

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

MCDR INSPECTION REPORT

Jabalpur regional office

Mine file No : MP/KTN/LST-59

Mine code : 38MPR18081

- (i) Name of the Inspecting : P012) MITHELESH PUROHIT
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 04-OCT-18
- (v) Prev.inspection date : 06-DEC-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : JAMUWANI KALAN (31.43.HA)
- (b) **Registration NO.** :
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
State : MADHYA PRADESH
District : KATNI
Village : JAMUWANI KALAN
Taluka : VIJAYRAGHAVGARH
Post office : JAMUWANI KALAN
Pin Code :
FAX No. : N. A.
E-mail : N. A.
Phone : N. A.
- (f) **Police Station** :
- (g) **First opening date** : 02-SEP-77
- (h) **Weekly day of rest** : WED
2. **Address for correspondance** : M/S ACC Limited
P.O. KYMORE, VIA. JUKEHI
DIST KATNI (M.P.) 483501
3. (a) **Lease Number** : MPR0273
- (b) **Lease area** : 31.82
- (c) **Period of lease** : 20
- (d) **Date of Expiry** : 01-SEP-17
4. **Mineral worked** : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : ACC Limited
P.O. KYMORE VIA JUKEHI
KATNI MADHYA PRADESH
Phone:N. A.
FAX :N. A.

Owner : ACC Limited
P.O. KYMORE VIA JUKEHI
KATNI MADHYA PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	23-AUG-96
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	04-OCT-04
		Mining Scheme rule 12 MCDR1988	25-JUN-07
		Mining Scheme rule 12 MCDR1988	19-MAR-12
		MP modif under MCR 1960	04-APR-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	No exploration done.	
1b	Exploration over lease area for geological axis 1 or 2	NIL	The entire lease area has been explored upto the G1 level of exploration.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NIL	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	The entire lease area of 31.43 hect is explored upto G1 level of exploration.	
1e	Balance reserve as on 01/04/20	Proposed balance reserve as on 1.4.2018 8.89 MT	Actual balance reserve as on 1.4.2018 9.02 MT	Due to low mineral production than proposed.
1f	General remarks of inspecting officers on geology, exploration etc	NIL	Total 12 boreholes have been drilled during the year 2015-16 (8) and 2014-15(4).	As per the general geology of the lease area the limestone horizon is dipping due north. The OB capping increased towards south of the lease.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to expand the existing pit (existing on the north of the lease area) due south.	The pit was expanded due south. The development during the year 2018-19 is lagging from the approved proposals.	Violation of Rule 11(1) of MCDR 2017 was issued.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil-1 bench (1.5 m) OB-1 bench (2.5m) , Limestone bench-1 (6m) , Limestone bench-2 (6m) , Limestone bench-3 (6m)	Topsoil-1 bench (1.5 m) OB-1 bench (2.5m) , Limestone bench-1 (6m) , Limestone bench-2 (6m) , Limestone bench-3 (6m)	Bench height as per proposal.
2c	Stripping ratio or ore to OB ratio	1:0.33 for the year 2017-18.	1:0.46 for the year 2017-18.	
2d	Quantity of topsoil generation in m3	13500 cubic meter for the year 2017-18	7000 cubic meter for the year 2017-18	
2e	Quantity of overburden generation in m3	6824 cubic meter for the year 2017-18	36893 tonnes for the year 2017-18	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	The development of the pit is towards the south side . The development on the south side is lagging w.r.t approved proposals for the year 2017-18.	Violation of Rule 11(1) of MCDR 2017 issued.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	
3b	Quantity of ROM mineral production proposed	It was proposed to excavate 153558 tonnes of limestone ROM for the year 2017-18	The total limestone production from the mine was reported as 129237 tonnes.	The low production is primarily due to the high logistics cost of tranportation from pit head to plant .
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	NIL	NIL	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	

3f	Quantity of sub grade mineral generation.	NA	NA	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	No Segregation proposed.	No segregation done.	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA	
3j	Provision of drilling and blasting in mineral benches	Proposed.	Drilling and blasting done in the mineral benches.	
3k	Provision of mining machineries in mineral benches	Proposed.	Machinery deployed.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of 6 meter is proposed in the mineral benches, 3 meter in OB	5-6 meters in mineral bench and 2.5 meter in OB	The height of benches is suitable for the mining method deployed.
3m	Total area covered under excavation/pits	6.5 hect	4.31 hect.	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.33	1:0.46	
3o	Total area put in use under different heads at the end of year	Total area proposed to put to use at the end of proposal period 11.95 hect.	Actual as on date 5.6 hect.	

3p	Production of ROM mineral during the last five year period as applicable	Proposed production during the year 2012-13, 2013-14, 2014-15, 2015-16, 2016-17 is 0.12 MT, 0.15 MT, 0.19 MT, 0.19 MT, 0.16 MT respectively.	The production achieved during the year 2012-13, 2013-14, 2014-15, 2015-16, 2016-17 (till oct 16) is NIL, NIL, NIL, 0.08 MT, 0.15 MT and 0.101 MT respectively.	
3q	General remarks of inspecting officers on method of mining etc.	Open pit mining with external dumping.	Open pit mining with external dumping.	The mineral limestone is used in cement plant and ob is stacked inside the mining lease. No area is mined out till date therefore as on date backfilling has not been proposed and not been done.

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 waste proposed.	No dump of top soil observed. Waste dumping is done on the south of the mininig lease.	The top soil whatever is available is used in the plantation.
4b	Location of topsoil, OB and mineral reject dumps	It was proposed to dump the top soil and OB dump in the south of the lease.	No top soil dump observed. The OB dumping is done on the south of the lease.	
4c	Number of dumps within lease area and outside of lease area	One dump proposed with in the lease area of OB and one of top soil..	Only one OB dump (active) exists inside the lease area.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	The proposed dumping was outside the ultimate pit limit.	The existing dumps are at the proposed dumping site and outside the ultimate pit limit.	
4e	Number of active and alive dumps.	One	One active OB dump.	

4f	Number of dead dumps.	NIL	NIL
4g	Number of dumps established.	NIL	NIL
4h	Whether Retaining wall or garland drain all along dumps are there.	240 meters	240 meters
4i	Length of Retaining wall or garland drain all along dumps	240 meters	240 meters
4j	Number of settling ponds	NIL	One
4k	Specific comments of inspecting officer on waste dump management	waste dumping in the south of the lease.	The waste dumping is carried out 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.	It was proposed to backfill aproxx 0.07 hect of area in the 7.5 meter barrier zone on the north of the pit.	Aproxx 0.04 hect of area has been backfilled in the north of the pit in the 7.5 meter barrier zone.	
5b	Area under backfilling of mined out area	Total 0.07 hect area was proposed to be put under backfilling.	Total 0.07 hect area has been taken under backfilling in the north part of the lease	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	The top soil is used in the plantation work on the north of the lease.
5d	Total area fully reclaimed and rehabilitated	NIL	NIL	No area fully reclaimed.

5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	The backfilling in the 7.5 barrier zone is continuing. plantation has been done on the backfilled area.
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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).	To be submitted as per rule 26(2) of MCDR 2017	Not submitted on time.	A violation of rule 26(2)) of MCDR 2017 was issued on 11.10.2018
6b	Area available for rehabilitation (ha) .	NA	NA	No proposal for rehabilitation.
6c	afforestation done (ha).	On the north of the lease.	Plantation is done on the north of the lease during the year 2017-18	
6d	No. of saplings planted during the year	700	1150	
6e	Cumulative no .of plants	NA	NA	
6f	Any other method of rehabilitation	NA	NA	
6g	Cost incurred on watch and care during the year	Rs 75000	RS 198000	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.07 hect	0.07 hect backfilling completed	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	0.07 hect	0.07 hect backfilled by waste.	

6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	NA	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	plantation proposed.	Plantation done.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NA	aproxx 0.4 hect is taken under plantation	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation is being done on the north of the lease area.	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Done.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Plantation, garland drain, retaining wall	Plantation done, garland drain prepared.	The plantation and waste dumping are being done as per proposal. The garland drain has been prepared.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for dispatch of ROM	ROM is being dispatched from the lease.	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	NA	NA	
7c	Different grade of mineral sorted out at mines.	NA	NA	
7d	Any beneficiation process at mines	None proposed.	None done.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	None proposed.	None suggested.	No beneficiation carried out the entire ROM is used in the Cement manufacturing in the plant situation outside the lease area.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Proposed.	The top soil is used in the plantation purpose.	
8b	Concurrent use or storage of topsoil	Stacking proposed.	used in the plantation.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate dumpng of overburden Proposed.	Dumping of overburden done on the south of the mining lease.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	None proposed.	None done as pit and dump are active.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed.	Not proposed.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Done	Done
8g	Survival rate	80%	60%
8h	Water sprinkling on roads to control airborne dust	Proposed	done
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	the general terrain of the area is flat. The area around the lease has agriculture fields and has good aesthetic beauty.	the general terrain of the the area is flat. The area around the lease has agriculture fields and has good aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Mineral production for the year 2017-18 129237 tonnes. Cost of production 271.5 Rs/tonne	The pit profile is in line with the reported production.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Manager Mr. Rajanikanta Sahani Mining Engineer in charge Mr. Akhil Chouhan Geologist in charge Mr. Sanjeev Kumar Sharma	Manager Mr. Rajanikanta Sahani Mining Engineer in charge Mr. Akhil Chouhan Geologist in charge Mr. Sanjeev Kumar Sharma	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Total area put to use 5.58 hect	as per return filed.	
9d	Scrutiny of Annual return on afforestation	1000	As per return filed.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	NIL	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No stock of ROM in the lease	No stock of ROM in the lease.	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	the mine is a captive mine the exmine price is equal to cost of production i.e 271.5 Rs/tonne.	the mine is a captive mine the exmine price is equal to cost of production i.e 271.5 Rs/tonne.	
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in Rs) 13702770	The mine site has Office building, machinery are deployed, pumping arrangements, electricity and weighbridge installation.	The fixed assest are also used in the adjoining lease of 8 hect of same lesse.

9k Scrutiny of BACK HOE 1.200 As per return.
Annual return on CUM 1 Non
mining Electrical
machineries Opencast
 BACK HOE 0.900
 CUM 1 Non
 Electrical
 Opencast
 TIPPER 10.001
 CUM 5 Non
 Electrical
 Opencast
 PUMPS (ELEC.)
 200.000 L/MN 2
 Electrical
 Opencast
 PUMPS (NON-
 ELEC.) 600.000
 L/MN 1 Non
 Electrical
 Opencast
 WATER TANKER
 5000.000 LITRE
 1 Non
 Electrical
 Opencast
 ROCK DRILL
 (NONELEC.)
 115.000 MM 1
 Non Electrical
 Opencast

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 11(1)	22-OCT-18			
MCDR17	Rule 26(2)	22-OCT-18			
MCDR17	Rule 33	22-OCT-18			

Date :

(MITHELESH PUROHIT)

Indian Bureau of Mines