

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/KATNI/LST-252

Mine code : 38MPR47015

- (i) Name of the Inspecting : **SQ05**) **DEEPAK SHARMA**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Mr Ojha Mining Engineer, QP
Official with
Designation
- (iv) Date of Inspection : 18-NOV-19
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NANHWARA (11.833 HA)**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : KATNI
Village : NANHWARA
Taluka : VIJAYRAGHAVGARH
Post office : NANHWARA
Pin Code : 483775
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) Police Station : KYMORE
- (g) First opening date : 23-JUN-00
- (h) Weekly day of rest : SAT
2. Address for : M/S ASSOCIATED LIME COMPANY
correspondance P.B.NO.164,KATNI (M.P.) 483501
3. (a) Lease Number : MPR1697
(b) Lease area : 7.03
(c) Period of lease : 20
(d) Date of Expiry : 04-DEC-15
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : ASSOCIATED LIME COMPANY
 P.B.NO.164 KATNI MADHYA
 PRADESH
 Phone:N. A.
 FAX :N. A.

Owner : ASSOCIATED LIME COMPANY
 P.B.NO.164 KATNI MADHYA
 PRADESH
 Phone: N. A.
 FAX : N. A.

Mining Engineer

Name : KRISNA NAND OJHA,Part Time
 Qualification : B.E.(MINING)
 Appointment/ : 22-MAY-02
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	15-FEB-04
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	12-JUN-07
		Modif.approved Mining Scheme	05-FEB-09
		Mining Scheme rule 12 MCDR1988	21-JUL-11
		Mining Scheme rule 12 MCDR1988	20-APR-15

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Exploration proposed in the reporting year 2018-19	no exploration has been done in the reporting year 2018-19	
1b	Exploration over lease area for geological axis 1 or 2	lease area already explore upto Geological axis G2 level of exploration	area under G1 level 8.777 hectare upto 345 mrl, area under G2 level 3.056 hectare upto 345 mrl	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	no exploration was proposed and no exploration agency was engaged	due to no proposal of exploration, no exploration agency was engaged	
1d	Balance area to be explored to bring Geological axis in 1 or 2	G2 area 3.056 hecatare	3.056 hectare area to be explored to bring geological axis 2 to 1	
1e	Balance reserve as on 01/04/20	121-2422995 t 122-562969 t as on 01/04/2015	121-1714197 t 122-477077 t as on 01/10/2019	
1f	General remarks of inspecting officers on geology, exploration etc			limestone of the lease area belongs to lower vindhyan super group of semri group limestone, occurrence of the limestone in the lease area founds with alternate bands of shale and shally limestone (cao % presences)

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

2a	Location of development w.r.t.lease area	it was proposed to work in the block A, pit 1 in the reportign year 2018-19	development work was done in the block A, pit 1 in teh reporting year 2018-19 as per proposal	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	it was proposed to develop separate bencehs in the top soil ob and mineral bench	one bench of 3-4 m in the top soil / OB as per deposition found, 5-6 m bench in the limestone for production	
2c	Stripping ratio or ore to OB ratio	1:0.19	1:0.10 aprox	
2d	Quantity of topsoil generation in m3	NIL no top soil generation proposed	no top soil is being generated durign the reporting year production was proposed depth wise	
2e	Quantity of overburden generation in m3	NIL no OB generation proposed	No OB generated during the reporting year, production was proposed in depth wise	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			the top soil / ob found in the lease area is about 3-4 m in thickness, after that limestone is in continuation with interclated shale

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	one pit (pit - 1) proposed for production	production is being carried out from pit-1 as per proposal given	
3b	Quantity of ROM mineral production proposed	282469 t	195930 t	

3c	Recovery of sailable/usable mineral from ROM production	75 % recovery proposed	75-80 % recovery aprox
3d	Quantity of mineral reject generation	37663 cubic meter	NIL
3e	Grade of mineral rejects generation and threshold value declared.	Not Declared	NIL
3f	Quantity of sub grade mineral generation.	NIL	No subgrade mineral generated
3g	Grade of sub grade mineral generation	NIL	NIL
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised mehod proposed for segrargation from ROM	mechanised method is being adopted for segragation of mineral from ROM (i.e. screening)
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	not proposed	NIL
3j	Provision of drilling and blasting in mineral benches	drilling and blasting proposed	drillign and blasting is in process as per the proposal
3k	Provision of mining machineries in mineral benches	use of HEMM was proposed	HEMM is being used in mineral benches
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	height of benches in OB and in mmineral benches are suitable for mining proposed	height of benches in OB 3-4 m (aprox), height of mineral bench is 5-6 m (aprox) i.e. suitable for mining
3m	Total area covered under excavation/pits	3.3760 hectare	3.30 hectare aprox

3n	Ore to OB ratio for the pit/mine during the year.	1:0.19	1:0.10 aprox	
3o	Total area put in use under different heads at the end of year	10.1566 hect	10.135 hect aprox	
3p	Production of ROM mineral during the last five year period as applicable	2015-16-205564 2016-17-209813 2017-18-261750 2018-19-282469	2015-16-199600 2016-17-198880 2017-18-199940 2018-19-195930	
3q	General remarks of inspecting officers on method of mining etc.			HEMM is beign used in mineral benches, ROM is being segragetaed by screening method at the mine site.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping of Top soil and OB and Mineral reject proposed	seperate dumpign for Top soil, OB and mineral reject is being done in the lease area	
4b	Location of topsoil, OB and mineral reject dumps	two OB dumps were proposed in the lease area	there were two OB/waste dumps present in the lease area, one in the top north-west postion of the lease area and another one is in the south-east of the lease area.	
4c	Number of dumps within lease area and outside of lease area	two OB / waste dumps were proposed	two OB/Waste dumps are present in the lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out side the UPL	out side the UPL	

4e	Number of active and alive dumps.	two ob/waste dumps are active	two OB/waste dumps are active	
4f	Number of dead dumps.	not proposed	NIL	
4g	Number of dumps established.	not proposed	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed	retaining wall and garland drain prepared around the dumps	
4i	Length of Retaining wall or garland drain all along dumps	NIL	150 m (aprox)	
4j	Number of settling ponds	Not proposed	NIL	
4k	Specific comments of inspecting officer on waste dump management			OB / waste are being stocked seperately in teh designated place as per proposal.

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.	full extraction of teh mineral is proposed before backfilling	no area mature enough for the backfilling yet	
5b	Area under backfilling of mined out area	not proposed	no backfillign was proposed in the reporting year	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	top soil is proposed to be used in plantation	no top soil is being generated in teh reporting year	
5d	Total area fully reclaimed and rehabilitated	0.6038 hect	0.550 hect aprox	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	backfilling is only being in the fully mineral extracted area i.e. 0.55 aprox till date
----	--	---

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	proposed	Submitted	
6b	Area available for rehabilitation (ha) .	NIL	area not fully mature enough for rehabilitation	
6c	afforestation done (ha).	0.6038	0.50 aprox	
6d	No. of saplings planted during the year	225	150	
6e	Cumulative no .of plants	500	300 aprox	
6f	Any other method of rehabilitation	not proposed	NIL	
6g	Cost incurred on watch and care during the year	Not declared	NIL	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	NIL	

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not Proposed	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not Proposed	NIL
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	NIL
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	NIL
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	proposed	as per proposal afforestation done with slower survival rate
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.1206	0.102 aprox
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	backfilling and plantation	matured area is being backfilled and plantation done over it

6p	Compliance of environmental monitoring (core zone and buffer zone)	proposed	AIR, WATER, NOISE as per proposal	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			fully extracted area is being backfiled and plantation is being done over the backfilled area

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM size wise sorting prposed	ROM is being sorted size wise	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	mechanical method proposed	mechanical method adopted for sorting	
7c	Different grade of mineral sorted out at mines.	not proposed	NIL	
7d	Any beneficiation process at mines .	not proposed	NIL only screening is being used for segragation	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			ROM is being sorted size wise with the help of screeners

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

8a	Separate removal and utilization of topsoil (Rule 32)	proposed	separate removal and stacking of top soil proposed no top soil generated during the year
8b	Concurrent use or storage of topsoil	top soil is being proposed to be used in plantation	no top soil generated during the year
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	separate dumps of OB/waste/rejects proposed	separate dumps prepared for OB waste and rejects
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	proposed	OB waste rejects are being used for backfilling of fully extracted area
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	proposed	as per proposal
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	proposed	as per proposal
8g	Survival rate	85%	60%
8h	Water sprinkling on roads to control airborne dust	proposed	water is being sprinkled on roads

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	aesthetic beauty of mine and surrounding area need to improve
----	--	---

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR and MR submitted in online portal	A submitted upto 2018 and MR submmitted upto 12/2019	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	information for manager and mining engineer provided	manager and mining engineer Mr K N Ojha Geologist not appointed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Proposed	submitted	
9d	Scrutiny of Annual return on afforestation	provided	submitted	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	not provided	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	proposed	submitted	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	submitted	INR 200 cost per tonne	
9h	Scrutiny of Annual return on fixed assets	submitted	Value of Fixed Assets (in) 2576336	

9k Scrutiny of submitted submitted
Annual return on
mining
machineries

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
MCDR17 Rule 33	13-JAN-20				
MCDR17 Rule 47(a)	13-JAN-20				
MCDR17 Rule 48	13-JAN-20				
MCDR17 Rule 55(1) (3)	13-JAN-20				

Date :

(DEEPAK SHARMA)

Indian Bureau of Mines