

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

**MCDR inspection REPORT  
Jabalpur regional office**

**Mine file No :** MP/SATNA/LIMESTONE-346

**Mine code :** 38MPR35319

- (i) Name of the Inspecting : **G007** ) **RAGHUBIR SHARAN GARG**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Sankatha Prasad Dwivedi, lessee, Shri Tushar Pand  
Official with  
Designation
- (iv) Date of Inspection : 20-SEP-21
- (v) Prev.inspection date : 07-MAR-18

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **JURA 29.163HA.**
- (b) **Registration NO.** : **IBM/15145/2013**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : SATNA  
Village : JOORA  
Taluka : MAIHAR  
Post office : JOORA  
Pin Code :  
FAX No. : -  
E-mail : -sankathadwivedi@gmail.com  
Phone : 9425811881
- (f) Police Station :
- (g) First opening date : 31-JAN-09
- (h) Weekly day of rest : SUN
2. Address for : P.O.GORAIYA  
correspondance : DIST. SATNA  
MP
3. (a) Lease Number : MPR2269
- (b) Lease area : 29.16
- (c) Period of lease : 30
- (d) Date of Expiry : 12-JAN-39
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : SANKATHA PRASAD DWIVEDI  
VILLAGE GORAIYA DISSTT.  
SATNA, M.P. - SATNA MADHYA  
PRADESH  
Phone:-  
FAX :-

Owner : SANKATHA PRASAD DWIVEDI  
P.O. GORAIYA DISTT. SATNA  
MP SATNA MADHYA PRADESH  
Phone: -  
FAX : -

6. Date of approval of Mining : MP review under 17(1) MCR 2016 28-AUG-19  
Plan/Scheme of Mining

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal	No exploratory work	Area is explored by DGM , MP
1b	Exploration over lease area for geological axis 1 or 2	No proposal	No exploratory work	Area is explored by DGM , MP
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Applicable	Not Applicable	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire area explored	Not Applicable	-
1e	Balance reserve as on 01/04/20	2,603,096tonne	2,603,096tonne	As per approved RMP, as on 01/04/2019 reserves in the mine was 2605096tonne. As per AR-2019-20 and 2020-21 there waere production of mineral 2000t and 3000tone respectively. Thus as on 01/04/2021 there was only 2,600,096tonne limestone reserves under G1 axis

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	between N2683700 & N2683780 and E48800 & E48900	Mining operation in the mine is temporarily discontinued w.e.f. 31/12/2000. Present configuration of the pit shows location & direction of advancement of benches are as per approved proposal.	Location and diretion of advancement of pit appears as per approved RMP.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One-one bench in top soily and shaly/ reject stone and one bench in mineral	Separate benches in top soil and Shaly/ reject stone of 1.0m & 1.5m respectively observed . Mineral bench was found water logged.	Top Soil & shaly/ reject stone benches were seen whereas mineral bench was found water logged.
2c	Stripping ratio or ore to OB ratio	1:0.9	During for the production of 3000t limestone total quantity of overburden removal was 1500CUM. Thus Stripping ratio during the year under review was 1:0.5	less development. Violation of rule 11(1) pointed out.
2d	Quantity of topsoil generation in m3	5600CUM	Total generation of overburden of 1500CUM is reported in AR, 2020-21. On discussion on the matter concerned it was told that about 500CUM soil was generated which was utilised for plantation purpose.	Practicall a little less development work were seen in the mine. As the mine is temporarily discontinued so no further action suggested.
2e	Quantity of overburden generation in m3	12369CUM	Total OB removal against the reveiwing year is 1500CUM	It shows a less development.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	There is propoper proposal of development in the approved document.	Although development were advanced in the approved direction but in fact in less proporsnet amount. Pit is water logged	Mine is temporarily discontinued w.e.f. 31/12/2021 and pit was found water logged. However for less development violation of rule 11(1) pointed out.

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### Exploitation:

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Sl.No.	Item	Propasals	Actual work	Remarks
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3a	Number of pit proposed for production	One	On the proposed pit. Reportedly 3000tonne mineral produced from the mine againsttargetted production proposal of 49590tonne	Mine was temporarily discontinued w.e.f 31/12/2020 but notice of such temporarily discontinuance has not not submitted to the office. Accordingly violation under rule 28 of MCDR, 2017 has been pointedout.
3b	Quantity of ROM mineral production proposed	19836CUm or 49590tonne	3000tonne	Comparatevly very less production than the proposed one. Mining operation was temporarily discontinued w.e.f. 31/12/2020Consider ing extent of pit envisaged production can be achived form the lease area.
3c	Recovery of sailable/usable mineral from ROM production	80% recovery of mineral from ROM ore	Almost recovery percentage of mineral from ROM ore appearsl remains same as envisaged in the document i.e. 80%	Envisaged recovery apperars correct as of nowa lso.
3d	Quantity of mineral reject generation	Nil	No mineral reject generation	Envisaged generation of mineral reject apperars correct as of nowa lso.
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	Not applicable as there is no generation of mineralreject.	Envisaged generation of mineral reject apperars correct as of nowa lso.

3f	Quantity of sub grade mineral generation.	No sub grade mineral generation envisaged	In actual there is no sub grade mineral generation reported.	Limestone of the mine is suitable for cement plant. There is no issue related with generation and disposal of sub grade mineral .
3g	Grade of sub grade mineral generation	Not Applicable	Not Applicable as there is no generation of sub grade mineral from the mine.	Limestone of the mine is suitable for cement plant. There is no issue related with generation and disposal of sub grade mineral .
3h	Manual / Mechanised method adopted for segregating from ROM	Segregation from ROM is not suggested	Segregation of Limestone from ROM is not required .	There is no need of segregation of ROM as entire Limestone mineralisation is suitable for manufacture of cement.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Any beneficiation study is not proposed.	Reportedly no beneficiation study is carried out by the lessee.	There is no need of any beneficiation study at this level as mineral produced from the mine have reportedly no issues in marketing of mineral in envisaged cement industry.

3j	Provision of drilling and blasting in mineral benches	yes with blasting parameters of 2.5mX2.2mX2.9m	Reportedly extraction of mineral is carried out with proposed drilling and blasting parameters.	There is no need of changes in proposed drilling and blasting parameters for extraction of limestone. In fact after approval of last review of mining plan only production in 2019-20 and 2020-21 carried out that too about less than 6% of the envisaged quantity.
3k	Provision of mining machineries in mineral benches	Small dia hole blasting , Manual loading in 10 tonners dumper	Reportedly extraction of mineral carried out with Small dia hole blasting , Manual loading in 10 tonners dumper	There is no need of changes in proposed drilling and blasting, mineral loading and their transportation system from the mine.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Soil bench 1.0m, bench in reject stone- 1.5m and two minerral benches of 3.0m each hight.	Mining operation from the mine is temporarily discontinued w.e.f. 31/12/2020. Evidenses shows that height of benches proposed in soil, reject stone and in mineral are maintained.	Height of benches as suggested in the approved document appears suitable looking level of mining adopted so far.
3m	Total area covered under excavation/pits	0.56hect additional area proposed for extraction of mineral against 2020-21. With this total pit area of the proposed site to be 2.6hect including proposal against 2019-20.	During the year 2020-21, only 3000tonne mineral extracted against targetted one of about 50000tonnes. With this additional broken area of about 0.05 hect Present pit covers about 1.7hect area.	Achievement of production is too low with comprision to the proposed one i.e about only 5-7%.

3n	Ore to OB ratio for the pit/mine during the year.	1:0.9	1:0.5	Mine is temporarily discontinued w.e.f 31/12/2020.
3o	Total area put in use under different heads at the end of year	0.6hect	0.05hect	-
3p	Production of ROM mineral during the last five year period as applicable	16-17 50760t, 17-18 49500t, 18-19 Laps Period, 19-20 49320t, and 2020-21 49590t	16-17 2780t, 17-18 21250t, 18-19 Laps Period, 19-20 2000t, and 2020-21 3000t	Level of production is comparatively too low.
3q	General remarks of inspecting officers on method of mining etc.	-	-	Pit has been developed with separate benching in top soil, reject stone and in mineral. Second bench of Mineral was found water logged . Mining is not commensurating with targetted production as well as extent of lease area.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top Soil 1120CUM, Waste Dump 16888CUM, Mineral Reject -No Mineral reject generation	Top Soil-Nil, Waste Dump Mineral Reject -No Mineral reject generation	Top soil generated during mining operation utilised for plantation purpose and in toping of backfilled area whereas Overburden/ waste rock is utilised for backfilling of already digout portion of statutory barrier zone of road passing through the lease area to connect NH-7.
4b	Location of topsoil, OB and mineral reject dumps	Top Soil- N2684140-268417 and E488080-488100, OB dump N-2683994-2684116& E487842-487927	Both, top soil and OB Waste were not stacked separately. Top soil generated during mining operation utilised for plantation purpose and in toping of backfilled area whereas overburden/ waste rock is utilised for backfilling of already digout portion of statutory barrier zone of road passing through the lease area to connect NH-7. In fact proposed backfilling was proposed fr the year 2019-20. As the fullflaged mining operation does not carried out so the left por proposed backfilling was not c	In fact proposed backfilling was proposed for the year 2019-20. As the fullflaged mining operation does not carried out neither in year 2019-20 nor in 2020-21 so left portion of proposed backfilling for the year 2019-20 was done in the year under review.
4e	Number of active and alive dumps.	One	None	So for generated OB is utilised for proposed backfilling.
4f	Number of dead dumps.	-	One	Old dump
4g	Number of dumps established.	none	one	Old dump established by plantation over it.

4h	Whether Retaining wall or garland drain all along dumps are there.	yes	Prepared on the sloping side of the dump.	-
4i	Length of Retaining wall or garland drain all along dumps	-	50m	-
4j	Number of settling ponds	NA	NA	-
4k	Specific comments of inspecting officer on waste dump management	-	-	Level of production from the mine is too low in comparison to the approved proposal. Consequent to which quantum of generation of top soil and OB waste is too less quantity resulting area proposed for backfilling during 2019-20 was even not completed at the end of 2020-21. There is an old inactive dump which was found established by the lessee.

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Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Only worked out portion of statutory barrier zone proposed for backfilling upto year ending 2019-20.	Proposed site statutory barrier zone. Although backfilling was proposed upto end of 2019-20	As the level of exploitation of mineral is too low resulting backlog of backfilling carried out in the year under review.
5b	Area under backfilling of mined out area	-	part of 750square metre backfilled during the year	-

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed	Top soil generated during the year concurrently utilised for toping of backfilled area and plantation purpose.	As the level of exploitation of mineral is too low resulting toping of backfilled portion carried out in the year under review.
5d	Total area fully reclaimed and rehabilitated	-	-	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	As the level of exploitation of mineral is too low resulting backfilling & toping of backfilled portion carried out in the year under review.

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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).	Yes	No	Violation of rule 26(2) pointed out
6b	Area available for rehabilitation (ha) .	0.3	Rehabilitation work not carried out as level of mining over the last two years were so low that backfilling proposed for old digout portion of statutory barrier zone was not completely backfilled.	Mine is under temporarily disconinuance w.e.f. 31/12/2020.
6c	afforestation done (ha).	Not proposed	Plantation over about 0.4hect area near old rehabilitated dump has been carried out during current monsoon season.	reclamation of Proposed backfilled area not yet carried out as level of mining over the last two years were too low.

6d	No. of saplings planted during the year	Not proposed	About 50 saplings planted during current monsoon season..	No deviation.
6e	Cumulative no .of plants	Not proposed	about 150newly grown plants were seen in the mine area.	No deviation.
6f	Any other method of rehabilitation	Not Proposed	Not adopted.	-
6g	Cost incurred on watch and care during the year	Not proposed	No records available	no deviation .
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	3000CUM	Not carried out	Level of mining over last two years were too low.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	not proposed	Not carried out	No comment
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	not carried out	No comment
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not Proposed	Not Carried out	Nocomment
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	not proposed	About 50saplings planted during current monsoon season were seen in the site.	----

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed.	NA	NA
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed	NA	NA
6p	Compliance of environmental monitoring (core zone and buffer zone)	Not proposed	NA	Mines fall under B category
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Level of mining over the last two years are too low resulting neither targetted production achieved in both the years not compliance on PMCP are satisfactory with respect to the time bound proposal.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	49590tonne (Production)	No mineral dispatch from the mine.	Although 3000tonne mineral produced from the mine but the same have been stocked within lease area.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Grade wise mineral stacking not proposed in the approved document.	Mineral produced from the mine is only cement grade as envisaged in the approved document. So all the produced mineral is simply stacked for dispatch to nearby cement plan.	----

7c	Different grade of mineral sorted out at mines.	Not proposed	Not Carried out	NA
7d	Any beneficiation process at mines .	Not proposed	Not carried out	NA
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No mineral reject generation observed. Entire mineral produced is cement grade.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	1120CUM	50CUM generated and utilised in plantation purpose and toping of backfilled portion of digout statutory barrier zone.	Judicious utilisation of top soil.
8b	Concurrent use or storage of topsoil	Storage 1254 (withswelling factor)	Actual generation was about 50CUM which was utilised for plantation purpose.	Judicious utilisation of top soil.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	18935CUM	About 1500CUM overburden generated and the dsame is utilised in backfilling of old void in statutory barrier zone.	----
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	18915CUM Dumping in earmarked place.	As levelof mining were too low in preceding twom years and generation of Overburden was little .1500Cum OB generated from the mine is utilised in backfilling of void in statutory barrier zone.	No issue.

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8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	NA	NA
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not proposed	about 50 saplings planted over an 500square metre area.	NA
8g	Survival rate	-	70%	-
8h	Water sprinkling on roads to control airborne dust	-	NA	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Lease area is surrounded by agricultralland. Old dump of lease area is reclaimed and rehabilitated with plantion over it. Recently plantion done nearby area of such old dump also attractive. Separate benches in topsoil/ overburden and mineral with waterlogged portion of lower bench of mineral also gives nice view.

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly Returns upto August 2021 and Annual Return 2020-21 have been received in the office online.	Defficiency in AR 2020-21 were found and the same have been pointed out through violation of rule 45(7) of MCDR,2017	Violation pointed out.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer Nil	Although Shri Tushar Pandey is apponted as Mining Engineer but name of Shri Pandey is not indicated in the AR	Defficiency pointed out.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	yes	OK	OK
9d	Scrutiny of Annual return on afforestation	50 plantion	Found	OK
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral reject generation	OK
9f	Scrutiny of Annual return on ROM stock and/or graded ore	As per AR 9925tonne ROM ore	Mineral stock found with in lease area.	--

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Mineral not dispatched form the mine so there is no sale vallue, Ex mine price Rs. 299/- per tonne and production cost Rs. 133/08 per tonne	indicated Cost of production mismatch with the cost of commodities of production given in the return such as - For the calculation of cost of production royalty is considered only Rs.20/-per tone paid which is incorrect. In fact, royalty is to be paid at the rate of fixed vallue which is as of day is Rs. 80/-per tone. Similarly in calculation of cost of production other taxes such as NMET,DMF,GST etc also be considered. Similarly cost of technical & superwisery staff are on higher side.	Defficiency pointed out through vioation of rule 45(7) of MCDR,2017.
9h	Scrutiny of Annual return on fixed assets	Given	observed ok	OK
9k	Scrutiny of Annual return on mining machineries	given	ok	ok

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**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)	25-OCT-21				
Rule 26(2)	01-OCT-21				
MCDR17 Rule 28(3) (a)	01-OCT-21				
MCDR17 Rule 33	01-OCT-21				
Rule 45(7) (i)	01-OCT-21				

**Date :**

**(RAGHUBIR SHARAN GARG)**

Indian Bureau of Mines