

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/YTL/LST-63/NGP

Mine code : 38MSH26039

- (i) Name of the Inspecting : **219**) **Rajesh M Khadse**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Dhirendra Kumar Singh
Official with
Designation
- (iv) Date of Inspection : 08-SEP-21
- (v) Prev.inspection date : 30-AUG-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **ADEGAON (9.97H)**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MAHARASHTRA
District : YEOTMAL
Village : Adegaon
Taluka : Zari
Post office : Adegaon
Pin Code : 445319
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 23-MAY-06
- (h) Weekly day of rest :
2. Address for : 49/5, Nehru Nagar (E),
correspondance At & P.O. Bhilai,
Distt. Durg
3. (a) Lease Number : MSH0293
(b) Lease area : 9.97
(c) Period of lease : 50
(d) Date of Expiry : 30-JUN-53
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : SHRI T.R. MISHRA
 49/5, Nehru Nagar (E), At &
 P.O. Bhilai, Distt. Durg
 DURG CHHATTISGARH
 Phone:
 FAX :

Owner : SHRI T.R. MISHRA
 49/5, Nehru Nagar (E), At &
 P.O. Bhilai, Distt. Durg
 DURG CHHATTISGARH
 Phone:
 FAX :

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	30-APR-03
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	07-MAY-09
		Modif.approved Mining Scheme	31-OCT-12
		Mining Scheme rule 12 MCDR1988	29-AUG-16
		MP modif under MCR 1960	27-DEC-18
		MP modif under 17(3) MCR 2016	19-MAY-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not proposed	nil	No Backlog
1b	Exploration over lease area for geological axis 1 or 2	NIL	NIL	NIL
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	NIL
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	NIL
1e	Balance reserve as on 01/04/20	166682.000 mt	9250.000 mt	157432 mt. (remaining resource)
1f	General remarks of inspecting officers on geology, exploration etc	-	-	In the mining area geologically there is very less occurrence of Limestone in the form of layers/bands. In Northern part of ML area there are few outcrops of Limestone but that also limited to 3-4 m thickness. Exploration has been done in detail to prove the deposit up to 30 to 40m at few locations earlier. Depth continuity is proposed to be proved in future after reaching pit bottom.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Not proposed	-	Type of the deposit is Dolomite & Limestone with interbanded Silicious & Clayey material. Dolomite is mainly worked in the pit. During inspection pit found water logged.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Overburden -1 Mineral -4	Overburden -1 Mineral -4	Limestone -1 (1.5 mtrs) Dolomite -4 (6 mtrs)
2c	Stripping ratio or ore to OB ratio	4500cum (OB)	1:0.05	
2d	Quantity of topsoil generation in m3	Not proposed	1000 Cum	Utilised for plantation work in safety zone
2e	Quantity of overburden generation in m3	Not proposed	4500Cum	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Working is carried out as per proposal.	--

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Pit	One Pit	--
3b	Quantity of ROM mineral production proposed	16584 tonnes	9250 tonnes	Still did not get EC of proposed quantity.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Not proposed	Nil	--

3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	NIL	--
3f	Quantity of sub grade mineral generation.	Not proposed	NIL	--
3g	Grade of sub grade mineral generation	Not Proposed	NIL	--
3h	Manual / Mechanised method adopted for segregating from ROM	Manual and Mechanised both	Manual and Mechanised both	--
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	No subgrade mineral produced	--
3j	Provision of drilling and blasting in mineral benches	34 mm dia jackhammer drills are proposed having Spacing-4m burden-3m depth of hole 6.6m	NIL	No development or production of Limestone due to no demands. Pit is water logged due to rainy water.
3k	Provision of mining machineries in mineral benches	Blasted material is proposed to be sorted manually and transported to stack yard through trucks.	NIL	NIL
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed Bench height- 6 mtrs	Maintained Bench height- 6 mtrs	No development or production of Limestone due to no demands. Pit is found water logged due to rains.
3m	Total area covered under excavation/pits	7.345 Ha at the end of approved plan period as per approved proposal.	Nil for limestone.	--

3n	Ore to OB ratio for the pit/mine during the year.	Ore:OB ratio is 1:0.67 (out of total excavation, 60% is Limestone rest is waste)	NIL	No development or production of Limestone due to no demands.
3o	Total area put in use under different heads at the end of year	9.285 Ha At the end of approved plan period	Total area 5.33 Ha	Proposed 9.285 ha at the end of 2023-2024
3p	Production of ROM mineral during the last five year period as applicable	RY20-21(16584MT) RY19-20(16297MT) RY18-19(3% of Total ROM) RY17-18(3% of Total ROM) RY16-17(3% of Total ROM)	9250MT 75MT 00MT as could not get Limestone out of 128099MT of ROM produced 910 MT out of 170643 MT of ROM produced 00MT as could not get Limestone out of 145560MT of ROM produced	Remaining 97% of ROM is DOLomite
3q	General remarks of inspecting officers on method of mining etc.			Mining operations are being carried out by opencast method under semi-mechanised category., Mineral Limestone & Dolomite (Major & Minor) both are co-existing and document has been subsequently prepared for A category mine.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4f	Number of dead dumps.	NIL	NIL	Waste dump management proposal were satisfactory as waste material as proposed is kept separately at earmarked location. Garland drain approximately 100 all around periphery of dumps being dugged. Further no development is being proposed and actual work is NIL (for Limestone).
4k	Specific comments of inspecting officer on waste dump management	--		Waste dump management proposals found satisfactory, location of garland drain of approximately 100 m around dump around the periphery of dump observed. No development or production of Limestone due to no demands and pit is water logged.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	No backfilling is proposed	NIL	
5b	Area under backfilling of mined out area	No such proposal	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No such proposal of backfilling of soil is proposed	NIL	

5d	Total area fully reclaimed and rehabilitated	No such proposals	NIL	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No such proposals.	NIL	Backfilling can not be envisaged as mineral (Dolomite) included in the Leas deed is occurring beyond the explored limits. The area may be converted into Water reservoir at conceptual stage.

Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	PMCP report need to be submitted before 1st July of every year.	Lessee has not submitted PMCP report and informed during inspection that it is under Draft Stage. PMCP report submitted by lessee on 23-09-2021.	Lessee submitted the report and hence no violation was given.
6b	Area available for rehabilitation (ha) .	NIL	0.050 Hect area used for settling tank and 0.100 for plantation	During inspection it is noticed that Plantation is being carried out in dumps.
6c	afforestation done (ha).	0.15 Hect	Plantation is being carried out during 2020-2021 in 0.15 Hect.	Plantation done mostly on dumps and near weigh bridge and back side of mine office.
6d	No. of saplings planted during the year	200 saplings	Planted 150 saplings	-
6e	Cumulative no .of plants	1000 plants	1826 plants planted.	--
6f	Any other method of rehabilitation	Not proposed	Nil	Nil
6g	Cost incurred on watch and care during the year	No specific proposal for expenditure for caring plantations was given.	Actually spent Rs. 25000/-	--

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No backfilling proposal.	NIL	No reclamation and backfilling in the area.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposals	NIL	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No such proposals	NIL	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposals	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No such proposals	NIL	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	It is proposed to plant 200 saplings in southern part of ML area speceially on dumps.	Lesse planted 150 saplings in part of ML area speceially on dumps.	--
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed	NIL	--
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Green belt development	Green belt development	--

6p	Compliance of environmental monitoring (core zone and buffer zone)	Environment monitoring is proposed in core zone that is Mining Area and in Buffer Zone for Air, Dust Water, Noise and fort Ground Water at 10r 2 locations in the year.	As per the proposal
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Plantation is the main activity under PMCP. Plantation has been carried out on Dumps, Back side of Mine Office and Near Wiegh bridge. During inspection it is observed that to enhance survival rate fencing of plantation is observed.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No ROM despatch proposed. Manua l sortig proposed as production is quite less	ROM has been sorted out manually and graded as cement grade	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanically done	
7c	Different grade of mineral sorted out at mines.	No proposal of different grade	ROM sorted out manually and graded as cement grade only	
7d	Any beneficiation process at mines	Not proposed	Crushing and Screening	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Cement Grade Limestone	As Limestone band is occurring in thin layer above Dolomite Band (Minor mineral) in the area which is proposed to be excavated and sorted through manual working. AS Limestone & Dolomite mineral co-exists in the mining lease area, high magnesia Limestone is being consumed along with Dolomite after blending.
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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8b	Concurrent use or storage of topsoil	NO Such Proposals	NIL	Clayey material occurring in the top layer or interabands is proposed to be used for plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dump-01(36632cum) Dump-02(100884cum)	As per proposal shifting of Dump-1 material is in progress and accomodated in Dump-2.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information is given in approved mining plan regarding existing planation . 70% survival proposed	It is around 75% as proper bound paged register regarding plantation and survival is maintained Year wise at mines office. Additional plantation is carried out in the lease area and 150 saplings planted in the year 2021.	
8g	Survival rate	70%	75%	--
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed through small water tankers, on main haul road and nera wiegh bridge. Further water mist spray to control air borne dust proposed.	As per proposal.	--
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the Mining Lease area is satisfactory apart from normal degeradation due to active mining in the area. Plantation has been carriedout by the lessee in the mine area on Dumps/Backside of mIne office and near weigh bridge.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly return is required to be submitted every 10th of the month. Annual return is required to be submitted online before 1st July of everyt year for preceeding year.	Lessee has submitted annual return for the Year 2020-2021 and monthly return upto August-2021 timely.	--
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer present during inspection is Shri. S. K. Singh.Services of Geologist are being outsourced.	Part time Geologist was appointed.	It was suggested to mention the name of Geologist so appointed instead of mentioning outsourced.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Mine is mainly run for Dolomite (Minor Mineral) as reported in monthly return. Quantity of 9498 T Cement Grade Limestone Stock is available at Mine site.Exmine price reported as Rs 441 per Tonne.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA	NA	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	115 T	115 T	NIL
9k	Scrutiny of Annual return on mining machineries	NA	AR submitted	Foud in order

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

Violation observed		Show cause position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

Date :

(Rajesh M Khadse)

Indian Bureau of Mines