

COMPLIANCE REPORT

April 2019 – September 2019

M/s Manjeri Bricks and Metals Pvt. Ltd
Malappuram District
Kerala

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 537/ SEIAA/EC1/3880/2015

DATED: 11.02.2016

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

FOR

BUILDING STONE QUARRY

(MINOR MINERAL MINING) PROJECT

AT

**SURVEY Nos. 276/2, 281/2, Block 45 of Anakayam Village &
Panchayat and Survey No. 244 at Manjeri Village of Manjeri
Municipality, Ernadu Taluk, Malappuram District, Kerala**

BY

M/s Manjeri Bricks & Metals Pvt. Ltd.,

Malappuram District

Kerala

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INTRODUCTION

Quarry project of **M/s Manjeri Bricks & Metals Pvt. Ltd.** is situated at survey Nos. 276/2, 281/2, Block 45 of Anakayam Village & Panchayat and Survey No. 244 at Manjeri Village of Manjeri Municipality, Ernadu Taluk, Malappuram District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority on 11-02-2016. As part of general condition No.37 of Environmental Clearance order, half yearly compliance report needs to be submitted by the project proponent. The compliance report of Second half to the specific conditions and general conditions of the Environmental Clearance order for the period of October **2018 – March 2019** is being submitted.

SALIENT FEATURES OF THE PROJECT

The project comes under Category B, Activity 1 (a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M No. J-13012/12/2013-IA-II (I) dt.24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Geographical location of the project site is in 11°05'50.78" N to 11°05'42.30" N and 75°08'21.70" E to 76°08'15.00" E. The land use classification as per revenue records is rocky land with private own land. The present land use is rocky land with quarrying activities. The quarry is interlinked with a Crusher unit located within the complex. The exploitation of mineral is being done from 145 m MSL to 95 m MSL. The ultimate depth of the mine workings is estimated to be 110 m MSL. The approximate total water demand is 15 KLD. and total power requirement is 75 kw. The nearest house is located at 104 m south west of the quarry.

BRIEF OF THE PROJECT

| | |
|---|---|
| Type of Project | Quarry project (building stone) |
| Name of the project | M/s Manjeri Bricks & Metals Pvt. Ltd. |
| Category of the project | B2 |
| GPS Locations | 11°05'50.78" N to 11°05'42.30" N 76°08'21.70" E to 76°08'15.00" E |
| Address for correspondence | M/s Manjeri Bricks & Metals Pvt. Ltd. Vettakode, Pullanchery P.O., Manjeri, Malappuram District, Kerala-676122. |
| Name, Phone Number & e-mail id of responsible persons | |
| Main Features | |
| Total area under Environment Clearance | 2.8549 hectares |
| Minable reserves | 8,00,000 MT |
| Production | 1,00,000 MTA |
| Life of Mine | 8 years |
| Highest and lowest elevation | 145m MSL to 95 MSL |
| Crusher unit | Yes, within the project site |
| Environmental Settings | |
| Nearest stream | Kadalundipuzha, 1 km, S |
| Nearest house | 104 m, NE |
| Nearest town | Manjeri 4 km, NW |
| Nearest worship place | Mosque - Vettakode, 1 km., NW |
| Nearest hospital | Manjeri 4 km, NW |
| Seismic zone | Zone-III, Moderate damage risk zone as par BMTPC, Vulnerability atlas Seismic zone of India IS: 1893-2002. |

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART – B – GENERAL CONDITIONS

| | | |
|-----------|--|-----------------|
| 01 | Rain Water Harvesting capacity should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified. | Complied |
|-----------|--|-----------------|

Compliance:

As part of conservation of water, the project proponent has developed two rain water harvesting pond in the project site to collect rain water falling in the entire mining area. The pond is situated in the lowest level of project site. The surface runoff is canalized to the pond through garland drains. The water from pond is mainly used for, watering of plants, wetting of roads and sprinkler system for contain dust emission. The photograph of Rain water collection pond is provided in **Plate No. 1**

| | | |
|-----------|---|-----------------|
| 02 | Environment Monitoring Cell (EMC) as agreed under the affidavit filed by the proponent should be formed and made functional. | Complied |
|-----------|---|-----------------|

Compliance:

The project proponent has constituted an Environment Monitoring Cell (EMC) with Mr. Noushad M T as head of the cell. The meetings of the cell convened periodically and evaluate the activities towards the stipulations of Environmental Clearance order. The details of the Environment Monitoring Cell are given below.

TABLE 1 ENVIRONMENTAL MONITORING CELL (EMC)

| Sl. No. | Post | Name |
|----------------|-----------------------------|----------------|
| 1. | Head of the monitoring cell | : Noushad M T |
| 2. | Member | : Abdul Majeed |
| 3. | Member | : Saidhalavi |

| | | |
|-----------|--|-----------------------|
| 03 | Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, inclusive of approach road and internal roads. | Being complied |
|-----------|--|-----------------------|

Compliance:

The project proponent has planted many saplings along the road side to prevent dust emission during transportation of materials. There are natural vegetation including trees, shrubs, herbs and climbers present either side of tarred road and in the parking areas. This will help to reduce air and sound pollution. The name and family of flora is given below in **Table 2**.

TABLE 2 Details of the natural vegetation existing along the road side

| Sl. No. | Scientific Name | Common Name | Family | Type |
|---------|-------------------------------------|-------------------------|---------------|---------|
| 1 | <i>Ficus racemosa</i> | Athi | Moraceae | Tree |
| 2 | <i>Pongamia pinnata</i> | Ungu | Fabaceae | Tree |
| 3 | Bambusoideae | Bamboo | Poaceae | Tree |
| 4 | <i>Murraya koenigii</i> | Curry tree | Rutaceae | Tree |
| 5 | <i>Swietenia mahagoni</i> | Mahagony | Meliaceae | Tree |
| 6 | <i>Anacardium occidentale</i> | Kasumavu | Anacardiaceae | Tree |
| 7 | <i>Artocarpus heterophyllus</i> | Plavu | Moraceae | Tree |
| 8 | <i>Chromolaena odorata</i> | Communist-pacha | Compositae | Shrub |
| 9 | <i>Cocos nucifera</i> | Thengu / Coconut | Arecaceae | Tree |
| 10 | <i>Mangifera indica</i> | Mavu | Anacardiaceae | Tree |
| 11 | <i>Pennisetum orientale</i> | Oriental fountain grass | Poaceae | Herb |
| 12 | <i>Tabernaemontana alternifolia</i> | Kunnanpala | Apocynaceae | Tree |
| 13 | <i>Tectona grandis</i> | Thekku | Verbenaceae | Tree |
| 14 | <i>Ziziphus oenopolia</i> | Thodalli | Rhamnaceae | Climber |

| | | |
|-----------|---|-----------------------|
| 04 | Maximum possible solar energy generation and utilization shall be ensures as an essential part of the project. | Being complied |
|-----------|---|-----------------------|

Compliance:

To reduce the consumption of electricity from the conventional sources, the project in discussion to install solar street lights to use maximum renewable energy to reduce electrical consumption from KSEB. As part of this, the project proponent could reduce the use of energy from conventional sources.

| | | |
|-----------|--|-----------------|
| 05 | Sprinklers shall be installed and used in the project site to contain dust emissions. | Complied |
|-----------|--|-----------------|

Compliance:

To prevent dust emission, sprinklers are installed in the project site. The sprinklers installed in and around the crusher unit. To arrest the dust emission form the approach road and the haulage road, the project proponent has deployed a tanker vehicle to splashes water. The photograph of effective utilization of sprinklers is provided at **Plate No.2**.

| | | |
|-----------|--|--------------|
| 06 | Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent. | Noted |
|-----------|--|--------------|

Compliance:

The eco restoration plan prepared by the project will be executed in a good manner. The project started to plant various saplings in and around the project site. The list of tree/shrub/herb saplings planted in the project site is given below. The mine closure plan will be done at the own cost of project proponent as agreed in the proposal. The planted and proposed sapling to be planted in the project site is given below

TABLE 3 Details of the saplings planted within the project area

| Sl. No. | Scientific Name | Common Name | Family | Habitat |
|----------------|------------------------|--------------------|---------------|----------------|
| 1 | Bambusoideae | Bamboo | Poaceae | Tree |

| | | | | |
|----|---------------------------------|----------------|----------------|------|
| 2 | <i>Murraya koenigii</i> | Curry tree | Rutaceae | Tree |
| 3 | <i>Terminalia arjuna</i> | Maruthu | Combretaceae | Tree |
| 4 | <i>Phyllanthus emblica</i> | Nelli | Phyllanthaceae | Tree |
| 5 | <i>Xylia xylocarpa</i> | Erul | Fabaceae | Tree |
| 6 | <i>Artocarpus heterophyllus</i> | Plavu | Moraceae | Tree |
| 7 | <i>Capsicum frutescens</i> | Kantharimulaku | Solanaceae | Herb |
| 8 | <i>Carica papaya</i> | Papaya | Caricaceae | Tree |
| 9 | <i>Cocos nucifera</i> | Thengu | Arecaceae | Tree |
| 10 | <i>Curcuma longa</i> | Manjal | Zingiberaceae | Herb |
| 11 | <i>Mangifera indica</i> | Mavu | Anacardiaceae | Tree |
| 12 | <i>Musa paradisiaca</i> | Vazha | Musaceae | Herb |
| 13 | <i>Swietenia mahagoni</i> | Mahagony | Meliaceae | Tree |
| 14 | <i>Tectona grandis</i> | Thekku | Verbenaceae | Tree |

| | | |
|----|--|-------------------------|
| 07 | At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly. | Will be complied |
|----|--|-------------------------|

Compliance:

To save rain water, ten percent of the excavated pit area will be retained as water storage area. This will help to improve the ground water table. The remaining area will be reclaimed with stacked dumping of overburden and top soil. As part of its eco – restoration plan, the project will plant indigenous plant species that are eco – friendly on the reclaimed area.

| | | |
|----|---|-----------------|
| 08 | Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented | Complied |
|----|---|-----------------|

Compliance:

The activities under Corporate Social Responsibility (CSR) activities are executed in various sectors. The project proponent is intending to carry out more activities under CSR for inclusive growth in the community.

| | | |
|----|---|-----------------|
| 09 | The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine. | Complied |
|----|---|-----------------|

Compliance:

To demarcate the boundary and to ensure safety, the project has erected barbed metal wire fencing around the mining area with height of 5 ft. This will help to prevent falling of animals/human being/dumping of garbage etc. The photograph of barbed metal wire fencing is provided in **Plate No.3.**

| | | |
|----|--|-----------------|
| 10 | Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department. | Complied |
|----|--|-----------------|

Compliance:

As per the stipulation of Explosive department, to give warning to the labours and community people prior to the blasting in quarry, the project installed warning alarms in the quarry site. This is properly working prior to the blasting time. The blasting time is between 10.00 am to 4.00 pm on all working days. The photograph of alarm is given in **Plate No.4.**

| | | |
|----|---|-----------------|
| 11 | Control measures on noise and vibration prescribed by KSPCB should be implemented. | Complied |
|----|---|-----------------|

Compliance:

To reduce noise level in the project site, the project proponent has implemented mitigate masseurs. The major noise generating sources from the mining activity is working machineries, drilling, blasting and plying of vehicles. The following control measures are undertaken to bringing down the noise levels:-

- Proper maintenance of machinery and equipments
- The machineries like breaker and excavator has well sound proof cabin so that the machine operators can work without stress due to the sound.
- Personal protective devices i.e., earmuffs, ear plugs etc. are provided to workers working in high noise areas.
- The mining activity held in day time only.

Blast vibrations and control measures

- ❖ Controlled blasting technique is adopted in this project in order to reduce blast vibrations.
- ❖ The maximum charge per delay is not more than 10kg to limit the PPV values to 10mm/sec.
- ❖ Optimum delay sequence and stem to column ratio is maintaining to minimize the ground vibration intensity.
- ❖ Appointed a qualified person in the mining area

| | | |
|-----------|--|-----------------|
| 12 | Quarrying activities should be limited to day time as per KSPCB guidelines. | Complied |
|-----------|--|-----------------|

Compliance:

To reduce the inconvenience of nearby houses and community Quarrying activities are limited to day time only as per KSPCB guidelines. The quarry working time 8 am -5 pm. This will help to limit the sound pollution.

| | | |
|-----------|---|-----------------|
| 13 | Blasting should be done in a controlled manner as specified by the regulations of explosives department or any other concerned agency. | Complied |
|-----------|---|-----------------|

Compliance:

To reduce ground vibration, the blasting is done in controlled manner by using ordinary and electric delayed detonators. All blasting activities are carrying out with the stipulated guidelines of explosive department and other concerned agency.

| | | |
|-----------|--|-----------------|
| 14 | A licensed person should supervise/control the blasting operations. | Complied |
|-----------|--|-----------------|

Compliance:

The project proponent has appointed mining mate in the site to supervise/control exploitation of minor minerals including blasting at the project site.

| | | |
|-----------|--|-----------------|
| 15 | Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials. | Complied |
|-----------|--|-----------------|

Compliance:

The project is having a good approach road. To reduce emission of dust through the vehicle movement, the access road from the entrance of project site to quarry is tarred. The project is spraying water on the road to arrest the dust during summer season. The photograph of tarred road is provided in **Plate No. 5**. The project proponent is intending maintain access road to the quarry in good condition for dust emission and easiness of transportation of vehicles.

| | | |
|-----------|---|-----------------|
| 16 | Overburden materials should be managed within the site and the old quarries, if any, should be restored. | complied |
|-----------|---|-----------------|

Compliance:

There is no old quarry in the site for restoration. The overburden materials are stored within the site. This will be used to restore the exploited area in future.

| | | |
|-----------|---|-----------------------|
| 17 | Height of the benches should not exceed 5m and width should not be less than 5m. | Being complied |
|-----------|---|-----------------------|

Compliance:

To enhance safety and to make environment friendly quarrying, the excavation activity in the project is progressing by creating benches. **Plate No. 11** showing the same.

| | | |
|-----------|---|--------------|
| 18 | Mats to reduce fly rock blast to a maximum of 10 PPV should be provided. | Noted |
|-----------|---|--------------|

Compliance:

The project is using ordinary delayed detonator for blasting therefore there is no issue with fly rock in the community. The project is also assuring that the maximum PPV is under 10 during the time of blasting. The project proponent is yet to incorporate mats while blasting is happening.

| | | |
|----|--|--------------|
| 19 | Maximum depth of mining from general ground level at site shall not exceed 10m. | Noted |
|----|--|--------------|

Compliance:

The project proponent has given instruction to the mining mate to explore the minerals as per the submitted eco friendly plan. The depth of mining won't exceed beyond 10 meter or not below the level of the nearest stream bed, whichever is less. The exploration will be done as per the plan submitted before State Environment Impact Assessment Authority (SEIAA), Kerala.

| | | |
|----|--|--------------|
| 20 | No mining operations should be carried out at places having a slope greater than 45°. | Noted |
|----|--|--------------|

Compliance:

In the project site, there is no mining operation is carried out with a slope greater than 45°.

| | | |
|----|--|-----------------|
| 21 | Acoustic enclosures should be provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB. | Complied |
|----|--|-----------------|

Compliance:

To reduce sound amplification, the machines of crusher unit is housed with solid bricks. A green belt is also developed around the unit to reduce noise and air pollution. This helps the noise and sound level is kept within the prescribed standards.

The labours in the unit are wearing ear plugs to reduce the impact of noise generating from the machines. The project proponent is maintained all machineries in a good manner. The photograph of the crusher is provided in **Plate No.6**.

| | | |
|----|---|-----------------|
| 22 | The workers on the site should be provided with the required protective equipments such as ear muffs, helmet, etc | Complied |
|----|---|-----------------|

Compliance:

The project proponent has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear muffs, safety belts, glows, etc. to ensure the safety of workers in working site. The photograph of the workers with PPE is given in the **Plate No. 7**.

| | | |
|----|--|--------------|
| 23 | Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water. | Noted |
|----|--|--------------|

Compliance:

As part of effective storm water management, the project proponent has constructed storm water drains in the lower slopes of the project area. This helps to channelize the storm water to the rain water collection pond and the most of the debris is settling down in the bottom of the pond. The clarifiers are being installed soon at the let out point.

| | | |
|----|---|-----------------|
| 24 | The transportation of minerals should be done in covered trucks to contain dust emissions. | Complied |
|----|---|-----------------|

Compliance:

To avoid dust emission while transportation of materials, the project assures the trucks are covered before it leaving the project sites.

| | | |
|----|---|-----------------------|
| 25 | The proponent should plant trees at least 5 times of the loss that has occurred while clearing the land for the project. | Being complied |
|----|---|-----------------------|

Compliance:

As part of concurrent eco restoration, the project planted various saplings in the project area as a compensation of loss of trees while the project is clearing the land for mining. The photograph of planted trees is given in **Plate No. 8** The list of tree saplings planted in the project site as part of eco-restoration is provided in **Table No 3**.

| | | |
|----|---|--------------|
| 26 | Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations. | Noted |
|----|---|--------------|

Compliance:

The project proponent is using the used oil as lubricant for machineries and other equipments. Disposal of spent oil from diesel engines will be sold only to the approved recyclers as specified under relevant Rules/Regulations.

| | | |
|----|--|-----------------|
| 27 | Explosives should be stored in magazines in isolated place specified and approved by the explosives department. | complied |
|----|--|-----------------|

Compliance:

As part of safety, Explosives are stored in magazine. The magazine situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine was fenced with barbed metal wire. The photograph of the magazine is provided in **Plate No.9**.

| | | |
|----|---|-----------------|
| 28 | A minimum buffer distance of hundred meters from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided. | Complied |
|----|---|-----------------|

Compliance:

To reduce the adverse impact on community life, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project. The distance of the nearest house was 104 meter form the quarry, the KSPCB condition is 100 meter.

| | | |
|----|---|--------------|
| 29 | 100 m buffer distance should be maintained from forest | Noted |
|----|---|--------------|

| | | |
|--|--------------------|--|
| | boundaries. | |
|--|--------------------|--|

Compliance:

There is no forest area near to the project site. The nearest forest is 6 km away from the project site.

| | | |
|-----------|---|-----------------|
| 30 | Consent from Kerala Pollution Control Board under water and Air act(s) should have been obtained before initiating activity. | Complied |
|-----------|---|-----------------|

Compliance:

The project has obtained consent from KSPCB under Water and Air Act(s). The copy of certificate of “*Consent to Operate*” (Renewal) from Kerala State Pollution Control Board is provided in **Annexure No.1**.

| | | |
|-----------|--|-----------------|
| 31 | All other statutory clearances should have been obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives. | Complied |
|-----------|--|-----------------|

Compliance:

The project proponent has obtained all relevant approvals, licenses, clearances for mining industry. The certificates obtained from other concerned statutory authorities are enclosed in **Annexure No.1, 2, 3, 4 & 5**.

TABLE 4 – APPROVALS FROM COMPETENT AUTHORITIES

| Name of the Statutory approval | Name of the Statutory authority | Approval Number & Date |
|---------------------------------------|---|---|
| “Consent to Operate” (Renewal) | Kerala State Pollution Control Board | PCB/KKD/DO/2296/2012 |
| Environmental Clearance order | State Environmental Impact Assessment Authority, Kerala | 539/SEIAA/EC4/3882/2014 Dated 15-12-2015 |
| Explosive License | Ministry of Commerce & Industry – Petroleum & | E/SC/KL/22/1620(E71339) Dated 12-06-2015 |

| | | |
|--------------------------------------|---------------------------------------|---|
| | Explosives Safety Organization (PESO) | |
| License for quarry operations | Municipality | A5-02/16-17 dated 01-04-2016 |
| Permit order | Directorate of Mining and Geology | 12/2016-17/GS/CRPS/DOZ/M,1021/16 Dated 29-06-2016 |

| | | |
|-----------|---|------------------|
| 32 | In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority | No change |
|-----------|---|------------------|

Compliance:

At present there is no change in the scope of the project. The project will seek for a new Environmental clearance in the case of any change(s) in the scope of the project.

| | | |
|-----------|---|--------------|
| 33 | The Authority reserves the right to add additional safe guard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner. | Noted |
|-----------|---|--------------|

Compliance:

The project is willing to add all possible additional safe guard measures subsequently if the authority found necessary.

| | | |
|-----------|--|--------------|
| 34 | The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, The | Noted |
|-----------|--|--------------|

| | | |
|--|---|--|
| | Environment (Protection) Act, 1986, the public liability (Insurance) Act, 1991 and EIA notification, 2006. | |
|--|---|--|

Compliance:

The stipulated orders and directions under different act and notification including EIA notification will be scrupulously followed. A brief list of various Acts and notifications which are followed by the proponent is given below

1. **The Environment Protection Act,1986**
2. **Water (Prevention and Control of Pollution) Act, 1974**
3. **The Air (Prevention and Control of Pollution) Act, 1981**
4. **The Public Liability (Insurance) Act,1991**
5. **Municipal Solid Waste (Management and Handling) Act,2000**
6. **Hazardous and Other Wastes (Management and handling) Rules, 1989.**
7. **EIA notification, 2006**
8. **Kerala Minor Mineral concession Rules 2015**

| | | |
|----|--|----------|
| 35 | <p>The project proponent should advertise in at least two local news papers widely circulated in the region, one which (both advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. <u>The advertisement should be made within 10 days from the date of receipt of the Clearance letter and the copy of the same signed in all pages should be forwarded to the office of this authority as confirmation.</u></p> | Complied |
|----|--|----------|

Compliance:

An advertisement in two local daily newspapers (English and Malayalam) regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. The

photograph o news paper report is attached as **Annexure No. 6**. The details are given below in the **Table No.6**.

Table No. 5 - Details of advertisement in news paper

| Sl. No | News paper | Language | Date of edition |
|--------|------------------------|-----------|-----------------|
| 01 | The New Indian express | English | 01-03-2016 |
| 02 | Malayala Manorama | Malayalam | 01-03-2016 |

| | | |
|----|---|----------|
| 36 | A copy of the clearance letter shall be sent by the proponent to concerned Grama/District Panchayath / Municipality / Corporation / Urban Local Body and also to the Local NGO, if any from whom suggestions / representations, if any were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent. | Complied |
|----|---|----------|

Compliance:

A copy of the Environment Clearance letter was submitted to the gram Panchayath and Municipal Office. The project proponent did not receive any suggestions / representation from anywhere while the processing the proposal therefore did not give the copy of clearance letter to anyone.

| | | |
|----|---|----------|
| 37 | The proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hand copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also the Directorate of Environment and Climate Change, Govt. of Kerala. | Complied |
|----|---|----------|

Compliance:

The third compliance report is being submitted to the State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore both in hard copy as well as mail. The monitored data of Air, Water and Noise is attached as **Annexure No. 7, 8 & 9.**

| | | |
|----|---|-----------------|
| 38 | The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extant of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public. | Complied |
|----|---|-----------------|

Compliance:

The conditions of the environmental clearance prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font was installed. The project has also fixed signboards in the lease area. The photograph of the board is provided in **Plate No. 10.**

| | | |
|----|--|-----------------|
| 39 | The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed. | Complied |
|----|--|-----------------|

Compliance:

An assurance in the form of affidavit was already submitted to SEIAA Kerala.

| | | |
|----|---|--------------|
| 40 | The above conditions shall prevail notwithstanding anything to the contrary; in consistent, or simplified, contained any other permit, license on consent given by any other authority for the same project. | Noted |
|----|---|--------------|

Compliance:

The project will give priority to the conditions stipulated in the Environment clearance Order for its execution

PLATES

(Photographs of project)

Plate No. 1



Rain water harvesting pond

Plate No. 2



Sprinklers

Plate No.3



Fencing

Plate No.4



Warning Alarm

Plate No.5



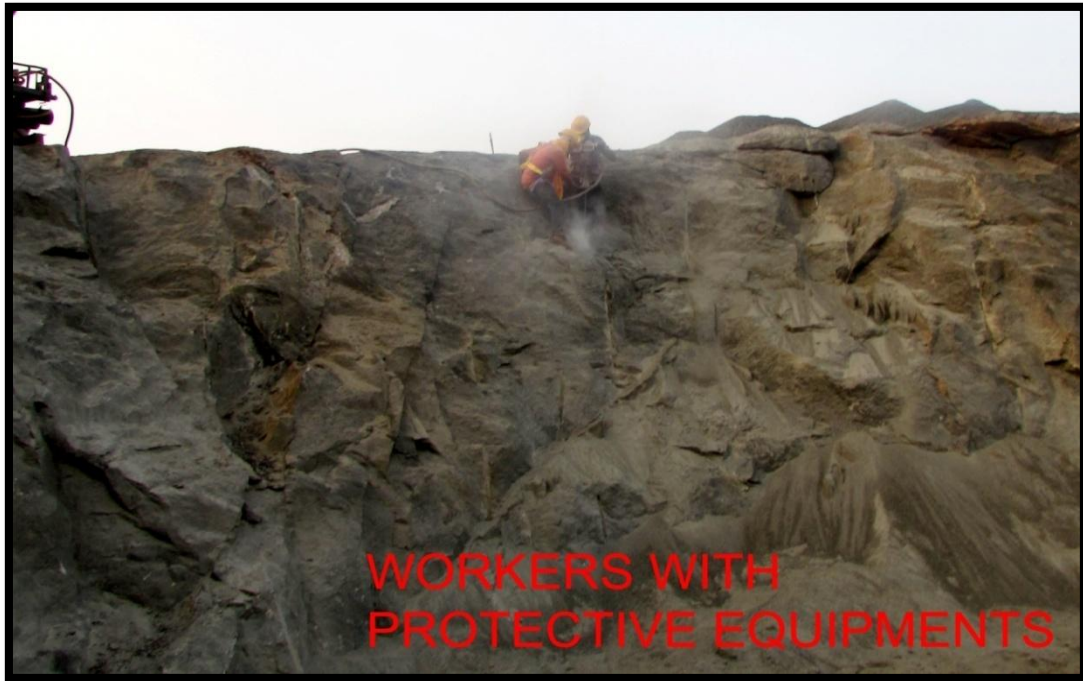
Access Road

Plate No.6



Crusher Unit

Plate No.7



Personal Protective Equipments

Plate No.8



Sapling in the site

Plate No.9



MAGAZINE

Magazine

Plate No.10



DETAILS OF EC

Board

Plate No.11




Mining Area

ANNEXURE

(Documents of the project)

Annexure No. 1

FILE NO : PCB/RO/MLPM/IC/108/2016
Date of issue : 23/04/2016



KERALA STATE POLLUTION CONTROL BOARD

CONSENT TO

OPERATE/AUTHORISATION/REGISTRATION

ISSUED UNDER

The Water (Prevention & Control of Pollution) Act, 1974
The Air (Prevention & Control of Pollution) Act, 1981

and

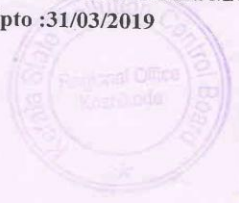
The Environment (Protection) Act, 1986

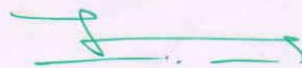
As per Application No. :2803179
Dated:31-03-2016

TO

M/s MANJERI BRICKS AND METALS
VETTAKODE
PULLANCHERY PO
MANJERI
MALAPPURAM- 676122
676122

Consent No. :PCB/RO/MLPM/ICO/ 03 /2016
Valid Upto :31/03/2019





Consent form PCB

Annexure No.2

Validity expires on 10-02-2021



सत्यमेव जयते

**Proceedings of the State Environment Impact Assessment
Authority Kerala**

*Present : Prof. (Dr.) K.P. Joy, Chairman; Dr. J. Subhashini, Member and Sri. P. Mara Pandiyan,
I.A.S., Member Secretary.*

Sub: SEIAA- Environmental Clearance for the proposed building stone quarry project in Survey Nos. 276/2, 281/2 B/No. 45 at Anakayam Village, Anakayam Panchayath and Sy. No. 244 at Manjeri Village, Manjeri Municipality, Eranadu Taluk,, Malappuram District by Sri. Abdul Azeez, Managing Director, M/s. Manjeri Bricks and Metals Pvt. Ltd., Vettakode, Pullancherry P.O., Manjeri, Malappuram-676122-Granted-Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY
No. 537/SEIAA/EC1/3880/2015 *dated, Thiruvananthapuram 11-02-2016*

- Read:
1. Application dated 31.07.2014 submitted by Sri. Abdul Azeez, Managing Director, Manjeri Bricks and Metals Pvt. Ltd., Vettakode, Pullancherry P.O., Manjeri, Malappuram-676122
 2. Minutes of the 45th meeting of SEAC held on 11/12-09-2015.
 3. Minutes of the 49th meeting of SEAC held on 07/08-12-2015.
 4. Minutes of the 48th meeting of SEIAA held on 23-01-2016.

Environmental Clearance No. 20/2016

Sri. Abdul Azeez, Managing Director, Manjeri Bricks and Metals Pvt. Ltd., Vettakode, Pullancherry P.O., Manjeri, Malappuram (D) vide his application received on 13/08/2014 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 276/2, 281/2 B/No. 45 at Anakayam Village, Anakayam Panchayath and Sy. No. 244 at Manjeri Village, Manjeri Municipality, Eranadu Taluk, Malappuram District, Kerala for an area of 2.8549 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the proposal are as follows:



Page 1 of 8


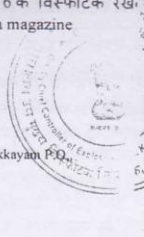
Copy of EC Order

Annexure No.3

अनुज्ञप्ति प्ररूप एन.ई.-3 | LICENCE FORM LE-3
(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)
(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखें
Licence to possess : (c) for use,explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.) : E/SC/KL/22/1415(E57027)
वार्षिक फीस रुपए (Annual Fee Rs): 2400/-

1. Licence is hereby granted to
Shri N.P.Abdul Azeez, Managing Director (अधिभोगी / Occupier : Shri N.P.Abdul Azees), Manjeri Bricks and Metals Pvt Ltd, Anakkayam P.O.,
Town/Village - Manjeri, District-MALAPPURAM, State-Kerala, Pincode - 676122

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : Company

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।
Licence is valid only for the following purpose. : possess for use of Nitrate Mixture, Safety Fuse, Ordinary Detonator, Electric Detonators, - के उपयोग के लिए

4. अनुज्ञप्ति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।
Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

| Sr. No. | Name and Description | Class & Division | उप-प्रभाग Sub-division | मात्रा किसी एक समय में Quantity at any one time |
|---------|----------------------|------------------|---------------------------|--|
| 1. | Nitrate Mixture | 2,0 | 0 | 100 Kg. |
| 2. | Safety Fuse | 6,1 | 0 | 1500 Mtrs |
| 3. | Ordinary Detonator | 6,3 | 0 | 2000 Nos. |
| 4. | Electric Detonators | 6,3 | 0 | 2000 Nos. |

(ख) किसी एक कलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए] 10 times
(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : as above.

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पुष्टि होती है।
The licensed premises shall conform to the following drawing(s) : रेखाचित्र क्र. (Drawing No.) E/SC/KL/22/1415(E57027)
दिनांक (Dated) 18/03/2016

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No. 281/2, ग्राम (Town/Village) : Anakkayam village, Ernad Taluk, Malappuram Distric
जिला (District) MALAPPURAM राज्य (State) Kerala पुलिस थाना (Police Station) : Manjeri
दूरभाष (Phone) 9745178677 ई. मेल (E-Mail) पिनकोड (Pincode) 0
फैक्स (Fax)

7. अनुज्ञप्त परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities. : A set of one D type (Sl.No.369) and one E type (Sl.No.522) portable magazines
fabricated by M/s Thekkans Engg and Fabrication Works, Ernakulam, Kerala.

8. अनुज्ञप्ति समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबंधों के अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.
1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए।)
Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
2. अनुज्ञप्ति प्राधिकारी द्वारा हस्ताक्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्त शर्तें।
Conditions and Additional Conditions of this licence signed by the licensing authority.
3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख 31 मार्च 2016 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2016.

यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपरोक्त इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहत की जा सकती है, जहां वह लागू हो।
This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 17/04/2012

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
कृते उप मुख्य विस्फोटक नियंत्रक South Circle, Chennai
For Deputy Chief Controller of Explosives
एरनाकुलम Ernakulam

नवीनीकरण के पृष्ठांकन के लिए स्थान
Space for Endorsement of Renewal

| नवीकरण की तारीख Date of Renewal | समाप्ति की तारीख Date of Expiry | अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp |
|------------------------------------|------------------------------------|--|
| 03/02/2016 | 31/03/2021 | Sd/- Jt. Chief Controller of Explosives, South Circle, Chennai |

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरुपयोग विधि के अधीन गंभीर दंडिक अपराध होगा।
Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Explosive license

Annexure No.4

മഞ്ചേരി നഗരസഭ


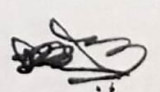
1994 ലെ കേരള മുനിസിപ്പാലിറ്റി ആക്ട് (1994 20-ാം ആക്ട്)
444/453/456/469/447 വകുപ്പ് അനുസരിച്ചുള്ള

ലൈസൻസ്

No **2303**

- ലൈസൻസ് നമ്പർ 3/Zone II വർഷം 2018 -2019 ഫയൽ നമ്പർ 7884/18
- ലൈസൻസിയുടെ പേരും മേൽവിലാസവും ദിരാജ്യാർ ദിരാജിൻ ചിൻ ചി
[മു.ദ.ന.ജി.യുടെ ഡയറക്ടർ മഞ്ചേരി ത്വീജൻ ആന്റ് മെറ്റൽസ്]
S/O എസ്.എസ്. നാലുപുരത്തു ന്യൂസ്, കുറ്റാരംഭക
കോളിളക്കാട്
- അച്ചന്റെ പേര് എസ്.എസ്.എസ്
- വാർഡ് നമ്പർ 22 കെട്ടിട നമ്പർ/സ്ഥലം നമ്പർ 116/16
- സ്ഥാപനത്തിന്റെ പേര് മഞ്ചേരി ത്വീജൻ ആന്റ് മെറ്റൽസ്
- പുതിയതാണെങ്കിൽ തുടങ്ങിയ/ തുടങ്ങുന്ന തീയതി 01.04.2018
- ലൈസൻസ് എന്ത് ആവശ്യത്തിനാണ് അനുവദിച്ചത്.....
കരിങ്കൽ ക്ലിനി നടത്തുന്നതിന്
(സ്കര്മ്മ നമ്പർ 116/16, 1.055 നെടുമ മഞ്ചേരി റിജിസ്റ്റർ)
- ലൈസൻസ് ഫീസ് 3000/- ലൈസൻസ് കാലാവധി 2018 - 2019

തീയതി 04.04.18 ഹെൽത്ത് ഇൻസ്പെക്ടർ യെ.കെ.ടി/ഹെൽത്ത് സൂപ്പർവൈസർ



K.C. MADHAVAN
 HEALTH SUPERVISOR

GLMK-642-14

License form Municipality



ലൈസൻസ് നമ്പർ A4-998/18(2)

തീയതി: 31/03/18

ആനക്കയം ഗ്രാമ പഞ്ചായത്തിൽ നിന്നും 1994 ലെ കേരള പഞ്ചായത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ വകുപ്പുകളും അതേ തുടർനുള്ള ചട്ടങ്ങളും അനുസരിച്ച് നൽകുന്ന

ഡി&ജി ലൈസൻസ്

| | |
|--|--|
| ലൈസൻസിയുടെ പേരും, മേൽവിലാസവും | എൻ.പി. അബ്ദുൽ അസീസ്, മാനേജിംഗ് ഡയറക്ടർ, മഞ്ചേരി ബ്രിക്സ് മെറ്റൽസ്, വേട്ടേക്കോട്, പുല്ലഞ്ചേരി പിഒ |
| സ്ഥാപനത്തിന്റെ പേരും, സ്ഥലനാമവും | മഞ്ചേരി ബ്രിക്സ് മെറ്റൽസ്, വേട്ടേക്കോട് |
| ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ | കരിങ്കൽ ഖനനം നടത്തുന്നതിന് |
| കെട്ടിടത്തിന്റെ നമ്പരും, വാർഡ് നമ്പരും | sy No BL-45/ 281/2 |
| ലൈസൻസ് കാലയളവ് | 01/04/2018 മുതൽ 31/05/2018 വരെ <i>Validity Extended till 31/3/19</i> |
| ഇടാക്കിയ ലൈസൻസ് ഫീസ് | 5000/- (രസീതി നം 117010-115032, 117010115033 തീയതി 23/02/2018, 23/02/2018) |
| ലൈസൻസ് അനുവദിക്കുന്നതിനായി ഹാജരാക്കിയ നിരീക്ഷണപത്രങ്ങളുടെ വിവരങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാരസ്ഥാനം) | 1) The quarrying permit issued by the Mining and Geology Dept(No 01/2017-18/GR/DOM/M-762/2017 Dt 05/06/2017, Validity upto 04/06/2018. 2)The consent of Kerala State Pollution Control Board(No PCB/MLPM/CO/1258/11 Dt 24/11/2015, Validity upto 31/05/2018. 3) The consent from State Environment Impact Assessment Authority, Kerala (No 537/SEIAA/ECI/3880/2015 Dt 11/02/2016, Validity up to 10/02/2021) 4) Blasters Certificate of Competency (No 3991 Dt 31/05/2002) 5)Consent from Explosive Authority of India(No E/SC/KL/22/1415(E57027) Dt 18/03/2016, Validity upto 31/03/2021) Possession certificate issued from Village Office, Anakkayam |



സെക്രട്ടറി
സെക്രട്ടറി
ആനക്കയം ഗ്രാമപഞ്ചായത്ത്
ആനക്കയം, മലപ്പുറം - 676 509
ഫോൺ: 9496047853

License form Panchayath

Annexure No.6

No.10242/M3/2015

Directorate of Mining & Geology
Kesavadasapuram, Pattom P.O.
Thiruvananthapuram-4
Tel: 0471-2447429
Fax: 0471-2447429
E.mail: director_dir.dmg@kerala.gov.in
Web: www.dmg.kerala.gov.in
Dated : 16/08/2016

From The Director of Mining & Geology

To Sri.N.P.Abdul Azeez,
Managing Director,
Manjeri Bricks & Metals Pvt. Ltd
Pullancheri.P.O,Vettakode, Manjeri, Malappuram,676122

Sir,

Sub : Mines and Minerals - Minor Minerals- Granite Building Stone -
Preparation and execution of quarrying lease deed – reg –


Ref : 1. Pro.Order No. 321/2016-17/10242/M3/2016 Dated:16/08/2016
2. KMMC Rules 2015
3. Pro.OrderNo.537/SEIAA/EC1/3880/2015 dtd 11/02/2016 of State
Environment Impact Assessment Authority, Kerala, Tvpm.

Please refer to the Proceedings Order cited above where in a quarrying lease for Granite (Building Stone) was granted to Sri.N.P.Abdul Azeez, Managing Director, Manjeri Bricks & Metals Pvt. Ltd Pullancheri.P.O,Vettakode, Manjeri, Malappuram,676122. I request you to prepare three copies of the quarrying lease deed in original in plain paper and two copies of the same in stamped paper worth Rs. 200/- and produce the same before the Geologist, District Office, Malappuram for scrutiny and execution. The date of execution will be entered up by the Geologist at the time of execution. After scrutiny of the quarrying lease deed, the Geologist will inform you the date of execution convenient to him. After execution, as per the request of the Geologist, stamp duty will be fixed by the District Registrar, Malappuram and he will receive the stamp duty and a certificate of remittance of stamp duty will be entered in the lease deed. A chalan for Rs 10,550/- (Rupees ten thousand five hundred and fifty only) being the security deposit is enclosed herewith duly countersigned. Please affix your signature at the appropriate places before remittance of money in the treasury. The original treasury receipted chalan may also be produced along with the typed copies of the lease deed and the draft form 'H' which is enclosed herewith, before the Geologist, District Office, Malappuram at the time of execution.

Please note that the quarrying lease deed has to be executed within a period of six months from the date on which quarrying lease has been granted and got registered in accordance with the Registration Act, 1908 vide Rules 44 of the Kerala Minor Mineral Concession Rules, 2015. Form 'D' is also enclosed herewith for strict compliance and to report thereof.

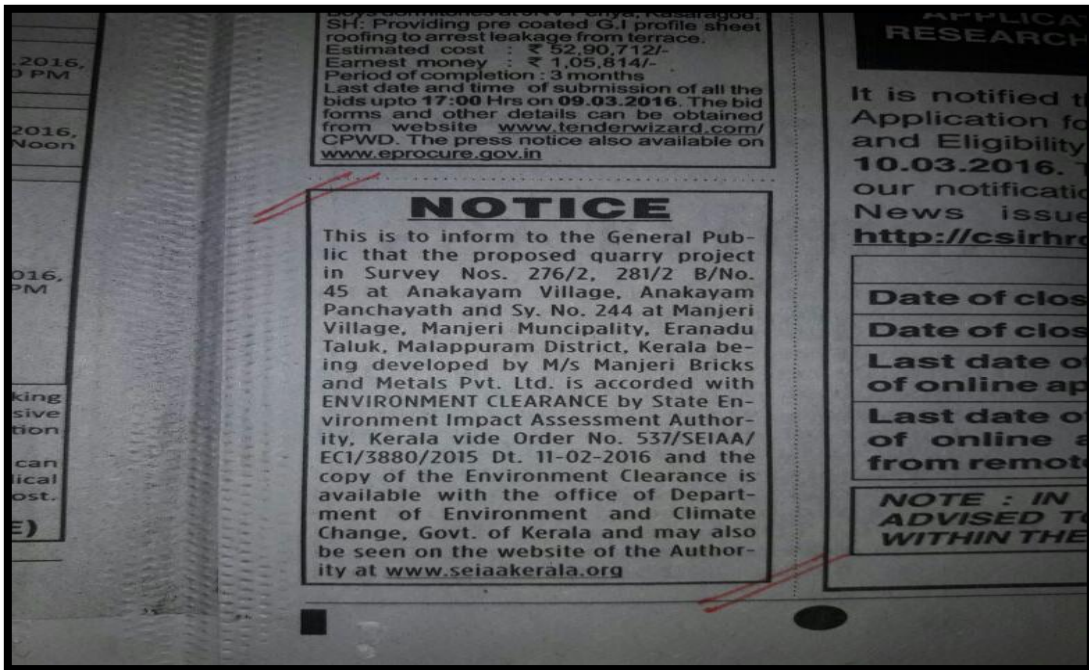
Encl : as above

Yours faithfully
[Signature]
16/08/2016
DIRECTOR OF MINING & GEOLOGY (I/c)



Copy of Lease

Annexure No.7



Advertisement in News paper

Annexure No. 7

**TEST REPORT**

| | | |
|-----------------------------------|------------------|-------------|
| Test Report No:TC540219000001454F | Date: 16.04.2019 | Page 1 of 1 |
|-----------------------------------|------------------|-------------|

| CUSTOMER DETAILS | | | | |
|------------------------|------------------------------------|---|----------------------|------------|
| Customer Details | Name & Address | Mr. N.P.Abdul Azees Managing Director M/s Manjeri Bricks & Metals (P) Ltd Pullanjeri, Manjeri, Malappuram District | | |
| Location of Site | Survey No | 276/2, 281/2 | Re-Survey No | 116/16 |
| | Village | Anakkayam | Village | Manjeri |
| | Taluk | Ernad | Taluk | Ernad |
| | District | Malappuram | District | Malappuram |
| | State | Kerala | State | Kerala |
| Customer Reference | Test Request form dated 09.04.2019 | | | |
| SAMPLE DETAILS | | | | |
| Source of Sample | Ambient Air | Sample Code | TC540219000001454F | |
| Location of Monitoring | South side boundary | Sampled By | Laboratory | |
| Date of Monitoring | 09.04.2019 | Test Started On | 12.04.2019 | |
| Sample Received On | 11.04.2019 | Test Completed On | 13.04.2019 | |
| Humidity | 54 % | Sampling Procedure | IS 5182 Part V & XIV | |

| SL NO | TEST PARAMETER | TEST METHOD | UNIT | RESULTS | NAAQ STANDARD |
|-------|---|---------------------------------|-------------------|---------|---------------|
| 01 | Particulate matter (PM ₁₀) | IS 5182 Part 23: 2006 RA 2017 | µg/m ³ | 51.7 | 100 |
| 02 | Particulate matter (PM _{2.5}) | EPA 40 CFR Part 50 Appendix - L | µg/m ³ | 23.8 | 60.0 |
| 03 | Sulphur dioxide (SO ₂) | IS 5182 Part 2: 2001 RA 2017 | µg/m ³ | < 2.00 | 80.0 |
| 04 | Nitrogen dioxide (NO ₂) | IS 5182 Part 6: 2006 RA 2017 | µg/m ³ | < 2.00 | 80.0 |

End of Report

For and on behalf of
Standard^s Environmental & Analytical Laboratories

Dey
Authorized Signatory
Riya Joseph
Technical Manager

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

Standard^s Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2005 & "A" Grade laboratory of KSPCB
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: seaalab@gmail.com, info@sealabs.in

Ambient Air

Annexure No.8



TEST REPORT



| | | |
|-----------------------------------|------------------|-------------|
| Test Report No:TC540219000001455F | Date: 16.04.2019 | Page 1 of 1 |
|-----------------------------------|------------------|-------------|

| CUSTOMER DETAILS | | | | |
|------------------------|------------------------------------|---|--------------|------------|
| Customer Details | Name & Address | Mr. N.P.Abdul Azees Managing Director M/s Manjeri Bricks & Metals (P) Ltd Pullanjeri, Manjeri, Malappuram District | | |
| Location of Site | Survey No | 276/2, 281/2 | Re-Survey No | 116/16 |
| | Village | Anakkayam | Village | Manjeri |
| | Taluk | Ernad | Taluk | Ernad |
| | District | Malappuram | District | Malappuram |
| | State | Kerala | State | Kerala |
| Customer Reference | Test Request form dated 09.04.2019 | | | |
| SAMPLE DETAILS | | | | |
| Source of Sample | Ambient Sound Level | | | |
| Sample Code | TC540219000001455F | | | |
| Location of Monitoring | South side Boundary | | | |
| Date of Monitoring | 09.04.2019 | | | |
| Method | IS 9989:1981 RA:2008 | | | |

| DAYTIME | RESULT | NIGHTTIME | RESULT |
|-----------|-------------|-----------------------------|-------------|
| 06.00 Hrs | 35.8 dB (A) | 23.00 Hrs | 32.8 dB (A) |
| 07.00 Hrs | 38.4 dB (A) | 00.00 Hrs | 35.2 dB (A) |
| 08.00 Hrs | 42.4 dB (A) | 01.00 Hrs | 35.8 dB (A) |
| 09.00 Hrs | 45.8 dB (A) | 02.00 Hrs | 35.5 dB (A) |
| 10.00 Hrs | 48.0 dB (A) | 03.00 Hrs | 36.2 dB (A) |
| 11.00 Hrs | 50.9 dB (A) | 04.00 Hrs | 35.2 dB (A) |
| 12.00 Hrs | 48.3 dB (A) | 05.00 Hrs | 36.8 dB (A) |
| 13.00 Hrs | 47.6 dB (A) | RESULTS | |
| 14.00 Hrs | 48.0 dB (A) | | |
| 15.00 Hrs | 48.3 dB (A) | Noise Level (Leq) Daytime | 46.4 dB (A) |
| 16.00 Hrs | 49.4 dB (A) | | |
| 17.00 Hrs | 49.8 dB (A) | | |
| 18.00 Hrs | 44.6 dB (A) | | |
| 19.00 Hrs | 41.3 dB (A) | | |
| 20.00 Hrs | 37.6 dB (A) | Noise Level (Leq) Nighttime | 35.5 dB (A) |
| 21.00 Hrs | 37.2 dB (A) | | |
| 22.00 Hrs | 34.7 dB (A) | | |

End of Report

For and on behalf of
Standard^s Environmental & Analytical Laboratories

Diya
Authorized Signatory
Rija Joseph
Technical Manager


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Standard^s Environmental & Analytical Laboratories

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K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: seaalab@gmail.com, info@sealabs.in

Result of ambient sound

Annexure No.9





TEST REPORT

| | | |
|------------------------------------|------------------|-------------|
| Test Report No: TC540219000001456F | Date: 16.04.2019 | Page 1 of 1 |
|------------------------------------|------------------|-------------|

| CUSTOMER DETAILS | | | | |
|--------------------|------------------------------------|---|--------------|------------|
| Customer Details | Name & Address | Mr. N.P.Abdul Azees Managing Director M/s Manjeri Bricks & Metals (P) Ltd Pullanjeri, Manjeri, Malappuram District | | |
| Location of Site | Survey No | 276/2, 281/2 | Re-Survey No | 116/16 |
| | Village | Anakkayam | Village | Manjeri |
| | Taluk | Ernad | Taluk | Ernad |
| | District | Malappuram | District | Malappuram |
| | State | Kerala | State | Kerala |
| Customer Reference | Test Request form dated 09.04.2019 | | | |

| SAMPLE DETAILS | | | |
|----------------------------|--------------------|--------------------|------------|
| Sample Code | TC540219000001456F | Sample Received On | 11.04.2019 |
| Sample Name | Water | Sampling Procedure | --- |
| Sample Description | Open Well | Sampling Location | West Side |
| Identification By Customer | --- | Sample Condition | Good |
| Sampled On | 09.04.2019 | Test Started On | 11.04.2019 |
| Sampled By | Customer | Test Completed On | 16.04.2019 |

| SL NO | TEST PARAMETER | TEST METHOD | UNITS | RESULT | ACCEPTABLE LIMIT (IS 10500 - 2012) |
|-------|--|------------------------------|-------|-----------------|------------------------------------|
| 01 | Colour | IS 3025 Part 4:1983 RA 2017 | Hazen | 1.00 | 5.00 (Max) |
| 02 | Odour | IS 3025 Part 5:1983 RA 2017 | --- | Unobjectionable | Unobjectionable |
| 03 | Turbidity | IS 3025 Part 10:1984 RA 2017 | NTU | < 0.10 | 1.00 (Max) |
| 04 | pH | IS 3025 Part 11:1983 RA 2017 | --- | 6.52 | 6.50 - 8.50 |
| 05 | Conductivity | IS 3025 Part 14:1984 RA 2013 | µS/cm | 73.0 | --- |
| 06 | Total Dissolved Solids | IS 3025 Part 16:1984 RA 2017 | mg/L | 42.0 | 500 (Max) |
| 07 | Total Hardness (as CaCO ₃) | IS 3025 Part 21:2009 RA 2014 | mg/L | 19.8 | 200 (Max) |
| 08 | Calcium (as Ca) | IS 3025 Part 40:1991 RA 2014 | mg/L | 6.34 | 75.0 (Max) |
| 09 | Magnesium (as Mg) | IS 3025 Part 46:1994 RA 2014 | mg/L | < 1.00 | 30.0 (Max) |
| 10 | Chloride (as Cl) | IS 3025 Part 32:1988 RA 2014 | mg/L | 4.96 | 250 (Max) |
| 11 | Total Alkalinity (as CaCO ₃) | IS 3025 Part 23:1986 RA 2014 | mg/L | 11.9 | 200 (Max) |
| 12 | Iron (as Fe) | IS 3025 Part 53:2003 RA 2014 | mg/L | < 0.10 | 1.00 (Max) |
| 13 | Sulphate (SO ₄) | IS 3025 Part 24:1986 RA 2014 | mg/L | < 1.00 | 200 (Max) |
| 14 | Total Coliform Bacteria | IS 15185 : 2016 | --- | Absent/100 ml | Absent/100 ml |
| 15 | E coli | IS 15185 : 2016 | --- | Absent/100 ml | Absent/100 ml |

End of Report

Authorized Signatory

Vidhyalakshmi Das

Vidhyalakshmi Das
Microbiologist

For and on behalf of
Standard^S Environmental & Analytical Laboratories

Authorized Signatory

Raja Joseph

Raja Joseph
Technical Manager

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Web: www.sealabs.in, E-mail: sealab@gmail.com, info@sealabs.in

Result of drinking water