

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KTN/LST-52

Mine code : 38MPR18132

- (i) Name of the Inspecting Officer and ID No. : **G007**) **RAGHUBIR SHARAN GARG**
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine Official with Designation : Shri K.N.Ojha, Mining Engineer and Manager (Mines)
- (iv) Date of Inspection : 11-JUL-22
- (v) Prev.inspection date : 27-FEB-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **NANHWARA [7.035 HA]**
- (b) **Registration NO.** : **IBM/4613/2011**
- (c) Category : A Mechanised
- (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. : 07626271233
E-mail : cimmcolime@gmail.com
Phone : 07626271212, M. no. 942280:
- (f) Police Station :
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for correspondance : Shri Ashok Kumar Katare, Partner / Nominated Own
M/S ASSOCIATED LIME COMPANY
P.B.NO.164, KATNI (M.P.) 483501
3. (a) Lease Number : MPR1697
- (b) Lease area : 7.03
- (c) Period of lease : 50
- (d) Date of Expiry : 04-DEC-25
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	27-MAY-03
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	18-AUG-06
		Mining Scheme rule 12 MCDR1988	30-JUN-10
		Mining Scheme rule 12 MCDR1988	14-JAN-15
		MP modif under MCR 1960	03-DEC-15
		MP review under 17(1) MCR 2016	01-JUL-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2 boreholes , each of 40m depth	2 boreholes , each of 40m depth	No deviation
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	Engeotech Consultation jabalpur, Expenditure Rs. 1,12,500/-	No deviation
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed	Not Applicable	no deviation
1e	Balance reserve as on 01/04/20	G1- 143660tonne & G2 145073tonne	G1-143660tonne & G2 145073tonne	No deviation
1f	General remarks of inspecting officers on geology, exploration etc			There is no need of additional exploration as entire lease area has been explored under G1 & G2 level and 288733tonne mineralreserves in the lease area is remains.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Between grid coordinates N 600-N740 & E 250-E 500	Between grid coordinates N 600-N740 & E 250-E 500	Advancement of benches towards lease boundary linewaere noticed which is the only way to exploit the remaining by reducing the burm width.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and mineral proposed	Separate benches in overburden and mineral maintained	width of benches in limestone were found less than the proposed one , violation under 11(1) pointed out for the deviation.
2c	Stripping ratio or ore to OB ratio	1:0.30	0.37	-
2d	Quantity of topsoil generation in m3	Nil	Nil	-
2e	Quantity of overburden generation in m3	45279cum	54114cum	No deviation
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			width of limestone benches were found reduced than the proposed one. Accordingly deviation observed in this regard have been pointed out through pointing out of violation of rule 11(1) of MCDR,2017.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01	01	
3b	Quantity of ROM mineral production proposed	150047	146220	Marginal less production, 97.4% of proposed one.
3d	Quantity of mineral reject generation	Nil	Nil	No deviation.

3e	Grade of mineral rejects generation and threshold value declared.	Not Applicable	Not Applicable	
3f	Quantity of sub grade mineral generation.	Nil	Not Applicable as sub grade mineral is neither envisaged nor generated during mining.	no deviation.
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable as no sub grade mineral generation from the mine.	No deviation.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Not carried out.	No deviation.
3j	Provision of drilling and blasting in mineral benches	proposed	As per proposal	No deviatio.

3k	Provision of mining machineries in mineral benches	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) BACK HOE 0.900 CUM 2	Type of machinery Capacity of each unit No.of units Electrical/ Non-Electrical (specify) BACK HOE 0.900 DUMPER 25.0 TONNE) 6 Non Electrical AIR COMPRESSOR 385.000 CUM/MN 1 Non Electrical PUMPS (ELEC.) 1080.000 L/MN 2 Electrical Wagon Drill ATLAS COPCO 2 1 Non Electrical PUMPS (ELEC.) 1080.000 L/MN 2 Electrical Wagon Drill Atlas COPCO 2	No deviation
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	proposed	Almost as per prioposal	No remarkable deviation
3m	Total area covered under excavation/pits	5.82	6.05	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.3	1:0.37	

3o	Total area put in use under different heads at the end of year	Total Area under Excavation 5.82hhect Total area under Dump 0.65hect (Dead Dump) Area under Green Belt 0.22 hect	(i) Covered under current (O/C) Workings 6.050 hect (ii) (iii) Reclaimed/Rehabilitated 1.704hect (iii) (vi) Other Purpose (Mineral Storage, 0.65 hect Top Soil Preservation)	-
3p	Production of ROM mineral during the last five year period as applicable	2017-18 220377 tone 2018-19 197570 tonne 2019-20 192160 tonne 2020-21 171430 tonne 2021-22 150047 tonne	2017-18 68380 tonne 2018-19 193090 tonne 2019-20 181700 tonne 2020-21 187100 tonne 2021-22 146220 tonne	
3q	General remarks of inspecting officers on method of mining etc.			Opencast method of mining is being carried out by deployment of heavy earth moving machineries for excavation, drilling, blasting, loading & transportation on single shift basis in the Limestone zone.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed	Separate dumping of top soil and OB are in practice. In the year under review there was no proposal for the removal of top soil and also there was no generation of mineral reject. Overburden waste rock removed during the year under review was utilised partially for backfilling of voids created due to mining activities and partially dumping in yearmarked site of dumping..	Reclamation of mined out area and dumping of overburden on yearmarked site bth were in practice during the year.
4b	Location of topsoil, OB and mineral reject dumps	Not proposed against the year.	Not Applicable in case of top soil and mineral reject whereas in case of overburden waste rock partially dumped on yearmarked site of dumping and partially utilised for backfilling of mined out area.	-
4c	Number of dumps within lease area and outside of lease area	One dump Proposed. There are Three another old dead dump out side of the lese area.	OB wast is partially backfilled and partially dumped on yearmarked site.	Simultaneous backfilling as well as dumping in yearmarked site are in practice.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	On Eastern part of the lease area .	Location of dead dump lies in within lease area are N530 to n650 and E550 to E630	External dumping as well as simultaneous reclamation both are in practice.
4e	Number of active and alive dumps.	One dump	One dump	-
4f	Number of dead dumps.	3 old dumps	3 old dumps	
4g	Number of dumps established.	None	03	-
4h	Whether Retaining wall or garland drain all along dumps are there.	yes	120 m of garland drain found	

4i	Length of Retaining wall or garland drain all along dumps	proposed	120 m of garland drain found	
4k	Specific comments of inspecting officer on waste dump management	01	01	Partial external duming is in practice. OB waste rock generated during explotiation of limestone is partially utilised for simultaneous backfilling of worked out portion of lease area and partially it is dumped on earmarked area for the purpose..

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.	Backfilling proposed after reacching 322 RL.	Backfilling started in Western part of the pit / part of the lease Near Boundary Pillar No.21, 22 and 23 extending towards north.	
5b	Area under backfilling of mined out area	not proposed	0.425hec.	Although backfilling is not proposed against the year but Overburden waste rock generated during the year partially utilised for backfilling and partially dumped on proposed site of dumping.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	not proposed against the year under review.	Reportedly top soil generation was nil during the year, not applicable.	-

5d	Total area fully reclaimed and rehabilitated	Nil	During the year partial backfilling in over an area of 0.425 hect area carried out. Cummelatively about 1.47hect area is found reclaimed and a planty no. of plants were observed over it.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Although there was no proposal for backfilling upto the current year even next year also. But part of overburden generated during mining operation were utilised for backfilling over benches reached to the ultimate pit limit in western part of the pit which can be accepted in the light of right spirit and expiry of the mining lease.

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).	Yes	yes	
6b	Area available for rehabilitation (ha) .	0.115	cummulative 1.595hect.	
6d	No. of saplings planted during the year	61	150 no. of saplings planted within lease area .	100 no. of saplings have also planted out side of the lease area.

6e	Cumulative no .of plants	1200	More than 1000 no plants were observed on over an area of about 1.3hec reclaimed area..	Cummelatively about 900 no. of saplings have also observed out side of the lease area .
6f	Any other method of rehabilitation	not proposed	So far not adopted.	
6g	Cost incurred on watch and care during the year	Rs. 15000/-	Reportedly Rs.131500/-	Health of planted trees indicates proper maintainance and care taken by the mine management.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not Proposed	Overburden generated during mining operation have been partially utilised for backfilling of mined out area . Reportedly mined out area of about 0.115hect area available for reclamation.	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed	Overburden generated during mining operation have been partially utilised for backfilling of mined out area . Reportedly mined out area of about 0.115hect have been reclaimed.	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not Proposed	Overburden generated during mining operation have been partially utilised for backfilling of mined out area . Reportedly reclaimed area of about 0.115hect have been rehabilitated by plantation with about 150no of saplings over reclaimed area.	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Not carried out	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Not Carried out.	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Proposed fencing 100m length	Fencing carried out by the management were seen in the site.	No deviation.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	proposed	Rehabilitation of reclaimed area were seen by plantation. In fact out side lease area plantation on waste land were also seen in an area of about 0.1 hect.	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed	Not observed.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Environmental monitoring reports are available with the lessee.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			More or less attempts on compliance on PMCP proposals are considerable. Plantation carried out on reclaimed area and status of health of planted trees are really appreciable.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	150047 MT limestone proposed for despatch.	154009.110MT of SMS grade limestone were despatched during the year 2021-22.	Mineral is also sold to unregistered personnel, violation under rule 45(7) pointed out.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual method for sizing & sorting proposed	Manual method for sizing & sorting done for SMS & Cement grade limestone	
7c	Different grade of mineral sorted out at mines.	Manual method for sizing & sorting proposed for cement & SMS grade of limestone	Sorting carried out as per the proposals	
7d	Any beneficiation process at mines .	Not Proposed	Not adopted	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Limestone is being conserved by grade wise sorting in the lease area. SMS & Cement grade limestone

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Normally Concurrent use for platisation purpose proposed. During the year there was no proposal for removal of top soil.	Carried out as per the proposals.	

8b	Concurrent use or storage of topsoil	Conceurrent use for platation purpose over reclaimed area proposed	Carried out as per the proposals	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Dumping of overburden proposed. There is no reject generation so proposal of separate dumping of reject is not proposed.	Dumping of overburden done partially on the proposed site proposed as well as partially it is utilised for backfilling of the voids created due to mining. . There is no reject generation so proposal of separate dumping of reject is not applicable.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed. Dumping of overburden waste rock were proposed on the site selected for the purpose.	Al though backfilling of mined out area was not proposed for the year under consideration, but part of the overburden generated during mining operation were utilised for backfilling of void created due to mining of limestne.	There waere certainly deviation. As minedout area was available for backfilling so part of the overburden generated due to mining were utilised for backfilling.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phase wise reclamation & rehabilitation proposed	Working carried out as per the proposals	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Available	150 saplings planted in ML & 100saplings outside ML area planted	
8g	Survival rate	Proposed as 80%	75%	

8h	Water sprinkling Proposed on roads to control airborne dust	Regular water sprinkling is done by water tanker
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Aesthetic beauty in and around mine area is not much satisfactory as in a large scale mining activities are going on in and surrounding of mining lease area since long back. Only statutory barrier zones are available where dumps of OB waste rock can be seen. Attempts of lessee towards plantation over reclaimed area seen very nice. health of plants are really very good.

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. submitted upto- June-2022 A.R. submitted upto- 2021-22	Monthly as well as Annual Return were submitted within time limit.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri K.N. Ojha was appointed as Mining Eng. & Manager Mines and Shri Nikhil Gadikar as Geologist	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Lease area (surface area) utilisation as at the end of year (hectares) (i) Covered under current (O/C) Workings 6.05 hect (ii) Occupied by plant, buildings, residential, welfare buildings & roads 0.034hect (iii) Other Purpose (Mineral Storage, Top Soil Preservation) 0.309hect (iv) Work done under progressive mine closure plan during the year 1.704hect 9 Cummelative)	
9d	Scrutiny of Annual return on afforestation	Given	Number of trees planted during the year within lease area 150 nos. andf outside lease area 100 nos.	Plantation aere seen during inspection.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Reject genneration were not envisaged in the approved mining plan. Practically there is no reject generation . Accordingly quantity of reject generated during the year is indicated as 0 appers correct.	Information given in the return with respect to reject generation is acceptable.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Closing stock at mine head (in tonne) 403.185 tonne SMSgrade Limestone.	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Rs. 310.0per tonne. for SMS grade Limestone
9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets given as Rs. 2492378/-
9k	Scrutiny of Annual return on mining machineries	Given	Details of mechineries and their number are given in ther AR,2021-22

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	28-JUL-22			
MCDR17	Rule 34(1)	28-JUL-22			
	Rule 45(7)	28-JUL-22			

Date :

(RAGHUBIR SHARAN GARG)

Indian Bureau of Mines