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

## MCDR INSPECTION REPORT

## Bangalore regional office

**Mine file No :** KNT/GLB/LST/7/BNG **Mine code : 38KAR10012**

(i) Name of the Inspecting Officer and ID No. : **256 ) PUKHRAJ NENIVAL**

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine Official with Designation : Shri.K B Verma, General Manager (Mining)

(iv) Date of Inspection : 21/09/2013

(v) Prev.inspection date : 14/02/2012

### PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **WADI - I**

(b) Category : A Mechanised

(c) Type of Working : Opencast

(d) Postal address

State : KARNATAKA
District : GULBARGA
Village : WADI
Taluka : CHITTAPUR
Post office : WADI
Pin Code :
FAX No. : 08476-202190
E-mail : mines_wd@acccement.com
Phone : 08476-202293

(e) Police Station : Chittapur

(f) First opening date : 09/08/1966

2. Address for correspondance : SRI. KULDIP KAURA, MD & OWNER,
ACC LIMITED, CEMENT HOUSE,
121, MAHARSHI KARVE ROAD, MUMBAI - 400020.

3. (a) Lease Number : KAR0074

(b) Lease area : 471.03

(c) Period of lease : 20

(d) Date of Expiry : 18/02/2023

4. Mineral worked :

| | |
|---|---|
| LIMESTONE | Main |
| CLAY (OTHERS) | Associated |
| SHALE | Associated |

5. Name and Address of the

Lessee : ACC Limited
WADI CEMENT WORKS, WADI
[P.O], GULBARGA, GULBARGA
KARNATAKA
Phone:08476-62411
FAX :08476-62190

Owner : KULDIP KAURA
121, MAHARSHI KARVE RD,
CHURCH GATE MUMBAI MUMBAI
(SUBURBAN) MAHARASHTRA
Phone:
FAX :

Agent : DR.S.B.SINGH
DIRECTOR (PLANT), WADI
CEMENT WORKS WADI, GULBARGA
GULBARGA KARNATAKA
Phone:
FAX :

Mining Engineer

Name : ARUN KUMAR,Full Time

Qualification : B.E ( MINING)

Appointment/ Termination date : 27/11/2008

Geologist

Name : JAGDISH MADIVAL,Full Time

Qualification : M.Sc ( GEOLOGY )

Appointment/ Termination date : 05/07/2013

Manager

Name : KUNJ BEHARI VERMA

Qualification : B.E ( MINING )

Appointment/ Termination date : 16/09/2012

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** | | |
| **Managerial** | **1** | **365** |
| **Workers** | **102** | **365** |
| **Supervisory** | **23** | **365** |

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

| Action during the year | Expenditure in Rs. Lakhs for previous year | | Expenditure in Rs. Lakhs for current year | | Remarks |
|---|---|---|---|---|---|
| | Proposed | Incurred | Proposed | Incurred | |
| **General** | | | | | |
| Health | | 77.93 | | 185.38 | |
| Sanitation | | 14.38 | | 43.73 | |
| **Sub total** | | **92.31** | | **229.11** | |
| **Infrastructure** | | | | | |
| Public transport | | | 212.88 | 475.35 | |
| **Sub total** | | | **92.31** | **475.35** | |
| **Others** | **372.03** | **954.88** | **10.03** | **23.60** | |
| **Environment management** | | | **19.14** | **52.54** | |
| **Training** | | | **9.66** | **40.39** | |
| **Employment** | | | **7.72** | **21.36** | |
| **Total** | **372.03** | **954.88** | **351.74** | **842.35** | |

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

.During the last MCDR inspection no violations were observed and pointed out. During the present course of inspection the violations under rule 13(1), 21 & 45 of MCDR 1988 were observed and 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, 19888, if recommended.**

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

**5. Scientific Mining**

| Items | Proposal | Actual work done | Remarks |
|---|---|---|---|
| **A. Exploration (Rule 13)** | | | |
| a.Type of prospecting and exploration i.e. pitting, drilling | : - | - | |
| b.Total area covered | : - | - | |
| **B. Working (Rule 13)** | | | |
| a.Number and size of each pit (LxWxH) | : 1pit 3000m X1200mX35m | 01pit 3000m X1200mX35m | |
| b.Bench size(LxWxH)length can be defined as regular/irregular | : 04 Benches in mineral (Irregular X 10 MtsX 50Mts) 01 Bench in Over burden (irregularX2mtsX80 Mts) | 04 Benches in mineral (Irregular X 10 MtsX 50Mts) 01 Bench in Over burden (irregularX2mtsX80Mts) | |
| c.Ore to waste ratio pit wise if possible otherwise for mine | : Ore to Waste Ratio: 0.10(For Mine) | Ore to waste ratio: 0.07(For Mine) | |
| d.Total area covered under excavation/pits | : 270 Ha | 219.87 Ha | |
| **C. Waste disposal (Rule 13)** | | | |
| a.Location of dumps | : 1.Near Quarry Crusher in the mined out area 2. Near NWP Plant crusher in the mined out area 3.Dump on the eastern/north side | 1.Near Quarry Crusher in the mined out area 2. Near NWP Plant crusher in the mined out area 3.Dump on the eastern/north side | |
| e.Yearly generation of waste quantity. | : 800000 TONNES | 201000 TONNES | |
| b.Method of dumping whether advancing/retreat | : Advancing | Advancing | |
| c.Total area covered under waste dump. | : 16 Ha | 16 Ha | |
| d.No.and size of each waste dump with No of steps/lift/bench | : Dump No.1: 20Mt*4 Ha.(2 Lift) Dump No.2: 20Mt*6 Ha.(2 Lift) Dump No.3: 10Mt*6 Ha.(single Lift) | Dump No.1: 20Mt*4 Ha (2 Lift) Dump No.2: 20Mt*6 Ha (2 Lift) Dump No.3: 10Mt*6 Ha (single Lift) | |
| **D. Production** | | | |
| b.Year wise production of last five year. | : 2008-09- 5100000(Lst), 850000 (Shale) | 2008-09- 4621110 (Lst), 620802 (Shale) 2009-10- 4397250 (Lst), | Production as achieved 63.97% of proposals |

| | | | |
|---|---|---|---|
| | 2009-10- 7720000(Lst), 1280000 (Shale) 2010-11- 7720000(Lst), 1280000 (Shale) 2011-12- 7720000(Lst), 1280000 (Shale) 2012-13- 7720000(Lst), 1280000(Shale) | 565890 (Shale) 2010-11- 4364691 (Lst), 558603 (Shale) 2011-12- 5858544 (Lst), 825027 (Shale) 2012-13- 5211041 (Lst), 546026 (Shale) | during 2012-13 similarly there is acievement of 65.72% of proposed production during last 5 years (cumulative). Accordingly violation has been pointed out . |

**D. Reserve**

| | | |
|---|---|---|
| a.Reserve position as per latest MP/MS and at the time of inspection. : | Limestone- 78 million tonnes (111 of UNFC). 21 million tonnes (333 of UNFC). Shale - 08 million tonnes (111 of UNFC). 07 million tonnes (333 of UNFC). | Limestone- 78 million tonnes (111 of UNFC). 21 million tonnes (333 of UNFC). Shale - 08 million tonnes (111 of UNFC). 07 million tonnes (333 of UNFC). |

**RESERVE POSITION AS ON 01/04/2013**

**LIMESTONE**

| Category | Quantity in Tonnes | Grade |
|---|---|---|
| Proved | 7690500 | |
| Probable | | |
| Possible | | |
| Total | 7690500 | |

**SHALE**

| Category | Quantity in Tonnes | Grade |
|---|---|---|
| Proved | 699400 | |
| Probable | | |
| Possible | | |
| Total | 699400 | |

**PRODUCTION FOR THE PREVIOUS YEAR 2012 - 2013**

| Mineral | Production | Unit |
|---|---|---|
| SHALE | 546026 | TON |
| LIMESTONE | 5211041 | TON |

## 6. Conservation of Mineral - both quantitative and qualitative

**Beneficiation (Rule 20 and 26)**

| | | |
|---|---|---|
| Efforts for improving low grade and sub grade mineral. | : | No beneficiation required as crushed limestone is directly supplied to plant. |
| Efforts for improving percentage of recovery of ore. | : | 100% recovery of ore is done. |

**Minearl Rule 15**

| | | |
|---|---|---|
| Percentage of recovery of ore pitwise w.r.t. ROM and total material | : | 100% |
| Number of benches in ore and waste. | : | In ore 4 bench & in waste 01bench |

**Sub/grd mineral/fines (Rule16)**

| | | |
|---|---|---|
| Qty of yearly generation and total qty available during inspection with grade | : | Nil |
| Number and size of each stack | : | Nil |
| Location of stacking. | : | Nil |
| Separate stacking from waste | : | Sub grade mineral is mixed simultaneously & used in the process, therefore there is no necessity of stacking of sub grade mineral separately. |
| Total area covered for stacking | : | Nil |

**Exploration data as on 31/03/ 2013**

| No. of Boreholes | No. of Pits | No. of Trenches |
|---|---|---|
| 345 | | |

**OVERBURDEN HANDLED DURING PREVIOUS YEAR 2012 - 2013**

Overbuden/waste removed (in m3) : 125625

**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 land under mining lease area is barren land. Major part of the leasehold area after exhausting mineral will be rehabilitated by water bodies and few of areas will be covered by matured O.B. dumps |
| b. Aesthetic environment | : | Converting mined out area into water holding bodies creating aesthetic environment |
| c. Soil and land use pattern | : | The land use within 10km radius of the site is mostly barren uncultivated land and limestone mines .A few patches of agriculture lands are existing which are predominantly rain fed cultivation areas. |
| d. Agriculture | : | The entire land is non agricultural land |
| e. Forest(flora and fauna) | : | No forest or any wild animals over the lease area |
| f. Vegetation | : | Ornamental plants & Plantation are being carried out on dumps |
| h. Public building, places and monuments (protected, historical), placec of worship and places of tourist | : | There are no places of historical importance in the near vicinity. |

**B Water environment.**

| | | |
|---|---|---|
| a. Surface water | : | Drainage of the area shows sub-dendritic pattern, no nallah in Mining lease area. Rain water is collected in dug out pits through rain water harvesting. Hence no impact is envisaged<br><br>Mine dumps have water garlanding, check dumps are made to arrest wash offs from OB dumps/stockpiles. Limestone does not Contain any toxic constituents, hence no impact is envisaged |
| b. Ground water | : | No tapping from ground water resources from the mine.<br><br>The ultimate pit depth is 35 m, while the ground water is at the depth of 150 m. Hence there is no cross cutting of<br>Water table at any stage of mining |
| c. Quality of water | : | Water is potable. |

**C. Air environment**

| | | |
|---|---|---|
| a. Noise | : | Hydraulic DTH Drills Atlas make L8 which produces less noise is used.<br>New generation HEMM has been procured like Electric excavator, having low noise generation. AC cabins to all HEMMs.<br>Strict vigil is kept on the proper maintenance of the vehicles by maintaining a separate dept, to control the continuous noise generation at source.<br>Instantaneous noise level due to blasting is controlled by CBM and non electric initiation devices with proper designed delays.<br>Charge per delay is kept minimum. |
| b. Air | : | Water sprinkling on haul road ,loading and dumping |

area is done regularly with Water Tanker and fixed sprinklers
Drilling machine with suitable dust collector / Wet drilling is adopted
All belt conveyors are covered and dust collection hoods are provided
Plantation around the mining pit is done to arrest dust emission.

c. Climatic condition : Gulbarga dist. has dry climate. The avg. temp ranges from min 100 to max 460 C. The wind direction has been taken into account so that neither the colony residents nor the nearby villagers are affected by dust pollution.

**D. Socio economic environment**

a. Social and demographic profile. : In south eastern portion of mining lease are two villages - wadi at distance of about 2 kms, with population of 20000 persons and Halkatta at a distance of about 4 kms having population of 700.
In east Rawoor village at distance of 2 kms, population of 10000 persons.
In west Ingalgi village at distance of 2 kms, population of 4500 persons.

b. Recommending health and safety. : 26 Bedded Hospital with Qualified Doctors & Para Medical Staff.
Hospital is equipped with latest medical Equipments.
Tele-Medicine facility is available.

c. Human settlement : There is no human settlement in the ML area. The existing operation will thus not disturb any village or settlement. No adverse impact is anticipated.

d. Recreational facility. : Developed Children's Parks, Gardens for old aged & sports Club with all the indoor games facility like table tennis, carom room, Billiards Room, News paper room along with cinema theatre.

**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.**

**Water Management**

| Season | Station type | Station name | Parameter | Value | |
|---|---|---|---|---|---|
| | | | | Actual | Excess |

**Air data for excess parameters**

| Season | Station name | Type of area | Parameter | Value | |
|---|---|---|---|---|---|
| | | | | Actual | Excess |

**PLANTATION DURING THE PREVIOUS YEAR 2012 - 2013**

Area in Hect.

| Within lease area | | | Outside lease area | | |
|---|---|---|---|---|---|
| Area | Trees planted | Survival rate | Area | Trees planted | Survival rate |
| 2 | 3200 | 95 | 2.5 | 3500 | 90 |

**TOP SOIL MANAGEMENT**

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 2012-13 has been scrutinised and the following observations were made.
Opening stock is - 1794075 tonnes.
Production - 4358231 tonnes.
PMV is -Rs 120.10/metric tonne .
Despatches are - 4688631 tonnes.
Cost of operation is - Rs 134.76 /- PMT .

The reserves as on 01/04/2013 has been increased 73 to 78 million tonnes in respect to 01/04/2012. However it must have been decreased duly depleting the production for one year i.e 4358231 tonnes raised during 2012-13, as no additional exploration was carried out during the period.

**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.**

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

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

**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.**

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

**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.**

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

**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.**

**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.)**

NIL

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

NIL

**Date :**

(**PUKHRAJ NENIVAL**)

Indian Bureau of Mines