

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

**MCDR inspection REPORT  
Jabalpur regional office**

**Mine file No :** MP/SATNA/LST-

**Mine code :** 38MPR35324

- (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 Surya Prakash Chourasiya, partner and Shekh Rust
- (iv) Date of Inspection : 20-SEP-21
- (v) Prev.inspection date : 23-NOV-16

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KHONDHRA (4.547HA)**
- (b) **Registration NO.** : **IBM/20215/2016**
- (c) Category : A Other Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : SATNA  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. :  
E-mail : spc221269@gmail.com  
Phone : 09425173865
- (f) Police Station : Maihar Dehat
- (g) First opening date :
- (h) Weekly day of rest : SUN
2. Address for correspondence :
3. (a) Lease Number : MPR2425
- (b) Lease area : 4.55
- (c) Period of lease : 30
- (d) Date of Expiry : 27-MAY-42
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : SIDDHI VINAYAK MINERALS  
SATNA SATNA MADHYA  
PRADESH  
Phone:  
FAX :

6. Date of approval of Mining : MP review under 17(1) MCR 2016 12-APR-18  
Plan/Scheme of Mining

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	There was no proposal of exploration in 2019-20. However one core/RC/DTH 30.0m deep borehole was proposed against 2018-19 proposal.	There was no backlog of Exploratory work against 2019-20 ,however against the proposal of 18-19, reportedly one DTH bore of 30m deep was carriedout and results of the same conform the existing mineralisation based on which estimation of mineral reserves done on document under review. .	Reportedly DTH borehole was carried out which conforms the mineralisation taken in to account for reserve estimation in the document under consideration.
1b	Exploration over lease area for geological axis 1 or 2	There was no proposal of exploration in 2019-20. However one core/RC/DTH 30.0m deep borehole was proposed against 2018-19 proposal.	There was no backlog of Exploratory work against 2019-20 ,however against the proposal of 18-19, reportedly one DTH bore of 30m deep was carriedout and results of the same conform the existing mineralisation based on which estimation of mineral reserves done during document under review. .	Reportedly DTH borehole was carried out which conforms the mineralisation taken in to account for reserve estimation in the document under consideration.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Name of exploration agency and estimated exploration cost not given in approved document	Details of exploration agency and exploration cost not maintained.	-----

1d	Balance area to be explored to bring Geological axis in 1 or 2	0.24hect	After complition of proposed exploratory work entire lease area i.e.4.547hect conforms G1 Level mineralisation.	Reportedly DTH borehole was carried out which conforms the mineralisation taken in to account for reserve estimation in the document under consideration as well as unexplored eastern part of the lease area.
1e	Balance reserve as on 01/04/20	As on 01/04/2018Status of level wise reserves were as follows- G1-Nil, G2- 2,50,085tonne	On the basis of approved Mining Plan As on 01/04/2020 balence reserve in the mine under G2 level was 2,35,585 tonne after depletion of production against 2017-18 , 2018-19 and 2019-20.Further ,after completion of reported proposed exploratoy work and extension of pit, entire lease area may be considered under G1 level. Thus as on 01/04/2020 balence reserve in the lease area is 2,35,585 tonne under G1 level.	With the completion of proposed exploratory borehole entire area may be considered under G1 level.

1f	General remarks of inspecting officers on geology, exploration etc	Limestone belongs to Bhandar group of Vindhyan system. Area was sanctioned to the present lessee after lapsing of old lease in the year vide notificationn dated 02/03/2007. Extensive old working upto the depth of 10.0 to 12m may be seen in the area in which 6 to 7m thick limestone are found. Proposed exploratory work carried out by the lessee and with this entire area may be considered under G1 axis .
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## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed development against 2020-21 falls between N 26855050 to 2685150 and E 486300 to486350 grid.	present pit covers the proposed Development against the year under review.	Almost recent development are as per proposal. Only in small part of the recent developed pit overburden and mineral benches were found murged for which violation of rule 11(1) pointed out.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden (Top soil / Reject stone ) and mineral bench of 4.0m and 6.0m height respectively are proposed.	Separat benches in overburden and mineral benches of 4.0m and 6.0m heights were observed except in small part of the working face.	For the deviation violation of rule 11(1) pointed out.
2c	Stripping ratio or ore to OB ratio	1;1.10	Record of removal of overburden (topsoil / reject stone) not maintained. However for the production of 7700 tone limestone it is reported by the lessee that about 3300cum reject stone generated during the year 2020-21 which have been separately stacked as per approved proposal. As per AR-2020-21 about 700cum top soil generated during the year . Thus,total overburden generation reached upto 3400cum. So, the actual stripping ratio for the year is 1:0.44 .	Less development as well as poor recor maintainance. Violation under rule 11(1) pointed out.
2d	Quantity of topsoil generation in m3	425cum	As per ARfor 2020-21 about 700cum soil removed during the year.	No diaviation
2e	Quantity of overburden generation in m3	8795cum including top soil	about 3400cum overburden including reject stone generated during the year.	It shows less development for which violation of rule 11(1) already pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Separate benches in overburden and mineral have been proposed with sufficient advancement of overburden bench.	Attempts for separat benching in overburden and mineral were observed. However development is defficient with respect to the proposed one.	Violation in this regard already pointed out through rule 11(1) of MCDR,2017.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	Mining operation were found from the proposed site of working.	It appears that there was no site deviation.
3b	Quantity of ROM mineral production proposed	19950tonne	7700tonne	Actual production is lower side from the proposed one
3c	Recovery of sailable/usable mineral from ROM production	80%	Actual recovery is seems to be as per proposal.	It appears that there is no deviation in this regard.
3d	Quantity of mineral reject generation	nil	none	No deviation.
3e	Grade of mineral rejects generation and threshold value declared.	Not envisaged	Not Applicable as there is no generation of mineral reject.	There is no generation of mineral reject.
3f	Quantity of sub grade mineral generation.	not envisaged in approved mining plan	There is no sub grade mineral generationfrom the mine.	Approved mining plan is still appropriate on matter concerned.
3g	Grade of sub grade mineral generation	Not proposed as there is no generation of sub grade mineral.	Sub grade mineral is not generated question of grade of sub grade mineral d not arrise.	proposal are valid in this regard.
3h	Manual / Mechanised method adopted for segregating from ROM	Segrigation of mineral not proposed in the approved mining plan.	Segrigation of mineral not required as entire mineral produced fromthe mine is salable in the envisaged industry.	No deviation observed in the mine.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	No analysis or beneficiation study carried out as there is no generation of sub grade mineral from the mine.	No deviation.
3j	Provision of drilling and blasting in mineral benches	yes, proposal of blasting with 2.5mX2.2mX2.9m blast design.	Drilling and blasting reportedly carried out in the proposed pattern.	No deviation.

3k	Provision of mining machineries in mineral benches	Loading with L & T PC of 1.2Cum bucket capacity. Hauling of mineral with 10tonner dumpers.	It was revealed that winning of mineral is being carried out with proposed mining machineries.	No deviation.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	4.0m height of bench in overburden and 6.0m height of bench in mineral.	Almost in active part of working bench height in overburden and mineral bench were found as proposed except in small part of the active pit where both the benches were observed murged.	There is deviation only in small part of the active face of the pit. Deviation already pointed out through vialation letter through pointing out violation of rule 11(1)
3m	Total area covered under excavation/pits	0.6hect	0.55hect	No significient deviation observed.
3n	Ore to OB ratio for the pit/mine during the year.	1:1.10	1:0.15,Actual ore to OB ratio decreased as advancement of entire OB bench is not taken place as of date of inspection.	Deviation observed and accordingly for the less development violatiion of rule 11(1) pointed out.
3o	Total area put in use under different heads at the end of year	Total 2.9hect. area including 0.57hect area for proposed five year working and 0.17hect area for proposed waste dumping, was considered for financial Assurance	It is observed that excessive area than the proposed one are not occupied by any mining& allied activities except mineral stacking in the lease area. In account of mineral stack on the date of inspection it was observed that about 2500square metre i.e. 0.25hect area area is used for the purpose. It appears that in overall total area occupied by different miing activities are not more than the 3.0hect.	Overall total lease occupied by different mining activities is not more than the area for which financial Assurancve had deposited by the lessee.

3p	Production of ROM mineral during the last five year period as applicable	Yearwise proposed production are as follows:- 2016-17-8850t, 2017-18-Lapse Period, 2018-19-27900t, 2019-20-11410t & 2020-21-19950t	Yearwise actual production of last five years are as follows :- 2016-17- 8850t , 2017-18- Nil, 2018-19-10,000t, 2019-20-4500t & 2020-21-7700t.	Excess production is not observed in any year of the valid document.
3q	General remarks of inspecting officers on method of mining etc.	Opencost mechanised method of working	Opencost mechanised method of working	No deviation.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate stacking of top soil was not proposed. As per proposal it is to be used in preparation of bund .OB - 8205CUM	Separate stacking of soil was not seen. It was informed that generated top soil has either been utilised for plantation purpose or making of bund.Reject stone part of OB about 2500CUM generated during miningand the same have been dumped in the earmarked place.	No deviation.
4b	Location of topsoil, OB and mineral reject dumps	location of overburden ( reject stone) proposed at near boundary pillar no. 14 &15. Separate stacking of top soil & mineral reject was not proposed.	Overburden ( reject stone) is found dumped on earmarked place.	-----
4c	Number of dumps within lease area and outside of lease area	one	one	no deviation.

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within ultimate pit limit	as proposed	----
4e	Number of active and alive dumps.	one	one	---
4f	Number of dead dumps.	none	None	----
4g	Number of dumps established.	None	None	---
4h	Whether Retaining wall or garland drain all along dumps are there.	yes	Prepared	Retaining wall prepared as proposed
4i	Length of Retaining wall or garland drain all along dumps	Along the proposed reject dump	150m	----
4j	Number of settling ponds	None	Mining activities are mainly for the exploitation of limestone mineral and due to such activities there is no danger for water pollution..	----
4k	Specific comments of inspecting officer on waste dump management	Dumping of overburden waste on proposed selected site as proposed in the approved document.	In fact overburden ( reject stone ) is separately stacked in the proposed site.	No deviation.

#### 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.	Proposal of backfilling of worked out portion of statutory barrier zone was made in approved document.	No backfilling of proposed statutory barrier zone was observed.	Observed deviation pointed outthrough violation letter with pointing out violation of rule 11(1)

5b	Area under backfilling of mined out area	1169CUM	Backfilling of proposed site was not seen during the inspection	Deviation pointed out.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Making of bund and toping of backfilled area of statutory barrier zone	Yes	----
5d	Total area fully reclaimed and rehabilitated	3050square metre	None	deviation pointed out
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Backfilling of 1000square metre out statutory barrier zone was proposed .	Backfilling not observed	deviation pointed out.

#### 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	PMCP report for the year 2020-21 not submitted	violation of rule 26(2) pointed out.
6b	Area available for rehabilitation (ha) .	Nil	NA	-----
6c	afforestation done (ha).	Not Proposed	Plantation on Northern Statutory lease boundary zone was ovserved.	----
6d	No. of saplings planted during the year	none	25	---
6e	Cumulative no .of plants	none	150	-----
6f	Any other method of rehabilitation	Not Proposed	NA	-----
6g	Cost incurred on watch and care during the year	Not proposed	No record maintained	None

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Old excavation present in Northern statutory barrier zone was proposed to be backfilled and rehabilitated by plantation over reclaimed area.	Reclamation work not carried out by the lessee.	deviation pointed out through violation of rule 11(1)
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1000square metre	not done	deviation pointed out
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	Not proposed	Not carried out	No action
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	not carried out	No action
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Notcarried out	No action
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not Proposed	not done	No action

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not Proposed	Not done	No Action.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No proposal	not done	No action
6p	Compliance of environmental monitoring (core zone and buffer zone)	No proposal	----	-----
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Backfilling of excavated portion of northern statutory barrier zone	Not carried out	deviation pointed out through violation of rule 11(1) of MCDR,2017

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	grade wise sorting not proposed as entire mineral is cement grade.	Grade wise sorting were not seen in the mine. About 25000tone limestone of cement grade werefound stacked in eastern part of the lease area.	Grade wise sorting is not required as entire mineral is cement grade.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Not proposed	Not done	No action
7c	Different grade of mineral sorted out at mines.	NA as entire mineral is cement grade only.	NA,as entire mineral is cement grade only	NA

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7d	Any beneficiation process at mines .	Not proposed	NA	No action
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not proposed	Not done	Entire mineral produced from the mine is cement grade. It is true that about 25000tone cement grade mined out limestone is stored but it will definetly have a market in future.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal and utilisation of top soil is proposed	Top soil generated from the mine is utilised for the preparation of bundh.	utilisation of top soil is judicially utilised in preparation of bundh, planttion purpose etc.
8b	Concurrent use or storage of topsoil	concurrent use	generated top soil generated from the mine is utilised in construction of bundh	soil is concurrently utilised.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Overburden consist of top soil and reject stone. Concurrent use of top soil proposed as discussed earlier. Reject stone were proposed to be dumped on earmark place.	Reject stone generated from the mine has dumped on earmarked place within lease area.	No deviation found.

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8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Excavated portion of statutory barrier zone was proposed to be backfilled.	backfilling not carried out.	deviation pointed out.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed except backfilling of excavated portion of statutory barrier zone.	Not carried out	deviation pointed out
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	not proposed	Additional 25 samplings were found planted during the year.	no action.
8g	Survival rate	-	90%	-
8h	Water sprinkling on roads to control airborne dust	proposed	Inspection carried out in rainy season so on the date of inspection water sprinkling not required. However in other season water sprinkling is in opractice, as reported by the partner of the lessee.	No action
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	Lease area is surrounded by agricultural land. Crops of rice were seen all around the lease area. Plantation within the lease area as well as on lessee's own land in adjoining to the lease area were found quite well having good condition. There is a cow selter also in which about 10 cows and their colves were seen in healthy condition. .	Efforts made by lessee towards aesthetic beauty appears very appriciable.

## Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly return upto Jun,21 and Annual return for 2020-21 received in the office by online.	In Annual return for the year 2020-21 defficiencies were found and the same have been pointed out to the lessee through violation of 45(7) of MCDR,2017. Monthly return for July and August,2021 were notreceived .	Violation of 45(5) (b) pointed out.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details of Mining Engineer given	It is indicated that shri Amit Roy is appointed as Mining Engineer in the mine whereas shri Roy has already left the mine.	Defficiency in this regard have been pointed out through violation of 45(7) of MCDR,2017
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR	Part I , item No. 12, Under land use pattern it is indicated that 0.01 hect area work done under PMCP plan whereas such PMCP work was not seen in the lease area.	Defficiency Pointed out
9d	Scrutiny of Annual return on afforestation	75 trees plantation	30-40 grown trees were Found OK	---
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	There is no mineral reject generation	There is no mineral reject generation	OK
9f	Scrutiny of Annual return on ROM stock and/or graded ore	25000tonne cement grade limestone	OK	OK

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Av.Sale vallue- Rs.250/- per tonne Ex Mine Price -Rs.250/- per tonne Production cost - Rs.181/73 per tonne	In calculation of cost of production Drilling and blasting expenditure have not taken into account .	defficiencies pointed out.
9h	Scrutiny of Annual return on fixed assets	Fixed Assets against Mining Machinery including transport equipments indicated as 0	Depreciation cost for the mining machineries as listed under part V item no. 5 of the return have not taken in to account, need be justified.	defficiency pointed out
9k	Scrutiny of Annual return on mining machineries	given	-	-

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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)	30-SEP-21			
MCDR17	Rule 26(2)	30-SEP-21			
MCDR17	Rule 31(1)	30-SEP-21			
MCDR17	Rule 33	30-SEP-21			
MCDR17	Rule 45(5) (k	30-SEP-21			
	Rule 45(7) (i)	30-SEP-21			
MCDR17	Rule 11(1)	30-SEP-21			
	Rule 26(2)	30-SEP-21			
MCDR17	Rule 31(4)	30-SEP-21			
	Rule 33(1)	30-SEP-21			
	Rule 45(5) (b)	30-SEP-21			
	Rule 45(7) (i)	30-SEP-21			

**Date :**

**(RAGHUBIR SHARAN GARG)**

Indian Bureau of Mines