INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

MCDR inspection REPORT

Hyderabad regional office

| | Mine : | file No : AP/NLG/LST-1 | L/H | Mine code : 38APR14011 |
|----|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | (i) | Name of the Inspecting Officer and ID No. | : | S11) SHAILENDRA KUMAR |
| | (ii) | Designation | : | Regional Controller Mines |
| | (iii) | Accompaning mine Official with Designation | : | Sri Bheemraj,Mines Manager |
| | (iv) | Date of Inspection | : | 05/03/2021 |
| | (v) | Prev.inspection date | : | 13/07/2018 |
| | | PA | RT- | I : GENERAL INFORMATION |
| 1. | (a) | Mine Name | : | VISHNUPURAM-I(G.O.NO.131) |
| | (b) | Registration NO. | : | IBM/613/2011 |
| | (c) (d) (e) (f) (g) (h) | Category Type of Working Postal address State District Village Taluka Post office Pin Code FAX No. E-mail Phone Police Station First opening date Weekly day of rest | | A Mechanised Opencast TELANGANA NALGONDA WADAPALLY MIRYALAGUDA WADAPALLY 508355 08689-228447 vpm_mines@indiacements.co.: 08689-228580 WADAPALLY 16/01/1991 SUN |
| 2. | | ess for espondance | : | M/s India Cements Limited,Vishnupuram WADAPALLY NALGONDA DISTRICT-508355 |
| 3. | (a) (b) (c) (d) | Lease Number Lease area Period of lease Date of Expiry | | |
| 4. | Miner | ral worked | : | LIMESTONE Main |

| 5. | Name and Address of t Lessee | the : | THE INDIA CEMENTS LTD DHUN BUILDING 827, ANNA SALAI CHENNAI CHENNAI CITY TAMIL NADU Phone:282521526 FAX :28520638 | |
|----|------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| | Owner | : | Mrs laxmi Aparna Srikumar Coromandal tower, 93, Santhome High Avenue, raja Annamalaipuram, Chennai CHENNAI CITY TAMIL NADU Phone: FAX : | |
| | Agent | : | M.Tirupati Rao Visshnupuram works, ICL Wadapally PO Damarcherla mandal NALGONDA TELANGANA Phone: 08689228580 FAX : 0868/9228447 | |
| | Mining Engineer | r | | |
| | Name | : | P.Bheem Raj.,Full Time | |
| | Qualification | : | B.Tech(Mining) | |
| | Appointment/ Termination dat | : | 01/03/2018 | |
| | Geologist | | | |
| | Name | : | K Srinivas,Full Time | |
| | Qualification | : | Msc geology | |
| | Appointment/ | : | 01/07/2016 | |
| | Termination dat | | 01,0,,2010 | |
| б. | Date of approval of M Plan/Scheme of Mining | | ng : Fresh under rule 22 MCR1960 Mining Scheme rule 12 MCDR1988 Modif.approved Mining Scheme Mining Scheme rule 12 MCDR1988 Renewal under rule 24 MCR1960 MP modif under MCR 1960 | 30/06/1998 28/12/2001 30/09/2004 16/10/2006 04/08/2010 08/03/2016 |

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

| Sl.No. | Item | Proposals | Actual work | Remarks |
|--------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------|
| la | Backlog of previous year | it was proposed to carry out drilling of 36 Core boreholes duirng the year 2019- 20.1 | A total of 36 Coreboreholes have been drilled duirng 2019-20 | None |
| 1b | Exploration over lease area for geological axis 1 or 2 | it is proposed to bring the totakl lease are under Gl level of exploration. | The entire potential mineralised area is under G1 level of exploration. | None |
| lc | Exploration Agencies and Expenditure in lakh rupees during the year | | The exploration was carried out by NRDCS and the expenditure incurred was Rs. 16.40 lakhs. | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | None | None | None |
| le | Balance reserve as on 01/04/20 | | 26.23 Million tonnes | None |
| lf | General remarks of inspecting officers on geology, exploration etc | None | None | None |

Development :

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|----------------------------------------------------------------------------|----------------|----------------------------------------------------------------------|---------|
| 2a | | to develop and | The development and workings are as per the approved proposal. | None |
| 2b | Separate benches in topsoil, overburden and minerals (Rule 15) | None | None | None |

| 2c | Stripping ratio or ore to OB ratio | 1:0.02 | 1:0.09 | None |
|----|--------------------------------------------------------------------------------------------------------|--------------------|-----------------|------|
| 2d | Quantity of topsoil generation in m3 | 21025 Cu.meters | 53739 Cu.meters | None |
| 2e | Quantity of overburden generation in m3 | None | None | None |
| 2f | General remarks of inspecting officers on development of pit w.r.t. type of deposit etc | None | None | None |

Exploitation:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|-------------------------------------------------------------------------------|-------------------------------------------------|------------------------------|---------|
| 3a | Number of pit proposed for production | It is proposed to excavate from two pits. | production is from two pits. | None |
| 3b | Quantity of ROM mineral production proposed | 1.40 Million tonnes | 0.81 Million tonnes | None |
| 3с | Recovery of sailable/usable mineral from ROM production | None | None | None |
| 3d | Quantity of mineral reject generation | None | None | None |
| 3e | Grade of mineral rejects generation and threshold value declared. | None | None | None |
| 3f | Quantity of sub grade mineral generation. | None | None | None |
| 3g | Grade of sub grade mineral generation | None | None | None |
| 3h | Manual / Mechanised method adopted for segregating from ROM | None | None | None |

| 3i | Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects. | None | None | None |
|----|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------|
| 3j | Provision of drilling and blasting in mineral benches | it is proposed to use Wagon drill with a capacity of 115 Cu.Meters.For blasting it proposed with a spacing of 5.5 meters,burden of 3.5 meters.The yield per hole is 346.5 tonnes. | The same was noticed duirng the inspection. | None |
| 3k | Provision of mining machineries in mineral benches | it is proposed to use Back hoe with a average capacity of 1.50 cu.meters and tippers with a capacity of 20 tonnes. | The same was noticed duirng the inspection. | None |
| 31 | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | to maintain a height of up | the same was noticed duirng the inspection. | None |
| 3m | Total area covered under excavation/pits | 4.94 ha | 2.067 ha | None |
| 3n | Ore to OB ratio for the pit/mine during the year. | 1:0.025 | 1:0.08 | None |
| 30 | Total area put in use under different heads at the end of year | | Current workings - 72.005 ha Roads - 1.07 ha Infrastructure - 56.710 ha reclaimed area - 6.65 ha | None |

| 3p | Production of ROM mineral during the last five year period as applicable | million 2016-17 Million | tonnes - 1.40 tonnes - 1.40 tonnes - 1.40 tonnes - 1.40 | tonnes 2016-17 tonnes 2017-18 tonnes 2018-19 tonnes 2019-20 | - | 0.88 1.02 1.37 | million million million | None | |
|----|--------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---|----------------------|-------------------------------|------|--|
| Зq | General remarks of inspecting officers on method of mining etc. | None | | None | | | | None | |

Solid Waste Management - Dumping:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------|---------|
| 4a | Separate dumping of topsoil, OB and mineral rejects (Rule 32,33) | None | None | None |
| 4b | Location of topsoil, OB and mineral reject dumps | it was proposed to use the topsoil generated simultaneously for plantation purpose. | | None |
| 4c | Number of dumps within lease area and outside of lease area | None | None | None |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | None | None | None |
| 4e | Number of active and alive dumps. | None | None | None |
| 4f | Number of dead dumps. | None | None | None |
| 4g | Number of dumps established. | None | None | None |
| 4h | Whether Retaining wall or garland drain all along dumps are there. | None | None | None |

| 4i | Length of Retaining wall or garland drain all along dumps | None | None | None |
|----|------------------------------------------------------------------------------|------|------|------|
| 4j | Number of settling ponds | None | None | None |
| 4k | Specific comments of inspecting officer on waste dump management | None | None | None |

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. | There is no proposal for reclamation during the year 2019-20. | No reclamation was carried out duirng the year 2019-20. | None |
| 5b | Area under backfilling of mined out area | None | None during the year 2019-20.However, an area of 6.65 ha has been backfilled earlier i.e. prior to 2019-20. | An area of 6.65 ha has been reclaimed by way of backfilling earlier. |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32) | None | None | None |
| 5d | Total area fully reclaimed and rehabilitated | None | None duirng 2019- 20.However, an area of 6.65 ha was reclaimed by way of backfilling prior to 2019-20. | None |
| 5e | General remarks of inspecting officers on backfilling and reclamation etc. | None | None | None |

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). | | The Annual report on PMCP submitted by the lessee in time. | None |
|----|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 6b | Area available for rehabilitation (ha) . | | None | None |
| 6c | afforestation done (ha). | It was proposed to carry out plantation of 1000 saplings over 1.20 ha duirng 2019-20 | Actual plantation carried out was 1200 saplings over an extent of 1.20 ha. | None |
| 6d | No. of saplings planted during the year | 1000 no.s | 1200 NO.S | None |
| бе | Cumulative no .of plants | | 15607 no.s over an extent of 19.58 ha. | None |
| 6f | Any other method of rehabilitation | None | None | None |
| бg | Cost incurred on watch and care during the year | | It was informed by the lessee that the cost incurred towards watch and ward for the year 2019-20 was Rs.2,46,000/- | None |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D | None | None | None |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings | None | None | Earlier i.e. prior to 2019-20 an area of 6.65 ha was reclaimed by way of backfilling. |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area | None | None | None |

| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir | None | None | None |
|----|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 61 | Compliance on reclamation and rehabilitation by backfilling (v)any other specific means. | None | None | None |
| 6m | Compliance of rehabilitation of waste land within lease (i)afforestation | None | None | None |
| 6n | Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha) | None | None | None |
| 60 | Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation | None | None | None |
| бр | Compliance of environmental monitoring (core zone and buffer zone) | it was proposed to carry out quarterly monitoring of environmental parameters in both core and buffer zones. | During the course of inspection it was noticed that quarterly monitoring of environmental parameters was carried out regularly in both core and buffer zones and the parameters are within the permissible limits. | None |
| бq | General remarks of inspecting officers on PMCP compliance and progressive closure operations etc. | None | None | None |

Mineral Conservation:

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

| 7a | ROM Mineral dispatch or grade-wise sorting within lease area | of Limestone | is that during 2019-20, 0.83 million tonnes and 0.55 Million tonnes was | None |
|----|----------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------|------|
| 7b | Method of grade- wise mineral sorting i.e. manual or mechanical. | None | None | None |
| 7c | Different grade of mineral sorted out at mines. | None | None | None |
| 7d | Any beneficiation process at mines | None | None | None |
| 7e | General remarks of inspecting officer on Mineral conservation and beneficiation issues | None | None | None |

Environment:

| Sl.No. | Item | Propasals | Actual work | Remarks |
|--------|----------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------|
| 8a | Separate removal and utilization of topsoil (Rule 32) | proposed to generate 21025 | The actual topsoil reportedly generated was 53739 Cu.meters during 2019-20 and 25984 Cu.meters up to January 2021. | None |
| 8b | Concurrent use or storage of topsoil | generated was | The topsoil generated was concurrently being used for plantation purpose. | None |

Not Applicable. The lessee has reported generation of 75235 tonnes duirng 2019-20

| | | proposed. | | correct accordingly he was advised to submit a revised return. |
|----|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | None | None | None |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | None | None | None |
| 8f | Baseline information on existence of plantation and additional plantation done (Rule 41) | | There is a pereneal river Krishna flowing on Southern side of the Mining Lease at a distance of 1.8 kilometers.The Mining lease is having medium thickness of vegetation and there are no reports of any wild animals. | None |
| 8g | Survival rate | | 93% | None |
| 8h | Water sprinkling on roads to control airborne dust | proposed to control the dust | Duirng the course of inspection it was noticed that there were no dust suppression arrangement made. | A violation letter was issued as there were no proper dust suppression arrangement have been made. |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | | None | None |

Compliance of Rule 45:

Sl.No. Item

8c

Separate dumps

waste rock,

rejects and

for overburden,

fines (Rule 33)

There is no

the Mining

such no

overburden in

lease and as

generation was

Propasals

Remarks

which was not

| 9a | Status of submission of Monthly and Annual returns | | All the Monthly and Annual returns are being submitted regularly. | None |
|----|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------|
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | As per the Annual return 2019-20,Sri P Bheemraj and Sri K Srinivas have been reported as Mining Engineer & geologist respectively. | The same was noticed during the inspection. | None |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | | The same was observed during the inspection. | None |
| 9d | Scrutiny of Annual return on afforestation | as per the annual return 2019-20, 1200 saplings have been planted during 2019-20 with a survival percentage of 93%. | The same was noticed during the inspection. | None |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade and quantity) | No Mineral reject was generated during the year 2019-20. | None | None |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | | The same was noticed during the inspection after verifying the records. | None |

| 9g | Scrutiny of Annual return on sale value, Ex. Mine price and production cost | The ex-mine price reported was Rs.173.12 per tonne. | Same was noticed during the inspection. | None |
|----|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------|
| 9h | Scrutiny of Annual return on fixed assets | The value of fixed assets reported in the Annual return for the year 2019-20 was Rs,326 crores. | The same could not verified. | None |
| 9k | Scrutiny of Annual return on mining machineries | | | None |

| Details of violations observed during current inspection and compliance position of violation pointed out | | | | |
|-----------------------------------------------------------------------------------------------------------|-------------------------|---------------------|-------------------------|--|
| Violati | on observed | Show couse position | | |
| Rule NO. | Issued on Compliance on | Rule NO. | Issued on Compliance on | |
| MCDR17 Rule 40 | 08/03/2021 | | | |

Date :

(SHAILENDRA KUMAR)

Indian Bureau of Mines