations are being c	
	officer on method of mining etc.			ethod. No production from ope	

Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB &	yes	yes	
	mineral reject (Rule 32, 33)			
4b	Location of topsoil, OB & mineral reject	Ch 100 to ch 200	Ch 100 to ch 200	
	dumps	Ch -3600 to Ch.4800	Ch -3600 to Ch.4800	
4c	Number of dumps within lease area and	1	2	
	outside lease area			

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NW	yes	
4e	Number of active & alive dumps	06		04 mineral dumps and 02 waste dumps
4f	Number of dead dumps	C	06	
4g	Number of dumps stabilished	06		
4h	Whether Retaining wall or garland drain all along dumps are there	nil	nil	
4i	Length of Retaining wall or garland drain all along dump	nil	nil	
4j	Number of settling ponds	nil	nil	
4k	Specific comments of inspecting officer on waste dump management	Retaining wall and garland drain are already made earlier. only maintence is done from time to time.		

Solid Waste Management-Backfilling

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral	nil	nil	
	from mined out area before starting			
	backfilling			
5b	Area under backfilling of mined out area	nil	nil	
5c	Concurrent use of topsoil for restoration	nil	nil	
	or rehabilitation of mined out area (Rule			
	32)			
5d	Total area fully reclaimed & rehabilitated	nil	nil	
5e	General remarks of inspecting officer on	No proposal of backfilli	ng	
	backfilling, reclamation etc			

Progressive Mine Closure PlanSN Item

SN	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule	yes	yes	
	23E(2). Details should be given in the			
	format as given in Annexure-20.			
6b	Management of worked/mined out benches	nil	nil	
	i) Area available for rehabilitation (ha)			500 Saplings
	ii) Afforestation done (ha)			are planted
	iii) No. of saplings planted during the year			along road in
	iv) Cumulative no. of plants			the year 2016-
	v) Any other specific method of			17
	rehabilitation			
	vi) Cost incurred on watch & care during			
	the year			
6c	Compliance on reclamation and			
	rehabilitation by backfilling	G. 11 1 C GYY	G. 11 1 C GYY	D 1 6311
	i) Voids available for backfilling (L X B	Stope block from CH	Stope block from CH	Back filling by
	XD)	2850 to CH 3050 at	2850 to CH 3050 at	sand stowing
		70'level	70'level	
	ii) Void filled by waste/tailings	Waste rock and sand	Waste rock and sand	
	iii) Afforestation on the backfilled area	nil	nil	
	iv) Rehabilitation by making water	nil	nil	

SN	Item	Proposals	Actual work	Remarks
	reservoir			
	v) Any other specific means			
6d	Compliance of Rehabilitation of waste	nil	nil	
	land within lease			
	i) Afforestation			
	ii) Area rehabilitated (ha)			
	iii) Method of rehabilitation			
6e	Compliance of Environmental monitoring	All the Environmental	parameters are being	
	(core zone & buffer zone)	monitored and are wi	thin the limits	
6f	General remarks of inspecting officer on	It is being carried out a	as per proposal. 500 Sap	lings are planted
	PMCP compliance & progressive closure	along road in the year 2016-17		
	operations			

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	yes	
7c	Different grade of mineral sorted out at mines	14 grades of different grade and size (25% -38 % 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	yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	For back filling in underground	yes	
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	2625 Saplings	As per proposal	79320 saplings are planted till date
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	To keep the aesthetic beauty ,79320 saplings are planted till date		

Compliance of Rule 45

SN	Item	Comments	Remarks
9a	Status of submission of Monthly and	M.R. Submitted jointly upto Dec 2018 for all	
	Annual returns	the four leases	
		A.R. submitted jointly upto 2016-17 for all the	
		four leases	

SN	Item	Details given in A.R.	Observation of	Remarks

			I/Officer
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)