

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KTN/LST-259

Mine code : 38MPR47037

- (i) Name of the Inspecting : **G005**) **SANJAY M. GIRHE**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 23-FEB-21
- (v) Prev.inspection date : 13-MAR-20

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SUNEHRI [15.17 HECT.]**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : KATNI
Village : SUNEHRI
Taluka : KATNI
Post office : BICCHUWA
Pin Code : 483501
FAX No. : 07622-230538
E-mail : N. A.
Phone : 07622- 506220, 230537, 22.
- (f) Police Station :
- (g) First opening date : 28-FEB-02
- (h) Weekly day of rest : SUN
2. Address for : SHRI GAGAN SIAL
correspondance B-1, NEW ACC COLONY
KATNI (M.P.) 483501
3. (a) Lease Number : MPR2496
(b) Lease area : 15.17
(c) Period of lease : 20
(d) Date of Expiry : 03-DEC-21
4. Mineral worked : DOLOMITE Associated
LIMESTONE Main

5. Name and Address of the

Lessee : GAGAN SIAL
 B-1, NEW ACC COLONY,
 KATNI MADHYA PRADESH
 Phone:N. A.
 FAX :N. A.

Owner : GAGAN SIAL
 B-1, NEW ACC COLONY,
 KATNI MADHYA PRADESH
 Phone: N. A.
 FAX : N. A.

Mining Engineer

Name : RAJESH SINGH,Part Time
 Qualification : Second class mines managers certificate
 Appointment/ : 17-DEC-04
 Termination date

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	19-SEP-01
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	17-JUN-04
	:	Mining Scheme rule 12 MCDR1988	21-FEB-08
	:	Mining Scheme rule 12 MCDR1988	07-AUG-12
	:	Mining Scheme rule 12 MCDR1988	05-APR-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During year 2017-18 total 06 core boreholes were proposed to drill of 30m, 50m & 50m	No exploration carried out during the approved plan period.	Violation of Rule 11(1) was pointed out for non-compliance
1b	Exploration over lease area for geological axis 1 or 2	Exploration was proposed by 06 boreholes for G1/G2 level	No exploration carried out during the approved plan period.	Mineralisation proved up to 12m by single working pit.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	During year 2017-18 total 06 core boreholes were proposed to drill by outsourced agency	Not carried out	
1d	Balance area to be explored to bring Geological axis in 1 or 2	During year 2017-18 total 06 core boreholes were proposed to bring G1 level	Area explored under G1 level about 4.72 Ha by way of working pits. Rest area of 10.45 Ha falls under G3 level	4.72 hact area is proven up to depth of 12mts and further depth to be proven by core bore hole.
1e	Balance reserve as on 01/04/20	Reserves in Tonnes Proved (111) -849093 MT Resources Feasibility (221): 1121268 MT The balance reserves as on 1/4/2016 as per approved SOM dtd 05.04.2016	Reserves in Tonnes Proved (111) -701368 MT Resources Feasibility (211): 272175MT The balance reserves as on 1/4/2019 as Annual return.	No additional reserves estimation done.

1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	Mining lease area belongs to Mahakaushal group of rock of irregular habit deposit. Most of the limestone in lease area proved by single working pit up to 12m. No systematic exploration carried out by the lessee in the lease area.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work in between E390 to E560N & S410 to S300 in three benches from 448 mRL to 430mRL	Mine working was carried out as per the proposed locations.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	One separate top soil bench and no benches in OB. Separate benches of 6mts heights were proposed in mineral.	Separate bench observed for top soil. Bench height of 6 to 7m maintained in limestone for systematic mining.	Most of the working lease is devoid of OB. Sufficient development work carried out.
2c	Stripping ratio or ore to OB ratio	1:0.50	1: 0.63	Total 29460 CuM OB generated during the year
2d	Quantity of topsoil generation in m3	Total 6984 CuM proposed	Total 3552 top soil generated during year	
2e	Quantity of overburden generation in m3	46654 CuM	29460 CuM generated during the year	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	There is single working pit in the central part of lease area with broken up area of about 2.87Ha and about 12mt working depth.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Working was proposed in single pit from 442.5mRL to 420mRL	Mine working were carried out in given single pit	
3b	Quantity of ROM mineral production proposed	91721 MT proposed in 2018-19	48340MT (Achieved in 2018-19)	High grade limestone of SMS grade & Cement grade being despatched.
3c	Recovery of sailable/usable mineral from ROM production	95% recovery of limestone from ROM	90% Achieved during the year	About 10% of ROM generated as inter-burden waste.
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral reject generation
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	
3g	Grade of sub grade mineral generation	Not Proposed	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sizing & sorting proposed	Manual sizing & sorting carried out	Sorting & sizing being carried out for SMS & cement grade limestone

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil	Lessee is not having any plan for beneficiation study.
3j	Provision of drilling and blasting in mineral benches	Dia of 110mm shallow depth drilling & blasting is proposed	Drilling & blasting using wagon drill of 110mm dia carried out.	
3k	Provision of mining machineries in mineral benches	L&T PC Excavator- 1.10CuM, 210HP, TATA Dumper, 10 T capacity- 03 Nos Wagon Drill rods -110mm Water Tanker- 5KL Water pump with Diesel engine	L&T PC Excavator- 1.10CuM, 210HP, TATA Dumper, 10 T capacity-03 Nos Wagon Drill rods -110mm Water Tanker-5KL Water pump with Diesel engine	HEMM deployment proposed as per the capacity & targeted production.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	OB bench height of 1.0m is proposed Bench height of 6m proposed in limestone	At some extent bench height is not regular due to quality constraints	Proposed bench height is suitable as per the deposit
3m	Total area covered under excavation/pits	4.0 Ha area was proposed in approved SOM period i.e. 2016-17 to 2020-21	2.87Ha as per Annual Return, 2018-19 as on 01.04.19	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.50Tonne/Cu M	1:0.63 Tonne/CuM	

3o	Total area put in use under different heads at the end of year	As per the previous approved SOM dtd 05.04.16 Pits-2.14Ha Top soil storage-0.26Ha Waste dumps-0.90Ha Mineral Storage-0.24Ha Infrastructure -0.12Ha Road-0.74Ha As on 01.04.2016	Pits-2.87Ha Waste dumps-1.75Ha Mineral & top soil Storage-2.010Ha Infrastructure-0.87Ha As on 01.04.2019 as per AR	No lateral excavation, production was carried out in already working pit.
3p	Production of ROM mineral during the last five year period as applicable	2015-16-:92750 MT 2016-17-:92009 MT 2017-18-: 91462MT 2018-19-: 91729 MT	2015-16-:26500 MT 2016-17-: 49620 MT 2017-18-: 49747 MT 2018-19-: 48340 MT	Production details as per annual returns from 2015-16 to 2018-19. EC of enhanced capacity not received
3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Open cast mechanised working proposed by using Excavator & dumper combination with drilling & blasting using wagon drill. One big centralised working pit is developed & mineralisation proved up to depth of 12mts.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate top soil, mine waste dumping proposed	Top soil, mine waste generated dumped at proposed locations.	Mine waste in the form of inter-burden.

4b	Location of topsoil, OB and mineral reject dumps	Top soil dump proposed in between S415 to S520 & E90 to E150 & Mine waste proposed at S320 to S210 to E560 to E700	Dumping carried out as per proposals	
4c	Number of dumps within lease area and outside of lease area	Presently there are total 09 dumps of dolomite/waste within lease area	Presently there are total 09 dumps of dolomite/waste within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB/waste generated proposed to be dumped at south-west & North eastern part of Pit-1 beyond UPL	Dumping carried out at earmarked locations	
4e	Number of active and alive dumps.	Not Proposed	All 09 dumps are active in nature	
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	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	Nil	
4j	Number of settling ponds	Not Proposed	Nil	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	Mining lease area is devoid of overburden. Mine waste is in the from of intercalated phyllite.

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.	Presently none of the pit is mineral exhausted for backfilling	Scope of backfilling doesn't exist as no pit is mineral exhausted	
5b	Area under backfilling of mined out area	NA	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Top soil & waste/inter-burden encountered in the lease area proposed to be stacked at earmarked location for future backfilling and plantation purpose. During proposed plan period scope of backfilling doesn't exists.

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 before 1st July of every year	Not submitted within time limit as per the provisions of Rule 26 of MCDR,2017	Violation under rule 26(2) of MCDR,17 observed

6b	Area available for rehabilitation (ha) .	Not Proposed	Not Done	
6c	afforestation done (ha).	85 Nos of saplings proposed to be planted over 300 Sq.M	120 saplings planted withing ML area over 450 Sq.M	
6d	No. of saplings planted during the year	85 Nos of saplings proposed to be planted	120 saplings planted withing ML area	
6e	Cumulative no .of plants	NA	NA	Details on cumulative plantation not furnished in approved document
6f	Any other method of rehabilitation	Not Proposed	Nil	
6g	Cost incurred on watch and care during the year	NA	NA	
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	Not Proposed	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not Proposed	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Carried out as per the proposals	Analysis reports were provided during the inspection
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	Scope of PMCP work is very well existed in the lease area. Along with limestone dolomite excavation also being carried out.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	92455 MT proposed as total ROM production for despatch. Grade wise sorting proposed within lease area for SMS & rest cement grade limestone	38445MT dispatched as SMS grade limestone & rest 30586 MT as SMS grade closing stock at mine head	No cement grade limestone despatch during the year
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed as Manual sizing & sorting	Manual sizing & sorting is done	
7c	Different grade of mineral sorted out at mines.	Sorting is being carried out for BF grade limestone (CaO-42% (Min), SiO ₂ -4%(Max) Cement grade (CaO-42 to 45% CaO & MgO-Up to 4%	Sorting carried out as per the proposals	
7d	Any beneficiation process at mines	Not Proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Mineral is being conserved by grade wise sorting in the lease area. BF grade limestone (CaO-42% (Min), SiO ₂ -4%(Max) proposed to be sell to the steel plants. Rest Cement grade (CaO-42 to 45% CaO & MgO-Up to 4% for cement manufacturing industries.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate stacking & utilization proposed	Done as per the proposals	Stacking done at earmarked locations
8b	Concurrent use or storage of topsoil	No Proposed	Nil	Stacking being carried out for future plantation purpose
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of mine waste proposed	Mine waste dumped at earmarked locations	ML area is devoid of OB.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	Presently scope doesn't exist.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Presently scope doesn't exist.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	85 saplings covering area 300 sqm proposed	120 Nos. of saplings planted along southern side of lease boundary	Survival rate is 66% which is on lower side
8g	Survival rate	Proposed as 65 %	Acheived as 60%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed by water tanker	Regular water sprinkling is done by water tanker	Water tanker of 5KL capacity is provided for the purpose

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	NA	NA	Aesthetic beauty in and around mine area is not much satisfactory as plantation not done up to that extent. Accordingly, proposals have been given in ROMP.
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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. submitted upto- January- 21 A.R. submitted upto- 2019-20	Annual Return for the year 2019-20 was submitted within time limit	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri K.N.Ojha, Mining Eng. & Shri Sridhar Pandey, as Geologist appointed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Opencast working-2.87Ha Waste dumping-1.70Ha Infrastructure -0.87Ha Mineral storage/Top soil-2.010Ha	
9d	Scrutiny of Annual return on afforestation	Given	120 Nos of saplings planted along statutory barriers zone	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	No mineral rejects generated in lease area	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	SMS Grade Limestone: O/S-22451.92MT Production-46980MT Despatch-38845.15 MT C/S-30586 MT	

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex-mine price: SMS Grade -Rs 502/MT Production cost- Rs 235/Tonne
9h	Scrutiny of Annual return on fixed assets	Given	NA
9k	Scrutiny of Annual return on mining machineries	Given	L&T PC Excavator- 1.10CuM, 210HP, TATA Dumper, 10 T capacity-03 Nos Wagon Drill rods -110mm Water Tanker-5KL Water pump with Diesel engine

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

Date :

(SANJAY M. GIRHE)

Indian Bureau of Mines