

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/SATNA/LIMESTONE-347

Mine code : 38MPR35320

- (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 : 15-MAR-20
- (v) Prev.inspection date : 04-JUL-13

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KHARAUNDI 12.5095HA.**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : SATNA
Village : KHARAUNDI
Taluka : MAIHAR
Post office : NADAN
Pin Code :
FAX No. : -
E-mail : -
Phone : -
- (f) Police Station : -
- (g) First opening date : 11-JUL-06
- (h) Weekly day of rest : SUN
2. Address for :
correspondance
3. (a) Lease Number : MPR2355
- (b) Lease area : 12.59
- (c) Period of lease : 20
- (d) Date of Expiry : 10-JUL-26
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : GHAI ENTERPRISES.
STATION ROAD, MAIHAR P.O.
MAIHAR DISTT. SATNA (M.P)
SATNA MADHYA PRADESH
Phone:
FAX :

Owner : GHAI ENTERPRISES.
P.O.MAIHAR SATNA MADHYA
PRADESH
Phone: N. A.
FAX : N. A.

6. Date of approval of Mining : Mining Scheme rule 12 MCDR1988 28-FEB-14
Plan/Scheme of Mining : MP review under 17(1) MCR 2016 26-APR-17

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration was proposed during the year 2019-20	NA	
1b	Exploration over lease area for geological axis 1 or 2	No exploration was proposed for geological axis 1 or 2	NA	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Exploration was not proposed during the year 2019-20	G1 level: 10.845 Ha G2 level: 1.05 Ha Area explored under G1&G2 by way of working & trial pits. No separate exploration carried out in lease area.	
1e	Balance reserve as on 01/04/20	Reserves in Tonnes Proved(111) - 1067438MT Resources in tonnes Pre-Feasibility(21): 502130 MT Reserves/Reso urces position as on 01.04.2017 as per approved ROMP dtd 26.04.2017	Reserves in Tonnes Proved(111) -1042131MT Resources in tonnes Pre-Feasibility(21): 502130 MT Reserves/Resources position as on 01.04.2020 as per AR 2019-20	

1f	General remarks of inspecting officers on geology, exploration etc	NA	NA	Most of the mineralised lease area has been explored by working pits only & no detailed exploration carried out in the lease area.
----	--	----	----	--

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work in between N2682707 to N2682828 & E490124 to 490308 with 333mRL to 327mRL 3C as marked on Plate-7 for the year 2019-20.	Mine working was carried out as per the proposed locations & but there was deviation due to less working days of mine during the year 2019-20	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches in Top soil & reject stone proposed as 4mts height & Limestone - 2 Benches (Height 3 to 5 m)	Seperate bench is observed in top soil/reject stone and Minerals as per the proposals.	
2c	Stripping ratio or ore to OB ratio	Proposed as 1: 0.76	Not acheived fully due to less production during the year.	
2d	Quantity of topsoil generation in m3	Total 1545 CuM proposed	Acheived 260 CuM due to very less production.	
2e	Quantity of overburden generation in m3	Proposed as 7635 CuM	Acheived as 1915 CuM due to less production	

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	There was single centralised quarry & its dimensions- Quarry No-1 (89-290m) x (140-260M) x (7M), limestone mineralisation was very well seen in pit.
----	---	----	----	--

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Excavation was proposed in Quarry-1 from 333mRL to 327mRL as marked in Plate-7	Mine working were carried out as per proposals	
3b	Quantity of ROM mineral production proposed	30,000MT proposed in 2019-20	2520 MT (Achieved in 2019-20)	Cement grade production reported during the year
3c	Recovery of sailable/usable mineral from ROM production	Recovery of 80% proposed for limestone	Acheived as per the proposals	Recovered ROM utilised/saled to the nearby cement plants.
3d	Quantity of mineral reject generation	Not Proposed	Nil	
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	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual sizing & sorting proposed	Manual sizing & sorting carried out	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil
3j	Provision of drilling and blasting in mineral benches	Small dia 32mm shallow depth drilling & blasting is proposed by Jack hammer	Drilling & blasting using jack hammer carried out by small dia 32mm shallow depth.
3k	Provision of mining machineries in mineral benches	L&T PC 200- 1.2Cum capacity TATA Dumper model 2515, 10 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Water pump with Diesel engine Water Tanker - 5KL capacity	L&T PC 200- 1.2Cum capacity TATA Dumper model 2515, 10 T capacity Tractor mounted Air Compressor Jack Hammer with Drill rods Water pump with Diesel engine Water Tanker -5KL capacity
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height in top soil/Interburden was proposed 4mts Bench height of 3m proposed in limestone	Working was carried out as per the proposals.
3m	Total area covered under excavation/pits	4.86 Ha area was proposed in approved ROMP period i.e. 2017-18 to 2020-21	4.29 Ha as on 01.04.2020, less excavated area due low production during the year 2019-20
3n	Ore to OB ratio for the pit/mine during the year.	Proposed as 1:0.76	NA

3o	Total area put in use under different heads at the end of year	As per the previous approved ROMP Pits-4.86 Ha Waste dump-0.70 Ha Infrastructure-0.05Ha Road-0.10 Ha	As per the previous approved ROMP Pits-4.29 Ha Waste dump-0.70 Ha Infrastructure-0.125 Ha Green belt-0.60 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2015-16-: 30000 MT 2016-17-: No Proposals 2017-18-: 30000 MT 2018-19-: 30000MT 2019-20-: 30000 MT	2015-16-: Nil 2016-17-: Nil 2017-18-: 15478 MT 2018-19-: 7307 MT 2019-20-: 2520 MT	
3q	General remarks of inspecting officers on method of mining etc.	NA	NA	Open cast working (OTFM) proposed by using Excavator /JCB & dumper combination with shallow drilling & blasting using jack hammer.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping for interburden was proposed as earmarked location.	Separate dumping for interburden was carried out as per the proposals	
4b	Location of topsoil, OB and mineral reject dumps	Top soil & interburden waste dumping was proposed at SW part between N2682800 to N2682900	Dumping carried out as per the proposals	

4c	Number of dumps within lease area and outside of lease area	Top soil & interburden waste dumping was proposed at SW part between N2682800 to N2682900	At present two old waste dumps are existing between N2682600 to N2682700.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps were proposed outside UPL	Dumps are located beyond UPL	
4e	Number of active and alive dumps.	At Present 02 active waste dumps are existing.	At Present 02 active waste dumps are existing.	
4f	Number of dead dumps.	No dead dumps in the lease area	No dead dumps in the lease area	
4g	Number of dumps established.	Not Proposed	NA	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	Not available	
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	NA	
4j	Number of settling ponds	Not Proposed	NA	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	Top soil & interburden waste dumps of 02 nos. are lying in lease area.

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.	Not proposed during the year 2019-20	Limestone is not exhausted in quarry-1 so far for future backfilling purpose.	
5b	Area under backfilling of mined out area	Not Proposed	Some of the area have been backfilled in 7.5m barrier zone.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use of top soil for plantation purpose over backfilled area proposed	Top soil used as per the proposals	
5d	Total area fully reclaimed and rehabilitated	Not Proposed	Backfilling carried out in some part of 7.5m barrier zone.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	Presently none of the quarry/pit area have been mineral exhausted fully. Hence, scope of reclamation by backfilling doesn't exist on large extent.

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	Yes, submitted within time limit as per the provisions of Rule 26 of MCDR,2018	
6b	Area available for rehabilitation (ha) .	Not Proposed	NA	
6c	afforestation done (ha).	Total 100 saplings proposed during 2019-20	100 saplings planted with 70% survival rate	

6d	No. of saplings planted during the year	Total 100 saplings proposed during 2019-20	100 saplings planted with 70% survival rate
6e	Cumulative no .of plants	NA	NA
6f	Any other method of rehabilitation	Not Proposed	NA
6g	Cost incurred on watch and care during the year	Not Proposed	NA
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed during the year 2019-20	NA
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	NA
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	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	NA	NA	None of the pit area is fully mineral exhausted, hence scope of backfilling/reclamation & rehabilitation doesn't exist. Periodic monitoring is being carried out by outsourced consultant.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	30000 MT proposed as total ROM production for despatch during the year 2019-20	Only 2520 MT cement grade limestone production carried out & no dispatches as the mine worked for only 29 days during the year 2019-20.	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed as Manual	Manual sorting is done	
7c	Different grade of mineral sorted out at mines.	Cement grade limestone proposed to be sorted.	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	Cement grade limestone is being sorted & conserved for cement plants requirements. Entire ROM utilised by proper sizing, sorting & blending as per plant requirement & buyer requirements.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & utilization was proposed	During the year- Nil, oncurrent use of top soil for plantation purpose was proposed.	
8b	Concurrent use or storage of topsoil	Concurrent use of top soil for plantation purpose was proposed	During the year 2019-20, no top soil generated	Due to very marginal limestone production, top soil was not generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping for interburden waste material was proposed	Dumping carried out as per the proposals	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not Proposed	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Limestone not exhausted in any one of the pit so far backfilling, reclamation & rehabilitation.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Total 100 saplings were proposed for plantation	Plantation carried out as per the proposals.	
8g	Survival rate	Proposed as 70%	Acheived as 70%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed by water tanker	Regular water sprinkling is being practised.	
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. Hence, it was instructed to propose at least 200-300 sapling/year.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

9a	Status of submission of Monthly and Annual returns	M.R. not submitted upto- February - 2020 A.R. submitted upto- 2018-19	Nil	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Not Given	Nil	Mine worked for 29 days in the year 2019-20
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	NA	
9d	Scrutiny of Annual return on afforestation	Given	Some plantation were observed along statutory barrier	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Give	Nil	No mineral rejects generation proposed during the year.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Cement Grade: O/S-34254.78 MT Despatch-Nil C/S-36774.78 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Ex-mine price: Cement Grade -Rs379 /MT	Variation in ex-mine price w.r.t. monthly sale price published by the IBM
9h	Scrutiny of Annual return on fixed assets	Given	Nil	
9k	Scrutiny of Annual return on mining machineries	Given	Nil	

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