

MCDR INSPECTION REPORT

General

S. N.	Particulars	Details
1	Name of the Mine	Gumgaon Mine
	Date of Inspection	6/7/2018
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	35.97 ha
3	Mine code	40MSH14049
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	Gumgaon, Khapa, Rajna & Teghai
7	Taluka/Mandal	Saoner
8	District	Nagpur
9	Pincode	441101
10	State	Maharashtra
11	Post office	Khapa
12	Nearest police station	Khapa
13	Nearest Railway station	Saoner
14	Date of Grant of Mining Lease	1900
15	Date of Execution	1900
16	Date of opening of Mine	1900
17	Date of first Renewal, if applicable and its period & expiry	-
18	Date of second Renewal, if applicable and its period & expiry	30.06.2000 TO 29.06.2020 Renewal 30.6 2020 to 29.6.2050
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	-
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Dipankar Shome, Director (Production & Planning) MOIL Bhavan, Katol Road, Nagpur. Dt of appointment as owner: 22.02.17
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:7888048660. Dt of appointment as agent- 08.04.2018
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri A.R.Guladhe, Gumgaon mine, Khapa Post, Saoner Thesil, Nagpur-dist. Ph- 9923757045 Date of joining 04/04/2018
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri V.M.Khedikar, Dy.Chief (Mines), with Ist class M.M Certificate Gumgaon mine, Dt of joining: 14.02.17
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Arijit Mitra ,Manager (Geo) Dt of joining 01.05.2017
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-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-258 /NGP dt 10.07.2013 NGP/MN/MPLN-258/NGP-2017 dt- 20/06/2017(lease I – 48.046 Ha) NGP/MN/MPLN-361/NGP-2017 dt- 07/06/2017(lease II – 1.33Ha) NGP/MN/MPLN-493/NGP-2017 dt- 12/07/2017(lease III – 35.97 Ha)

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)	Mechanised
30	Captive/Non Captive	Non captive

Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year 2015-16 2016- 17 2017-18	8 10 3	2 5 3	Due to major break down of departmental machine. The back log boreholes will be done by outsourcing in next year.
1b	Exploration over lease area for Geological axis 1 or 2.	1	1	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Moil ltd Rs.33 lakhs	Moil ltd Rs.34.90 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	21%		In this particular area the exploration will be done by departmental drilling
1e	Balance reserves as on 01.04.2017	-		As on 1/4/2018
1f	General remarks of inspecting officer on geology, exploration etc.	54 11 583 T Based on the nature of deposit few boreholes can also be drilled to prove the deposit at deeper level		

Development

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	UG Dev for 2017-18 is 150 mtr HR-50 X CUT- 25 OD- 50 WINZES- 25	UG Dev. Is 58 m in the year 2017-18 HR-17 X CUT- 11 OD- 0 WINZES- 30	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	nil	nil	
2c	Stripping ratio or ore to OB ratio	nil	nil	
2d	Quantity of topsoil generation in m3	nil	nil	
2e	Quantity of overburden generation in m3	nil	nil	.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development is being carried out as per the proposal		

Exploitation

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	nil	nil	
3b	Quantity of ROM mineral production proposed	<u>(U/G)</u> ROM- 38000	<u>(U/G)</u> ROM- 28643	For 35.94ha lease
3c	Recovery of salable/usable mineral from ROM production	<u>(U/G)</u> 30400	<u>(U/G)</u> 20050	(E.C -90,000 T/annum) In the western

SN	Item	Proposals		Actual work		Remarks
						side of lease the thickness of the ore is around 50 m due to which the recovery is good.
3d	Quantity of mineral reject generation (waste rock)	3800		1718.0		
3e	Grade of mineral reject generation and threshold value declared	0-10%		0-10%		
3f	Quantity of sub-grade mineral generation	3800		1768		
3g	Grade of sub-grade mineral generation	10-24%		10-24%		
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	nil		nil		
3j	Provision of drilling & blasting in mineral benches	nil		nil		
3k	Provision of mining machineries in mineral benches	nil		nil		
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	nil		nil		
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	28.123 Ha		yes		
	Production of ROM mineral during last five-year period, as applicable	2013-2014 2014-2015 2015-2016 2016-2017 2017-2018	97,000 1,14,000 1,04,000 1,13,000' 0	57,835 61,385 73,742 85,942 0	Annual return not submitted by the party for year 2017-18, Advise letter send to State DGM to take action under rule 45(7)(a) of MCDR 2017	
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				

Solid Waste Management-Dumping

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	01	01	1 waste dump.
4b	Location of topsoil, OB & mineral reject dumps	E/W 1644 -1724 S/N 1856 1956	As per proposal	This is a Waste dump.
4c	Number of dumps within lease area and outside lease area	01	01	1 active dumps
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	nil	nil	
4e	Number of active & alive dumps	01	01	01 waste dump
4f	Number of dead dumps	nil	nil	
4g	Number of dumps stabilized	nil	nil	
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	There is only one active dump in the area. The retaining wall and garland drains are already made earlier, only maintenance is carried out from time to time.		

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	No reclamation is proposed in current year.
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			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	<table><tr><th>LEVEL</th><th>HORZ DEV</th><th>VERT DEV</th></tr><tr><td>(-) 100'L</td><td>25</td><td>25</td></tr><tr><td>(-) 200'L</td><td>100</td><td>-</td></tr><tr><td>(-) 300'L</td><td>-</td><td>-</td></tr><tr><td>(-) 400'L</td><td>-</td><td>-</td></tr><tr><td>TOTAL</td><td>125</td><td>25</td></tr></table>			LEVEL	HORZ DEV	VERT DEV	(-) 100'L	25	25	(-) 200'L	100	-	(-) 300'L	-	-	(-) 400'L	-	-	TOTAL	125	25	<table><tr><th>LEVEL</th><th>HORZ DEV</th><th>VERT DEV</th></tr><tr><td>(-) 100'L</td><td>-</td><td>30</td></tr><tr><td>(-) 200'L</td><td>28</td><td>-</td></tr><tr><td>(-) 300'L</td><td>-</td><td>-</td></tr><tr><td>(-) 400'L</td><td>-</td><td>-</td></tr><tr><td>TOTAL</td><td>28</td><td>30</td></tr></table> <u>Between – 200'L and -100'L:-</u> Stope block – 90x 30 x 10 (Ch37.50-Ch40.50) <u>Winges between (-)200'L and (-)100'L:-</u> A)WZ - 21 (30MTR)			LEVEL	HORZ DEV	VERT DEV	(-) 100'L	-	30	(-) 200'L	28	-	(-) 300'L	-	-	(-) 400'L	-	-	TOTAL	28	30
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		By sand stowing and waste rock.			Yes																																						
					nil																																						

SN	Item	Proposals	Actual work	Remarks
	iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	nil		
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	nil	nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of all environmental parameter is done	yes	
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	Voids available in the area are being filled by sand stowing and waste rock. The environment monitoring is also being carried out as per proposal.		

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	5 different grades produced between (25-47%) Mn>42%,-75-+25mm- (Lump) Mn(38-40)%,-25mm-+6mm(Lump) Mn(30-35)%,-75-+25mm-(Lump) Mn(30-35)%,> - 6mm- (Fines) Mn<20%,- (subgrade) Mn(25%)	As per proposal.	
7d	Any beneficiation process at mines	nil	nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Separate mineral dumps are available with in the lease area and grade wise mineral sorting is 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)	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 and partially used in backfilling.	yes	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	1000	yes	
8f	Baseline information on existence of plantation & additional plantation	yes. .	yes.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	For haulage road and dump working	yes	

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	A cumulative of 124930(lease I,II andII) saplings are planted on waste dumps and outside mine area till date to maintain the aesthetic beauty around the lease area.	
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Compliance of Rule 45

SN	Item	Comments	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto June 2018 Not submitted	Returns are being submitted jointly for all the three lease

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	nil	nil	Advise letter send to State DGM to take action under rule 45(7)(a) of MCDR 2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	nil	nil	
9d	Scrutiny of Annual return on afforestation	nil	nil.	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	nil	nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	nil	nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	nil	nil.	
9i	Scrutiny of Annual return on fixed assets	nil	nil	
9k	Scrutiny of Annual return on mining machineries	nil	nil	

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 45(5)c

KEWAL KRISHAN

Sr. Mining Geologist

(Name of inspecting officer with designation and date)