INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR INSPECTION REPORT

Bangalore regional office

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

(i) Name of the Inspecting : P005) C.PARAMESHWARAN

Officer and ID No.

(ii) Designation : Deputy Controller Mines

(iii) Accompaning mine : Shri K.B. Verma. GM Mines

Official with Designation

(iv) Date of Inspection : 15/10/2015
(v) Prev.inspection date : 12/02/2015

PART-I : GENERAL INFORMATION

. (a) Mine Name : WADI - I

(b) Registration NO: :

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) 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

(f) Police Station : Chittapur
(g) First opening date : 09/08/1966

(h) Weekly day of rest

2. Address for : SRI. KULDIP KAURA, MD & OWNER,

correspondance 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/ : 27/11/2008

Termination date

Geologist

Name : JAGDISH MADIVAL, Full Time

Qualification : M.Sc (GEOLOGY)

Appointment/ : 05/07/2013

Termination date

Manager

Name : KUNJ BEHARI VERMA
Qualification : B.E (MINING)
Appointment/ : 16/09/2012

Termination date

6. Date of approval of Mining
Plan/Scheme of Mining
Modif.of approved Mining Plan
Mining Scheme rule 12 MCDR1988
Renewal under rule 22 MCR1960
Mining Scheme rule 12 MCDR1988
28/06/1990
10/06/1993
12/10/1994
Mining Scheme rule 12 MCDR1988
20/10/2008

Mining Scheme rule 12 MCDR1988 24/09/2013

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration:

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|--|--|--|---|
| 1a | Backlog of previous year | No proposals as such for the year 2015-16, execept 2016-17 and backlog for the previous years. | actual drilling undertaken in the last approval document period. | for last approval, lessee company drilled 13 core, 10 CCS & 53 DTH boreholes withncumulative meterage 1897.50m. |
| 1b | Exploration over lease area for geological axis 1 or 2 | proposed in the year 2016-17 for 25 nos. of holes. | during the year 2015-16, no exploratory work. | nil |
| 1c | Exploration Agencies and Expenditure in lakh rupees during the year | not given details of the agency. | none. | nil |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | proposed almost in the periphery of the ML area and some in between the lease area. | during the year 2016-17. | nil |
| 1e | Balance reserve as on 01/04/20 | from the last approved document it is given as 91.1 Million tonnes. | after undertaking 1897.50 metrage drilling before 2013-14. | nil |
| 1f | General remarks of inspecting officers on geology, exploration etc | lessee company proposed for the existing situations. | as per the lastapproval and the geological plan it is very clear that the exploration almost major area completed. | yes satisfcatory from the geological plan. |
| Deve | elopment : | | | |
| Sl.No. | Item | Propasals | Actual work | Remarks |

| 2a | Location of development w.r.t.lease area | 1,2 & 3 blocks, work | yes three blocks work is in progress, in block - 3, some pits were converted to sump for storage of water. | Majority of the area is covered with pits, sump and dumps. All the boundary pillars are intact and observed during the field inspection. |
|----|--|---|--|--|
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | yes separete benches were proposed in the approved documents. | yes as per approved documents it is being followed. | yes developed. |
| 2c | Stripping ratio or ore to OB ratio | 1:0.07 | 1:0.09 | as above from the production it was observed. |
| 2d | Quantity of topsoil generation in m3 | 12000 m3for 2014-15 | 7000 m3 | less than what is proposed. |
| 2e | Quantity of overburden generation in m3 | 354900 m3 | 350000m3 | almost near the proposals. |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | appropriate proposals made. | as per the approved document, the development is in progress. | yes development is satisfactory. |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|------------|-------------|--|
| 3a | Number of pit proposed for production | one pit | one pit | as reported for the year 2014-15, but for the year 2015-16 it is two pits. |
| 3b | Quantity of ROM mineral production proposed | 77,18,000t | 54,74,760t | within the proposals, but less than the target. |
| 3с | Recovery of sailable/usable mineral from ROM production | 1005 | 100% | as above. |
| 3d | Quantity of mineral reject generation | nil | nil | nil |

| 3e | Grade of mineral rejects generation and threshold value declared. | thersh hold value & cut off grade is | no mineral reject, execept waste of OB. same is followed in the mine and the reserve estimation made as it is. | Yes no mineral rejects. OB is ist layer above limestone. |
|----|--|---|---|---|
| 3f | Quantity of sub grade mineral generation. | 12,80,000t | 7,75,422t | within the limit. |
| 3g | Grade of sub grade mineral generation | cement grade | cement grade | cement grade |
| 3h | Manual / Mechanised method adopted for segregating from ROM | mechanised | mechanised | yes mechanised only. |
| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | nil | nil | nil |
| 3ј | Provision of drilling and blasting in mineral benches | Hydraulic drill, Atlas copco/ RCO-L8- 115mm dia, 30m/h | Hydraulic drill, Atlas copco/ RCO-L8- 115mm dia, 30m/h same is used for drilling holes. | as per the proposals it is used in the mine. |
| 3k | Provision of mining machineries in mineral benches | excavator 4.5cum to 7 cum capacity., various companies were in use. | same machineries are in use at the benches for developemnt & productions. | yes it is used in the mine workings. |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | 6-9m bench height is suitable in ore & waste benches. | the proposed bench height and wide width of the bench is suitable and it is practiced. | it is suitable. |
| 3m | Total area covered under excavation/pits | 230 на | 227.60 НА | As per the date of inspection, the area put to use at the start of the mine after the approval was 219. |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.07 | 1:0.09 | slightly more than the planned or approved ratio. |

| 30 | Total area put in use under different heads at the end of year | 345.00 ha | 344.97 ha. | end of the year 2015-16. |
|----|--|---|---|---|
| 3p | Production of ROM mineral during the last five year period as applicable | 12,80,000t (shale) 2011- 12=77,20,000t 12,80,000t (shale) 2012- | 2010-11=43,64,691t, 5,58,603t (shale) 2011-12=58,58,544t 8,25,027t (shale) 2012-13=52,11,041t, 5,46,026t (shale) 2013-14=50,53,025t, 6,70,136t (shale) 2014-15=54,74,760t, 7,75,422t (shale) | From the five years production it is clear that, not one year the desired producton could be achived in the mine. |
| 3q | General remarks of inspecting officers on method of mining etc. | yes proposed for systematic workings. | carrying out systematic workings, but at places, the orientation and alignments were not maintained. | over all staisfactory development. |

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 proposed. | yes separate dumping is being carrried out in the mine. | yes separate dumping is being followed. |
| 4b | Location of topsoil, OB and mineral reject dumps | proposed in the approved mining scheme on the periphery of the area. | as per the approved document, top soil, are stacked as usual in the specified area. | yes it is placed in the specified place, all along the boundary. |
| 4c | Number of dumps within lease area and outside of lease area | five within the lease | same five inside the lease area, no outside the mining lease. | All the dumps are maintained within the ML area. |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | all along Ml boundary | all along the boundary is maintained. | yes all along the boundary is maintained, which is depoited on the plan. |

| 4e | Number of active and alive dumps. | | one dump is continuing | On the boundary waste dumps are dumped and levelled and stabilized. |
|----|--|---|---|--|
| 4f | Number of dead dumps. | nil | nil | nil |
| 4g | Number of dumps established. | 5 nos stabilized. | 5 nos. of dumps stabilized. | within the area stabilized, all non mineralized virgin area. |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | _ | yes 100m approximately made in the area. | partly it has been done. |
| 4i | Length of Retaining wall or garland drain all along dumps | proposed in the approved document. | 100m approximate. | yes partly along the dumps, |
| 4j | Number of settling ponds | nil | nil | In te present ML area total 6 nos. sumps were in active use within the lease area. |
| 4k | Specific comments of inspecting officer on waste dump management | waste dumping is made all along the ML area only. | Six sumps created in the Ml area after exploiting tehe limestone. | Still mined out area is not used for dumping waste as back filling. |

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. | | yes after exploiting the limestone from the six pits, it was converted to water reservoir for mining use and domestic purposes and also for industrial ppurposes. | yes it was confirmed for exploitation and exhausted and started storing water. |
| 5b | Area under backfilling of mined out area | which considered under back filling with | all the six pits converted into sumps, are not aware for the company that this can be brought under reclamation & rehabilitations. The extent of the area is not given by the manager. | During the inspection it was confirmed that the no mined out area is utilized for waste dumping/back filling. |

| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | not proposed till the period of inspection. | not proposed as on date. | nil |
|----|---|---|--------------------------|---|
| 5d | Total area fully reclaimed and rehabilitated | sumps, the waste dumps | area./ against 51.00 ha. | The concept on water reservoir conversion is not aware by the lessee. |
| 5e | | exploited in six pit & used for water | | |

Progressive Mine Clousre Plan:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--|----------------------------------|---|---|
| ба | Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2). | yes submitted on time correctly. | In the present scheme of mining, 2 nos. sumps will be developed. I.e in the present scheme perod and at the end of the 5th year & used for bak filling. | started in the |
| 6b | Area available for rehabilitation (ha) . | | As on date of inspection no area matured for rehabilitations. | In future there is a possibility to rehabilitate. |
| бс | afforestation done (ha). | 2.5 ha | 4ha | as above |
| 6d | No. of saplings planted during the year | 2500 nos. | 3000nos. | additionally 500 nos added. |

| бе | Cumulative no .of plants | 75000 nos. | 79270 nos. | more than the proposed. |
|----|--|----------------------------------|--|-------------------------|
| 6f | Any other method of rehabilitation | yes proposed for water resevoir. | yes converted 6 nos., and some more in the future, | nil |
| 6g | Cost incurred on watch and care during the year | 5 lakhs. | 7.5 lakhs. | nil |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | nil | nil | nil |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | nil | nil | nil |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | 1 ha area | i ha area. | same as above |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | 2ha | 2 ha | nil |
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | nil | nil | nil |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | nil | nil | nil |

| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | nil | nil | natural growth of shrubs and bushes. |
|--------|---|--|---|--------------------------------------|
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | nil | nil | nil |
| 6p | Compliance of environmental monitoring (core zone and buffer zone) | yes proposed in the approved scheme of mining. | it is reported by the party that the report was sent. | received in tis office. |
| 6q | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | proposed in the approved document. | lessee company sent accordingly. | not any adverse remarks. |

Mineral Conservation:

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

7a ROM Mineral dispatch or grade-wise sorting within lease area

54,74,760 t, of limstone, 775,422t shale yes everthing is within the lease

produce cement.

area.

77,18,000t lst., 12,76,650t shale.

7b Method of grade- mechanical mechanical yes mechanically. wise mineral sorting i.e. manual or mechanical. Different grade Cement grade cement grade 7c yes cement grade of mineral only. sorted out at mines. 7d nil, all the Any no process at nil beneficiation th meines. materails sent to process at mines plant for final processing to

7e General remarks proposals made conservation point of situation does not of inspecting view is satisfactory. No in the warrant. officer on approved beneficiationn facility Mineral document on not made. conservation and mineral beneficiation conservation, issues regarding beneficiation, no proposals.

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|--|--|
| 8a | Separate removal and utilization of topsoil (Rule 32) | 12000t | 7000t | utilized for various purposes like planatations/gardens, etc. |
| 8b | Concurrent use or storage of topsoil | yes proposed to use for green belt. | using for green belt. | yes it is used in the within the colony/ office etc. |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | yes maintained | maintained within the ML area as per the ear marked locations. | separtely maintained. |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | proposed for usage. | yes used approrpiately different materials, wherever required. | certain materials for certain useage. |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | yes proposed partly | Carrying out mining, converting sumps for water reservoirs for domestic and industrial purposes. | lessee carrying out to the requirments of the company, still not started backfilling inthe mined out area, execept back fillimng in the periphery. |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | There are existing plantations in the area. | wherever required company is undertaking. | Plantations are developed systematically. |
| 8g | Survival rate | 80-90% | 90% | as above. |

| 8h | Water sprinkling on roads to control airborne dust | _ | provided water sprinklers. | yes followed reqularly. |
|----|---|-----------|------------------------------|-------------------------|
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | proposed. | followed to the satisfaction | yes followed. |

Compliance of Rule 45:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|---|---|--|--|
| 9a | Status of submission of Monthly and Annual returns | all the information furnsied as per the returns format for the year 214-15. | satsifactory | online and the hard copy submitted to this office. |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Shri Arun Kumar, Jagadis, MK, KB. Verma respectively. | same as it is working in the mine and observed during the inspections of the mine. | yes working in the mine. |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | _ | sumps of 6nos. converted to water reservoirs-reported for 51.50 ha in the data base sheet, need to be cheched. | there is a variation in the datas furnished submitted during the inspection and the annual returns 2014-15 |
| 9d | Scrutiny of Annual return on afforestation | | exist in the Ml area during the site inspections. | as it is found in the Ml area. |

| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | nil | nil | nil |
|----|---|--|--|------------------------------|
| 9f | | closing stock. | all the materials directly fed to the processing plant, hence no stock | as above. |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | 5474760t as production, dispatch of same figure, with ex-mine proce is rs.142.99/t. | Only cement grade matreials reported, and other were not present. | only one materaisl reported. |
| 9h | Scrutiny of Annual return on fixed assets | | the things which are present are reported. | nil |
| 9k | Scrutiny of Annual return on mining machineries | Rock drill machines of 115m dia, shovels of 6.5cum, dumpers, loadres, dozer, grader, crusher, other HEMM furnished.water tanker etc. | all were present in the mining premises. | yes observed inthe mine. |

Details of violations observed during current inspection and compliance position of violation pointed out

| Viola | ation observed | Show couse position | |
|------------|-------------------------|---------------------|-------------------------|
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on |
| Rule 13(1) | 18/04/0216 | | |
| Rule 45(1) | 18/04/0216 | | |

Date : (C.PARAMESHWARAN)

Indian Bureau of Mines