

**INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**

MCDR INSPECTION REPORT

Bangalore regional office

Mine file No : KNT/GLB/LST/48/BNG

Mine code : 38KAR10017

- (i) Name of the Inspecting : **256**) PUKHRAJ NENIVAL
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : K.Sudhakar, Sr.Manager- Mines, K.Nagaraja Rao, Manag
Official with
Designation
- (iv) Date of Inspection : 24/09/2013
- (v) Prev.inspection date : 26/10/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : VICAT SAGAR LIMESTONE MIN
- (b) Category : A Mechanised
- (c) Type of Working : Opencast
- (d) Postal address
State : KARNATAKA
District : GULBARGA
Village :
Taluka :
Post office :
Pin Code :
FAX No. :
E-mail : sudhakar.k@vicatsagar.in
Phone : 91 9663786273
- (e) Police Station : Mirian
- (f) First opening date : 21/06/2012
2. Address for : Chatrasala village, KHARCHIKED POST
correspondance Chincholi Taluk
Gulbarga-585 320
3. (a) Lease Number :
(b) Lease area :
(c) Period of lease :
(d) Date of Expiry :
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : VICAT SAGAR CEMENT PRIVATE LIMITED
 CHITRASALA, CHINCHOLI
 GULBARGA GULBARGA
 KARNATAKA
 Phone:
 FAX :

Owner : Anoop Kumar Saxena
 M/s. Vicat Sagar Cement Pvt
 Limited Reliance Majestic
 Bldg,Road No:11 Door No:8-
 2-626, Banjara Hills,
 HYDERABAD ANDHRA PRADESH
 Phone:
 FAX :

Agent : Y.V.Krishna Kumar
 M/s. Vicat Sagar Cement Pvt
 Limited Chatrasala (Vil),
 Kharchikhed (Post Chincholi
 (Tq) Gulbarga Dist. Karna
 GULBARGA KARNATAKA
 Phone:
 FAX :

Mining Engineer

Name : G.SUDHAKAR,Full Time
 Qualification : B.Tech (MINING)
 Appointment/ : 25/04/2013
 Termination date

Geologist

Name : K.NAGARAJ RAO,Full Time
 Qualification : M.SC, (MINERAL EXPLORATION)
 Appointment/ : 14/02/2011
 Termination date

Manager

Name : K.SUDHAKAR
 Qualification : Dip.in (Mining), FCC.
 Appointment/ : 20/09/2013
 Termination date

6. Date of approval of Mining :
 Plan/Scheme of Mining**PART - II : TECHNICAL DETAILS/COMMENTS**

1. Details about Average employment :

Maximum number of persons employed on any day during the year

Employment category	No.of employment	Av. yearly working days
DIRECT		
Supervisory	5	233
Managerial	6	233

2. Community Development Plan (in and around the mines) : Proposed action and expenditure towards socio-economic development.

Action during the year	Expenditure in Rs. Lakhs for				Remarks
	previous year		current year		
	Proposed	Incurred	Proposed	Incurred	
General					
Sanitation		10.54		24.00	
Water supply		0.54		10.54	
Health		13.22		29.83	
Sub total		24.30		64.37	
Infrastructure					
Sub total			24.30		
Employment			15.00	15.00	
Environment management			102.90	325.00	
Training			4.50	9.15	
Others			0.00	30.00	
Total			146.70	443.52	

3. Status of compliance of MCDR, 1988, including therewith the rectification of the outstanding violation of rules.

The mine was inspected on 26/10/2012 under RMGS the provisions of Rule 47 under MCDR 1988 were observed & pointed on 27/11/2012 & the same were complied on 23/12/2012. During the present course of inspection, the provisions of Rule 13 (1), 21 & 48 of MCDR 1988 were observed & pointed out on 04/10/2013.

4. A note on the justification in case of suspension of mining operation under rule 13(2) or prohibition of deployment of any person under rule 56 of MCDR, 1988, if recommended.

No such recommendation have been made under 56 of MCDR 1988.
Not applicable.

5. Scientific Mining

Items	Proposal	Actual work done	Remarks
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A. Exploration (Rule 13)

a.Type of prospecting : As per MMP 100
and exploration i.e. Core holes
pitting, drilling proposed. 136 Coreholes - 4968.9
mts

b.Total area covered : - 446.77 Hect

B. Working (Rule 13)

a.Number and size of : ONE, 460m x 530m
each pit (LxWxH) Width-350mts ,Length-
380mts
Height-14.5mts

b.Bench : REGULAR 1 L-350, W-235, H-8
size(LxWxH)length can 2 L-150, W-150, H-6.5
be defined as
regular/irregular

c.Ore to waste ratio : 1:0.11 1:0.68
pit wise if possible
otherwise for mine

d.Total area covered : 30.00 hectares 14.41 Hect
under excavation/pits

C. Waste disposal (Rule 13)

a.Location of dumps : NA NA

e.Yearly generation : NIL 214053 Cub.mtr(Top
of waste quantity. soil).
68496 cub.mtr - 32%
utilised for plantation.
145557cub.mtr - 88%
stored.

b.Method of dumping : NA NA
whether
advancing/retreat

c.Total area covered : NA NA
under waste dump.

d.No.and size of each : NA NA
waste dump with No of
steps/lift/bench

D. Production

b.Year wise : 2009-10 NIL 2009-10 NIL
production of last 2010-11 6,69,078 2010-11 NIL
five year. 2011-12 17,41,604 2011-12 NIL
2012-13 19,84,906 2012-13 3,64,699mt lst &
2013-14 25,03,416 214053 Cub mtr (Topsoil)
2013-14 4,93,288 up to
August-13
Production as
achieved 47.14%
of proposals
during 2012-13
similarly there
is acievement
of 51.2% of
proposed
production
during last 5
years
(cumulative).
Accordingly
violation has
been pointed

out .

D. Reserve

a. Reserve position as : 26.81 Million
per latest MP/MS and Tonnes
at the time of
inspection.

0.4 Million Tonnes
Depleted during 12-13
Leaving 26.41 Million
Tonnes reserves as
1/4/2013.

RESERVE POSITION AS ON 01/04/2013

LIMESTONE		
Category	Quantity in Tonnes	Grade
Proved	26810000	Cao-47.12%& Sio2-12.19
Probable	0	
Possible	260040000	
Total	286850000	

PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013

Mineral	Production	Unit
LIMESTONE	364699	TON

6. Conservation of Mineral - both quantitative and qualitative**Beneficiation (Rule 20 and 26)**

Efforts for improving low grade and sub grade mineral. : NA

Efforts for improving percentage of recovery of ore. : NA

Mineral Rule 15

Percentage of recovery of ore pitwise w.r.t. ROM and total material : 95%

Number of benches in ore and waste. : Ore:02 & BC Soil:01

Sub/grd mineral/fines (Rule16)

Qty of yearly generation and total qty available during inspection with grade : NA

Number and size of each stack : NA

Location of stacking. : NA

Separate stacking from waste : NA

Total area covered for stacking : NA

Exploration data as on 31/03/ 2013

No. of Boreholes	No. of Pits	No. of Trenches
68	0	0

OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013

Overburden/waste removed (in m3) :	214053
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Utilisation of Sub Grade Mineral and Mineral Rejects

Generated	Utilised	Stacked	(In Ton.)

7. Environment Management - both quantitative and qualitativ

A. Land environment

- a. Landscape. : The mine is opened only last year and Land degradation by mining during the last year is 14.41 Hectares out of 446.77 Hectares. It means 3.32% of the total leasehold area has been subjected to land degradation.
- b. Aesthetic environment : The core area of the leasehold is essentially a gently sloping ground towards South, SE and NW. The ML area spreading with a mantle of black-cotton soil and limestone occurs below this ubiquitous soil cover and is scantily exposed at surface near stream cuttings. As the mining is in initial stage ,bunds are made along the Buffer Zone and safety zones to make the area aesthetic. 8500 & 37500 no of saplings have been planted in & around the ML area respectively
- c. Soil and land use pattern : The soil and land use pattern in the buffer zone will hardly be affected by the mining activities.
- d. Agriculture : Out of total ML area of 446.77 hectares ,only 341 hectares have been acquired. The present mining is no way affecting the agricultural practices in the buffer zone. All the measures are taken to prevent siltation of the surrounding lands carried out by the rain water. In the core zone will have part reclamation and afforestation. A major part will be made hydro reclamation and useful for ground water recharging.
- e. Forest(flora and fauna) : The ML area lies outside the forest. The ML area does not contain any national park and wild life sanctuary with in the 10 kms radius. The major emissions from the mining operations are fugitive are confined to maximum distance of 1 km. The impact of mining on Forest is negligible. The core zone and buffer zone does not have endangered, endemic and migratory bird species.
- f. Vegetation : Bushes and ricketts dominated the entire area with scanty grass cover.
- h. Public building, places and monuments (protected, historical), placec of worship and places of tourist : Not Applicable.

B Water environment.

- a. Surface water : No Perennial nallas are located within in mine area. Kagna is the only major river within 10 kms radius. The drainage is controlled by lithological contacts, structural features, fault zones and master joints resulting in straight line course of drainage.
- b. Ground water : The ground water is deep seated and is found below the 40 m below the ground level. As the maximum depth of mining will be about 30 mtrs. And interference of ground water as seepage is not envisaged. At the end of the mining activities , the void created will be made Hydro reclamation which will improve the ground water recharge of the area.
- c. Quality of water : Quality of water being monitored and found within the

permissible limits. (pH value -7.6, TDS -170, & alkalinity -100).

C. Air environment

- a. Noise : Noise levels are being maintained well within the permissible limits. They are operated at different spots. Noise levels being monitored at every month. Daytime is reckoned in between 0600AM to 10PM - 61.5 to 66.0 dB (A)
Nighttime is reckoned in between 10PM to 06AM - 52.3 to 56.0.8 dB (A).
- b. Air : The Ambient air quality is monitored at 6 locations spreading over the entire buffer zone and core zone. At each sampling station monitoring was carried out for 24hrs. In a day, 2days in week and 4 weeks. PM - 52 to 560 ug/m³, PM 2.5 16 to 17 ug/m³, SO₂-8.1 to 8.3 ug/m³, Nox-9.3 to 9.4 ug/m³.
- c. Climatic condition : The mining operations in the area hardly remove any vegetation; this will hardly impact on the regional climatic conditions. The micrometeorological conditions in the core zone may record a change in afforestation and hydro reclamation in the pit.

D. Socio economic environment

- a. Social and demographic profile. : The area comprises 57 revenue villages with total population of 87561 with 16786 households and a sex ratio of 1000:1013. Percentage of SC and ST population is about 22.8% and 4.6%. The average literacy rate is observed as 47.4%. Male literate population is relatively high than the female. Only 17.5% females are literate against the male literacy of 29.9%. The major crops are Toor Dal, Maize & Cotton and main source of water is rain water. Most of the villages are electrified.
- b. Recommending health and safety. : Workers are exposed to excessive noise levels during the mining activities. Suitable PPE's are provided to all the workers. All safety precautionary measures are taken during the Blasting operations to avoid resulting of accidents. Medical facilities are available at taluq headquarters. Company established well equipped free occupational health center in the village.
- c. Human settlement : Chatrasala, Kharchikhed and Burugapalli Ghanapur and Garugapalli are the human settlements within 0.5 km or 3 2 km radius from the core zone. There are 200 to 500 houses, in these villages and their main pre occupation is Agriculture.
- d. Recreational facility. : There is a recreation club located inside the colony. The cable T.V network has come to every doorstep in and around the village. All sports & games are conducting at recreation club.

7.1 Comments on the steps taken by the lessee towards maintaining environment and monitoring of environmental parameters to ensure the qualitative improvement in the environment and ecology.

<u>Water Management</u>			Value
Season	Station type	Station name	
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Parameter	Actual	Excess
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<u>Air data for excess parameters</u>					
Season	Station name	Type of area	Parameter	Value	
				Actual	Excess
Monsoon	HAUL ROAD	Industrial	SPM	530	30
Monsoon	UNLOADING	Industrial	SPM	560	60

<u>PLANTATION DURING THE PREVIOUS YEAR</u>						<u>2012 - 2013</u>		Area in Hect.
Within lease area			Outside lease area					
Area	Trees planted	Survival rate	Area	Trees planted	Survival rate			
3.4	8500	95	5.06	22500	95			

<u>TOP SOIL MANAGEMENT</u>	
Quantity as on 31/03/2013	

8. Scrutiny of annual returns on cost of production, reserve, production, pit mouth value, stock, land use pattern and fixed assets.

The annual return for the year 2012-13 has been scrutinized & the following observations are made.

Opening Stock is - NIL
Production is - 364699 MT
PMV is - Rs.132.80
Despatches are - 364699 MT
Closing stock - NIL
Cost of Operation is - Rs. 68.80
Mineral rejects - NIL
Landuse pattern - NIL
Fixed assets - 1, 46, 34,133
Reserves - 266.78 Million Tonnes

PART - III : PERFORMANCE OF MINE OWNER
(In case of lease expiring within 2 years - as per guidelines)

a. Compliance of terms and conditions of lease deed.

NA

b. Compliance of the provisions of MCDR, 88 and advise given.

NA

c. Conduct with regard to adoption of safety measures and forest wealth, ecology and environment in the mining lease area.

NA

d. Whether the mine owner has carried out exploration and exploitation on the basis on surface mapping, pitting, trenching and core drilling taking in to consideration the mode of occurrences of mineral deposit.

NA

e. Whether production from mining area is commensurate with the reserves and the long term progress of utilization of mineral.

NA

f. Whether adequate investment has been made by the lessee on the development of mine on mining machinery, operational and administrative building, residential accommodation for the employees.

NA

g. Measures taken by the lessee for protection of environment and ecology.

NA

h. In case leases where the mineralisation tends to exhaust within the present period, the status of closing operation in phases and the special issues including human issues to be addressed at the time of closing of mine.

NA

PART - IV : PROPOSALS FOR FURTHER ACTION FOR :

Indian Bureau of Mines (any issue related to CGPB, SGPB, Assistance, Consultancy, Annual Programme and studies, etc.)

NIL

State Government (Illegal mining, mining dispute, infrastructure, Mineral based industry, Mineral policy, etc.)

It was observed that boundary pillars were erected as per the CCOM's circular 01/2009 furnishing the details of ML no , Boundary pillar No; longitude , latitude, etc. The lessee may be advised to erect the same within a period of 30 days.

The Central Government (Infrastructure, Development, Mineral policy and Legislation, Mineral based industry, etc.)

NIL

Date :

(PUKHRAJ NENIVAL)

Indian Bureau of Mines