

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 823/SEIAA/EC1/2606/2015

DT. 09-08-2016

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

FOR

PROPOSED QUARRY PROJECT

AT

**SURVEY NO. 1244/1pt KILLANUR VILLAGE, THRISSUR TALUK, THRISSUR
DISTRICT, KERALA**

BY

M/S RUDRA GRANITES

(February, 2019- July, 2019)

INTRODUCTION

M/S Rudra Granites is a stone quarry located at Survey No., 1244/1pt Killanur Village, Thrissur Taluk, Thrissur District, Kerala. The quarry project was accorded with the Environmental Clearance by state Environmental Impact Assessment Authority on 09-08-2016. Consequently based on this EC, mining activity started during February 2017 in this area. Six month compliance reports to the conditions of the Environmental Clearance are to be submitted as part of compliance. The compliance report to the specific conditions and general conditions of the Environmental Clearance for the period of February, 2019- July, 2019 (Sixth Report) is being submitted.

PART A – SPECIFIC CONDITIONS

➤ Condition 1

Protection wall (Protective fencing) shall be provided at vulnerable points of the quarry to avoid accidents.

✓ Compliance

We have provided barbed metal wire fencing around the lease area with a height of 5ft to avoid accidents. Photograph showing the same is enclosed as Annexure 1.

➤ Condition 2

Overburden is to be stored at the designated place.

✓ Compliance

For the present project, the quantity of topsoil and overburden estimated to be 29095MT and 138000MT respectively. The top soil and Overburden has been storing separately in an earmarked site since the starting of the project. Photograph showing the same is enclosed as Annexure 2.

➤ Condition 3

The approach road to the quarry from the main road is not maintained at all. This road must be maintained at good condition by the proponent.

✓ **Compliance**

The access road to project area has well maintained by strengthening by metal pieces pavement and trees are planted along both sides to avoid land sliding. To decrease dust emission during transportation, roads are watering at regular intervals using sprinklers fitted in vehicles.. The photographs showing the same is given in Annexure 3.

➤ **Condition 4**

Dust suppression mechanism must be in place.

✓ **Compliance**

To bring down the dust giving out through transportation, the haul roads are watering at regular intervals. Fixed sprinklers are also provided along the sides of approach road. To ensure adequate supply of water during the summer season, water harvesting pond is constructed in the project area. Dust emission during drilling is reducing using wet sack.

➤ **Condition 5**

A more realistic CSR shall be prepared and submitted before SEIAA

✓ **Compliance**

CSR activities are carrying out as per the more realistic CSR prepared and submitted to SEIAA. The documents regarding CSR were maintained in the company office as record.

PART B – GENERAL CONDITIONS

➤ **Condition 1**

Rainwater harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR unless otherwise specified.

✓ **Compliance**

In connection with the present project, rainwater harvesting system has provided. It consists of one harvesting tanks constructed with stone masonry wall having the capacity of 300000 liter. Photograph of the rainwater harvesting system as enclosed as Annexure 4.

➤ **Condition 2**

Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.

✓ **Compliance**

An Environmental Monitoring Cell has formed with Mr. Dineshmon NT (Owner) as head of the monitoring cell and made functional. Meeting of the monitoring cell has been arranging periodically and discuss the status of the compliance of the specific and general conditions stated in the Environmental clearance order. The details of the monitoring cell members are given below.

Sl. No.	Post	Name
1	Head of the monitoring cell	Dineshmon NT
2	Head in charge (Environment)	P. Sathyanarayana Rai
2	Senior Environmental Officer	Jammu Bhaskara Rao
3	Environmental Officer	Ratheesh N
4	Name of the environmental officers in charge at Site	Jacob AM
5	Address of Environmental laboratory	M/s Poluchem Laboratory Pvt. Ltd.

➤ **Condition 3**

Suitable avenue trees should be planted along either side of the tarred road and, open parking areas if any, including approach road and internal roads.

✓ **Compliance**

The margins of the project area is roughly covered by thick vegetation, the vacant spaces including the sides of approach road and other places near to the project area is planted with tree saplings. The photographs showing the same are attached as Annexure No.5.

➤ **Condition 4**

Maximum possible solar energy generation and utilization shall done at the own cost of the project proponent.

✓ **Compliance**

We have provided solar panels system near the project office and associated buildings. All the power needs of the office building are generated from solar power. The photographs showing the solar system is attached as Annexure No.5a.

➤ **Condition 5**

Sprinklers shall be installed and used in the project site to contain dust emission.

✓ **Compliance**

Dust emission during drilling is reduced using wet sack. To reduce dust emission during transportation, the haul roads are watered at regular intervals. Fixed Sprinklers are also provided along the sides of approach road. The photographs showing the fixed sprinklers along the road side is attached as Annexure No.5b

➤ **Condition 6**

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

✓ **Compliance**

Following to the shutting of the mine, it is proposes to build up a green belt in the mined out area after reclaimed with stacked dumping and overburden. For the same, we are storing the top soil and overburden in a prefixed area. Ten percent of the excavated pit area will be maintained as water storage area. Eco-restoration including the mine closure plan will perform at our own cost.

➤ **Condition 7**

At least 10 percent out of the total excavated pit area should be retained as water storage area and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly, if no other specific condition on reclamation of pit is stipulated in the E.C.

✓ **Compliance**

Following the closure of the mine, ten percent of the excavated pit area will be retained as water storage area. The project team proposes to develop a green belt in the remaining area with indigenous plant species after reclaimed with stacked dumping and overburden. Grass and Shrub species with strong root system will plant in the areas prone to erosion especially at the foot of the hill. As part of compliance we have started planting teak and jackfruit tree saplings. The photographs showing the same shown as Annexure No.5c

➤ **Condition 8**

Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.

✓ **Compliance**

As part of the Corporate Social Responsibility, the amount proposed by the company has been spending for various social activities. CSR activities are carrying out as per the application submitted to SEIAA. The registers regarding CSR were maintained in the company office as record.

➤ **Condition 9**

The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc.) shall be protected at all times and shall be conspicuous.

✓ **Compliance**

The project team provided barbed metal wire fencing around the mining area with a height of 5 ft to prevent falling of animals/human/belongings/dumping of garbage's etc. The photograph showing the same is attached as Annexure No.1

➤ **Condition 10**

Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulation of Explosive Department.

✓ **Compliance**

Warning alarm has installed in the project area and maintaining properly. The blasting time has fixed and is between 4.0pm and 5.0pm. A danger board indicating blasting time has also installed in the project site.

➤ **Condition 11**

Control measures on noise and vibration prescribed by KSPCB should be implemented.

✓ **Compliance**

Noise pollution

Mitigation measures Implemented

The major noise generating source from the mining activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are undertaken to bring down the noise levels:-

- Proper maintenance of machinery, equipments and improvement of design of machines.
- Personal protective devices i.e., earmuffs, ear plugs etc. are provided to workers working in high noise areas.
- Maintain a wide green belt of dense foliage between mine areas and residential colonies.
- The mining area is working only during day times.
- Noise quality is checking periodically. The sound levels are monitored through an NABL accredited laboratory during the quarry in operation and the monitored results are well within the permissible limits.

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.

➤ **Condition 12**

Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.

✓ **Compliance**

Quarrying activities is carrying out only during day time.

➤ **Condition 13**

Blasting should be in a controlled manner as specified by the regulations of Explosive department or any other concerned agency.

✓ **Compliance**

Blasting

- ❖ **The controlled blasting is proposed by adopting all the safety measures as per “MMR 1961” and with the permission of DGMS.**
- ❖ **Blasting is carried out for the fragmentation of the granite within the project area. Multiple blast holes of 1.0 to 1.5 m depth will be drilled with the help of 32mm drill rod, Jack Hammer and air compressor of 100 cm capacity.**
- ❖ **It is estimated about 250g of explosives per hole is required. About 30-50 holes per blast are proposed. Therefore the requirement of explosive will be about 10kg/ blast.**

Blasting safeguard

- ❖ **Blasting in the open cast is done only during day time at designated hours.**
- ❖ **Only competent blasters are appointed to handle explosives.**
- ❖ **Explosives are stored in approved and licensed magazine as per explosive Act/ Rules.**
- ❖ **Explosives are brought from magazine to blasting site in licensed explosive van under the care of blaster.**
- ❖ **Sufficient warning signals are given before blasting the holes.**
- ❖ **Guards are posted on all roads and paths at least 250 m distance to stop entrance to the danger zone during the blasting hour.**

- ❖ **Controlled blasting is practiced to control vibrations and flying fragments.**
- ❖ **Optimum charge is used, while blasting near office complex/ infrastructure site.**
- ❖ **Maximum charge per delay is always being less than 10kg to limit the PPV levels within the DGMS standards of 15 mm/sec.**

➤ **Condition 14**

A licensed person should supervise/ control the blasting operations.

✓ **Compliance**

Licensed person is supervising/controlling the blasting operations. Copy of license of the licensed person is enclosed as Annexure 6.

➤ **Condition 15**

Access road to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.

✓ **Compliance**

Entree road area to the mine has well maintained by paving granite stones. Roads have been well maintaining to contain dust emissions that may arise during transportation of materials. The photographs showing the same is given in Annexure 3.

➤ **Condition 16**

Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan/ specific condition.

✓ **Compliance**

The excavated top soil has been storing separately in a prefixed location. The quantity of topsoil and overburden estimated to be 29095MT and 138000MT respectively. Photograph showing the same is enclosed as Annexure 2.

➤ **Condition 17**

Height of the benches should not exceed 5m, and width should not be less than 5m, if there is no mention is the mining plan/ specific condition.

✓ **Compliance**

Quarry has started working during March, 2017 and the mining is carrying out in the form of benches. Now we are managing the height of the bench around 5 meters. The photograph showing our current working is shown as Annexure No.7.

➤ **Condition 18**

Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.

✓ **Compliance**

Various safety measures have set down to prevent fly rocks cross the lease area. Safety measures include no blasting during unfavorable weather conditions, maintain optimum delay sequence and stem to column ratio etc.

➤ **Condition 19**

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

✓ **Compliance**

In the current project, the exploitation of mineral is from 90-15m MSL in conceptual phases. Mining depth will not exceed beyond 10m from general ground level.

➤ **Condition 20**

No mining operation should be carried out at places having a slope greater than 45°.

✓ **Compliance**

Mining activities are not carrying out at regions having a slope greater than 45°.

➤ **Condition 21**

Acoustic enclosures should have been 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.

✓ **Compliance**

Mining area has covered by thick green belt and this will reduce sound amplifications produced during mining activities. The noise level is keeping within the prescribed standards given by CPCB/KSPCB.

➤ **Condition 22**

The workers on the site should be provided with the required protective equipment such as ear muffs, helmets, etc.

✓ **Compliance**

The project team has provided personal protective devices such as earmuffs, ear plugs, helmet etc. to all workers at the site.

➤ **Condition 23**

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

✓ **Compliance**

From the entire project area, storm water is channelizing in to an excavated pit and stored the storm water in it. During this storage all the debris/slit in the storm water are sedimented in to the bottom of the pit. Overflow from the storm water collected pit is opened in to Garland drains which entering to the main stream.

➤ **Condition 24**

The transportation of minerals should be done in covered trucks to contain dust emissions.

✓ **Compliance**

Trucks are covered with tarpaulin sheets after loading to control dust emissions during transportation,. Different other precautions also set down to control dust emissions are; trucks are not overloading and the loads are maintained to the body level etc.

➤ **Condition 25**

The proponent should plant at least 5 times of the loss that has been occurred while clearing the land for the project.

✓ **Compliance**

We have been planting trees at least 5 times of the loss that has been occurred while clearing the land for the project since the starting of the project.

➤ **Condition 26**

Disposal of spend oil from diesel engines should be as specified under relevant rules/regulations.

✓ **Compliance**

Disposal of spent oil from diesel engines is carrying out under relevant rules/regulations.

➤ **Condition 27**

Explosive should be stored in magazines in isolated place specified and approved by the Explosive Department.

✓ **Compliance**

Explosives are storing in magazines built in an isolated place specified and approved by the Explosives Department. A photograph showing the magazine is enclosed as Annexure 8.

➤ **Condition 28**

A minimum distance of 100 m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.

✓ **Compliance**

Distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures are providing.

➤ **Condition 29**

100 m buffer distance should be maintained from forest boundaries.

✓ **Compliance**

Not applicable, no forest boundary within 200m distance.

➤ **Condition 30**

Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.

✓ **Compliance**

Consent from Kerala State Pollution Control Board under Water and Air Act(s) has obtained before started the mining activity. Consent Order from Kerala State Pollution Control Board is attached as Annexure 9.

➤ **Condition 31**

All other statutory clearances should be obtained as applicable by project proponents from the respective competent authorities including that blasting and storage of explosives.

✓ **Compliance**

All statutory approvals required for the quarrying activity is obtained for the project. The details regarding the same along with the copy of the statutory approvals are enclosed as Annexure 10 and 11. Details of statutory approvals are given below.

Sl. No.	Annexure	Statutory approvals
1	10	License to possess: (c) for use, explosives of class 1, 2, 3, 4, 5, 6 or 7.
2	11	License from Panchayat

➤ **Condition 32**

In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts are assessed, based on which only the E.C. is issued, the project would require a fresh appraisal by this Authority for which the proponent shall apply and get the approval of this authority.

✓ **Compliance**

Would be complied

➤ **Condition 33**

The Authority reserves the right to add additional safeguard measures subsequently if found necessary, and to take action including revoking of the environmental 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.

✓ **Compliance**

Would be complied

➤ **Condition 34**

The stipulation by the statutory authorities under different acts and notifications should be complied with including the Water (Prevention and Control of Pollution) Act 1974, The Air (Prevention and Control of Pollution) Act, 1981, The Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 2006.

✓ **Compliance**

Would be complied

➤ **Condition 35**

The project Proponent should advertise in at least two local news papers widely circulated in the region one of which (both the advertisement and the news paper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environmental Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at www.seiaa.kerala.org. 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 the Authority as confirmation.

✓ **Compliance**

Regarding the accordance of environmental clearance to the quarrying activity has advertised in two local newspapers and the copy of the same was submitted to SEIAA Kerala. The copies of the advertisements are provided at Annexure 12 & 13. Details of the newspaper advertisements are given below.

Sl. No.	Annexure	Name of the Newspaper and edition	Dated
1	12	Mangalam	30/0-8/2016
2	13	Kerala Kaumadi	30/0-8/2016

➤ **Condition 36**

A copy of the clearance letter shall be send by the proponent to concerned Grama panchayat/ District panchayat/ 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.

✓ **Compliance**

A copy of the environmental clearance order has submitted to Panchayat office. There is no suggestion/representation received so far from anybody. The environmental clearance order and compliance report has uploaded in the Company website.

➤ **Condition 37**

The proponent shall submit half yearly reports on the status of compliance of the stipulated E.C. conditions including results of monitored data (both in hard copies as well as by e- mail) and upload the status of compliance of the stipulated E.C. conditions, including result of monitored data on website and shall and update the same periodically. It shall simultaneously be send to the respective Regional office, of MOEF, Govt. of India and also to the State Environmental Impact Assessment Authority (SEIAA) office.

✓ **Compliance**

Sixth Compliance Report is being submitted to Department of Environment and Climate change, Govt. of Kerala and Regional Office of MoEF, Govt. of India both in hard copy as well as soft copy (CD).

➤ **Condition 38**

The details of environmental clearance should be prominently displayed in a metallic board of 3ft x 3ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry visible to the public.

✓ **Compliance**

Details 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 photographs showing the metallic board is given in Annexure 14.

➤ **Condition 39**

The proponent should provide notarized affidavit (indicating the number and date of environmental clearance proceedings) that all the conditions stipulated in the E.C. shall be scrupulously followed.

✓ **Compliance**

An affidavit stating that all the conditions stipulated in the Environmental clearance will be scrupulously followed has submitted to Department of Environment and climate change.

➤ **Condition 40**

No change in mining technology and scope of work should be made without prior approval of the SEIAA, No further expansion or modifications in the mines shall be carried out without prior approval of the SEIAA, as applicable.

✓ **Compliance**

We will not make any change in mining technology and scope of work without prior approval of the SEIAA and further expansion or modifications in the mines will not be carried out without prior approval of the SEIAA.

➤ **Condition 41**

The project proponent shall ensure that no natural water course and/or water recourses shall be obstructed due to any mining operations. Necessary safe guard measures to protect the first order streams if any, originated from the mine lease shall be taken.

✓ **Compliance**

We ensure that no natural water course and/or water recourses has not obstructed due to any mining operations. There is no first order streams originated from the mine lease.

➤ **Condition 42**

Monitoring of Ambient Air Quality to be carried out based on the notification 2009, as amended from the time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points and transfer points to reduce fugitive emission.

✓ **Compliance**

We are carrying out monitoring of Ambient Air Quality based on the notification 2009, as amended from the time to time by the Central Pollution Control Board. Water sprinkling has installed at places via loading and unloading points and transfer points to reduce fugitive emission. Copy of the Ambient Air Quality is enclosed as Annexure 15.

➤ **Condition 43**

The top soil, if any, shall be temporarily be stored at earmarked site(s) only for the top soil shall be used for land reclamation and plantation. The overburden generated during the mining operation shall be stacked at earmarked dump site(s) only. The maximum height of the dump shall not exceed 8m and width 20m and overall slope of the dump shall be maintained to 45°. The O.B. dump should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for the stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated area should continue until the vegetation become self-sustaining.

✓ **Compliance**

The top soil has been storing at earmarked site(s) and it will be only used for land reclamation and plantation. The overburden generated during the mining operation also stacking at earmarked dump site only. The maximum height of the dump will not exceed 8m and width 20m and overall slope of the dump will be maintained to 45°. The O.B. dump will be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, we will use geo textiles undertaken for the stabilization of the dump. The entire

excavated area will be backfilled. We will monitor and manage the rehabilitated area until the vegetation become self-sustaining.

➤ **Condition 44**

Catch drains and siltation ponds of appropriate site shall be constructed around the mine working mineral and O.B. dumps to prevent runoff water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

✓ **Compliance**

Siltation ponds and catch drains has provided around the mine working, mineral and O.B. dumps to prevent runoff water and flow of sediments directly into the river and other water bodies. The water so collected will be utilized for watering the mine area, roads, green belt development etc. The drains will be regularly desilted particularly after monsoon and maintained properly.

➤ **Condition 45**

Effective safe guard measures such as regular water sprinkling shall be carried out in critical areas porn to air pollution and having high levels of PM₁₀ and PM₂₅ such as haul road loading and uploading points and transfer points. It shall be ensure that the Ambient Air Quality Parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

✓ **Compliance**

Effectual safe guard measures such as regular water sprinkling is carrying out in critical areas porn to air pollution and having high levels of PM₁₀ and PM₂₅ such as haul road loading and uploading points and transfer points. It will be ensuring that the Ambient Air Quality Parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

➤ **Condition 46**

Fugitive dust emission from all the sources should be controlled regularly. Water spraying arrangements on haul roads, loading and unloading at transfer points. Should be provided and properly maintained.

✓ **Compliance**

Fugitive dust emission from all the sources is controlling regularly. Water spraying arrangements on haul roads, loading and unloading at transfer points has arranged and properly maintained.

➤ **Condition 47**

Measures should be taken for the control of Noise level below 85 DBA in the work environment.

✓ **Compliance**

Different measures have taken for the control of noise level below 85 DBA in the work environment. We have been checking the Ambient Sound level periodically and the copy of the same as enclosed as Annexure 16.

➤ **Condition 48**

A separate Environment Management Cell with suitable qualified personal should be setup under the control of a senior executive who will directly report to the head of the organization.

✓ **Compliance**

A separate Environment Management Cell with suitable qualified personal will be setup shortly under the control of a senior executive who will directly report to the head of the organization.

➤ **Condition 49**

The funds earmarked for the Environmental protection measures and CSR activities should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environmental Impact Assessment Authority (SEIAA) office.

✓ **Compliance**

The amount earmarked for the Environmental protection measures and CSR activities are keeping in separate account and will not diverted for other purpose. We will reports year wise expenditure to the State Environmental Impact Assessment Authority (SEIAA) office.

➤ **Condition 50**

The regional office of MOEF and CC located at Bangalore shall monitor compliance of the stipulated conditions. The project Authorities should extent full co-operation to the officer (s) of the regional office by furnishing the requisite data/information/monitoring reports.

✓ **Compliance**

We will extent full co-operation to the MOEF officer (s) of the regional office by furnishing the requisite data/information/monitoring reports.

➤ **Condition 51**

Any appeal against the Environmental Clearance shall lie with the National Green Tribunal, if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

✓ **Compliance**

There is no appeal against this Environmental Clearance with the National Green Tribunal.

➤ **Condition 52**

Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in the withdrawal of this clearance and attract action under the provision of Environmental Protection Act, 1986.

✓ **Compliance**

We agreed

➤ **Condition 53**

The SEIAA may revoke, or suspend the order for non implementation of any of the specific or this implementation of any of the conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further conditions or stipulate any further conditions in the interest of Environmental Protection.

✓ **Compliance**

We agreed

➤ **Condition 54**

The above conditions shall prevail notwithstanding anything to the contrary in consistent or simplified, contained in any other permit, license or consent given by any other authority for any other project.

✓ **Compliance**

We agreed

➤ **Condition 55**

The order is valid for a period of 5 years or the expiry date of mining lease period issued by the Government of Kerala, whichever is earlier.

✓ **Compliance**

We agreed

➤ **Condition 56**

The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.

✓ **Compliance**

There is no pending litigation related to the land or project, in any court of law regarding this project.

➤ **Condition 57**

The mining operation shall restrict to above ground water table and it should not intersect ground water table.

✓ **Compliance**

We carried out mining only above the ground water table only and it will not intersect ground water table.

➤ **Condition 58**

All vehicles used for transportation and within the mine shall have 'PUC' certificate from authorized pollution taking center. Washing of all vehicles shall be in the lease area.

✓ **Compliance**

All vehicles have been washing within in the lease area. Every vehicles using for the transportation and within the mine have obtained 'PUC' certificate from authorized pollution taking center.

➤ **Condition 59**

Project proponent should obtain necessary prior permission of the competent authorities for withdrawal of requisite quantity of surface water and ground water for the project.

✓ **Compliance**

We will obtain necessary prior permission of the competent authorities for withdrawal of requisite quantity of surface water and ground water for the project.

➤ **Condition 60**

Regular monitoring of flow rates and water quality upstream and down streams of the spring and perennial nallahs flowing in and around the mining lease area shall be carried out and reported in the six monthly reports to the SEIAA.

✓ **Compliance**

We are carrying out the water quality analysis regarding the water bodies around the lease area. Copy of the water quality reports enclosed as Annexure 17. There is no spring and perennial nallahs flowing in and around the mining lease area.

Condition 61

Occupational Health surveillance programme of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures if needed.

✓ **Compliance**

We are carrying out Occupational Health surveillance programme of the workers periodically to monitor any contractions due to exposure to dust and take corrective measures if needed in connection with Mines Vocational Training.

ANNEXURE 1



Photograph showing the barbed metal wire fencing erected around the mining area

ANNEXURE 2



Photographs showing the top soil and OB storage area

Annexure 3



Photograph showing access road maintained by paving granite stone

Annexure 4



Photograph showing the rain water harvesting tank

Annexure 5



Tree saplings planted near to the project area

Annexure No.5a



Photograph showing solar panel installed in the project area

Annexure No.5b





Photograph showing the fixed sprinklers installed along the road side

Annexure No.5c



Annexure 6

भारत सरकार/Government of India
खान अधिनियम, 1952/Mines Act, 1952
खान परीक्षा बोर्ड/Board of Mining Examinations

खान मेट सक्षमता प्रमाण-पत्र
Mining Mate's Certificate of Competency
(केवल ओपनकास्ट खानों तक सीमित)
(Restricted to mines having opencast workings only)
(धात्वकीय खान अधिनियम, 1961 के अन्तर्गत)
(Under the Metalliferous Mines Regulations, 1961)

श्री. KRISHNA NAIK R
son of RAMA NAIK H
born on 20th JULY 1977 (SEVENTY SEVEN)
having given satisfactory evidence of his age,
medical fitness, good character, literacy and prescribed experience of working in metalliferous
mines and having passed the prescribed examination held at
centre on 03.08.2011
is hereby granted MINING MATE'S CERTIFICATE
OF COMPETENCY restricted to mines having opencast workings only

बायें हाथ के अंगूठे का निशान:
Left hand thumb impression

अचल सचिव
Zonal Secretary
Board of Mining Examinations
Southern Zone, Bengaluru

अचल सचिव
Zonal Secretary
Board of Mining Examinations
Southern Zone, Bengaluru

खान परीक्षा बोर्ड
Chairman
Board of Mining Examinations

Signed and Sealed

MR

To

SHRI KRISHNA NAIK R S/o. RAMA NAIK H,

Home Address

Village MARIYAMMANAHALLI
 PO MARIYAMMANAHALLI
 Police Station LLITHANDA
 District BELLARY
 State KARNATAKA

प्रमाणित किया जाता है कि उनकी सक्षम चिकित्सा अधिकारी द्वारा स्वास्थ्य परीक्षा कर
 खान में कार्य करने के लिए स्वस्थ घोषित किया जाता है।
 Certified that he has been examined by qualified medical
 officer and declared fit for employment in mines.

1. This certificate has been issued after
 examination by qualified Medical Officer
 on 26.05.2016 and declared fit for
 employment in mines. This Certificate is
 valid upto 25.05.2021 को

2. _____ को
 On _____

3. _____ को
 On _____

4. _____ को
 On _____

5. _____ को
 On _____

6. _____ को
 On _____

7. _____ को
 On _____

8. _____ को
 On _____

9. _____ को
 On _____

10. _____ को
 On _____

Prepared by _____
 Checked by _____

Annexure 7




The photograph showing bench type mining

Annexure 8



Annexure 9

FILE NO : PCB/TSR/IC/7170/2016
Date of issue : 14/06/2016



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. :2137886
Dated:27-11-2015

TO

M/s RUDRA GRANITES
KUNDUKAD P.O,
KARUVANKADU,THRISSUR-680028
680028

Consent No. :PCB/DO/TSR/F/ICO/5494/2016
Valid Upto :31/10/2018



I. GENERAL

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	VALIDITY	31/10/2018
2	Name and Address of the establishment	RUDRA GRANITES KUNDUKAD P.O, KARUVANKADU, THRISSUR-680028 680028
3	Communication	Telephone :- Fax :- E-mail:dineshnt683@gmail.com
4	Occupier Details	DINESH MON N.T, NEENDUTHALAKKAL HOUSE, P. O. KUNDUKAD, MUTTIKKAL, KARUVANKADU, THRISSUR-680028
5	Local Body	MULAKUNNATHUKAVU
6	Survey Number	1244/IP
7	Village	KILLANNUR
8	Taluk	THRISSUR
9	District	THRISSUR
10	Capital Investment(Rs in Lakhs)	10
11	Scale	Small
12	Category	RED
13	Annual fee(Rs)	2370/-
	Total Fee remitted(Rs)	15,405/-
14	RAW MATERIAL	PRODUCTS
	GRANITE BUILDING STONE @ 150 Metric Tonnes	QUARRYING FROM 4.9531 HECTARE OF LAND
15	Total Power Required (HP)	

2. CONDITIONS AS PER

The Water(Prevention and Control of Pollution)Act, 1974

- 2.1 In case of generation of trade effluent from the industry, effluent treatment system consisting of treatment units having adequate capacity established as per the Integrated Consent to Establish issued shall be operational at all times during which the industry is functional. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(1) (g) of the Water Act shall also be made along with.
- 2.2 Water consumption: 50 Litre/day
- 2.3 Effluent generation:
- 2.4 The characteristics of effluent after treatment shall conform to the following tolerance limits:



Sl.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

2.5 Mode of disposal of treated effluent:

**3. CONDITIONS AS PER
The Air(Prevention and Control of Pollution)Act, 1981**

3.1 Adequate air pollution control measures shall be operational at all times during the functioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	

3.2 Emission characteristics shall not exceed the following:

Sl.No.	Parameter	Limiting Standards (mg/Nm3)
--------	-----------	-----------------------------

**4. CONDITIONS AS PER
The Environment (Protection) Act, 1986.**

4.1 The operation of the industry shall be strictly in compliance with the provisions of the Noise Pollution (Regulation and Control) Rules 2000.

4.2 Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001.

4.3 Hazardous waste generated, if any, shall be handled as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.

4.3.1 Activities for which Authorisation is granted

Collection	transport
Reception	Storage
Treatment	Reprocessing/Disposal


4.3.2 Type, quantity and mode of storage/collection/disposal of hazardous wastes shall be as follows:

Sl.No.	Hazardous Waste	Schedule Category	Quantity Tonne/year
--------	-----------------	-------------------	---------------------

Mode of	
Storage	Disposal

4.4 e-waste shall be disposed off safely as per the e-waste (Management and Handling) Rules, 2011.

5. SPECIFIC CONDITIONS



- 5.1 The location of the industry/out let shall be as per the approved drawing attached.
- 5.2 This consent is granted for operating quarry with production capacity of 150 MT/day granite boulders.
- 5.3 The consent is granted subject to the power of the board to review and make variations to all or any of the conditions as per the Board deems fit as per the relevant Acts/Rules.
- 5.4 The applicant shall comply with the instructions that the Board may issue from time to time regarding prevention and control of air, water, land and sound pollution.
- 5.5 A minimum distance of 100m shall be kept from the boundary of quarry area to residential buildings, places of worship, public buildings, public road having vehicular traffic, river or lake, railway line and bridges.
- 5.6 All control measures provided should be maintained properly to ensure that the system is adequate to control the pollution caused.
- 5.7 The quarry should not be operated between 6.00 pm and 6.00am.
- 5.8 Necessary permission from Mining & Geology, Explosive Department may be obtained before doing blasting.
- 5.9 After excavation at the site is completed the land may be used for rain water harvesting with protective barriers any other suitable approved purpose or may be reclaimed.
- 6.0 The depth of excavation below the highest point shall not exceed 6m.
- 6.1 Fencing shall be provided around the boundary of quarry operation and shall be maintained properly.
- 6.2 This consent is granted for quarrying of exposed rock only.
- 6.3 The PM10 in ambient air at the boundary shall not exceed 100 $\mu\text{g}/\text{m}^3$.
- 6.4 The PM2.5 in ambient air at the boundary shall not exceed 60 $\mu\text{g}/\text{m}^3$.
- 6.5 The sound level (Leq) at 1m outside the boundary of the site should not exceed the ambient noise standard applicable to the adjoining areas.
- 6.6 Suspended particulate matter at the boundary of the premises shall not exceed the limit applicable to that area as per the National Ambient Air Quality Standards.
- 6.7 The consent issued from the Board shall be valid only for a period when all other statutory or necessary clearance from other concerned authorities are valid.
- 6.8 The renewal application shall be submitted on or before 31.07.2018. Late application shall be accepted only with fine as applicable.
- 6.9 The quarrying lease document from mining and geology department shall be produced within one month of receipt of the same from the department. Otherwise the consent shall be revoked

DATE :17/06/2016

SIGNATURE & SEAL OF
P.K. BABURAJAN
ENVIRONMENTAL ENGINEER
KERALA STATE POLLUTION CONTROL BOARD

control board towards fee arrears, as per G.O.(P) No. 2/2017/Envt. dated 04.11.2017 with in one month from the date of issue of this consent.

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

SUSEELA NAIR V A

Digitally signed by SUSEELA NAIR V A
Date: 2018.10.28 21:38:26 +05'30'

DATE :28/10/2018

SIGNATURE & SEAL OF ISSUING AUTHORITY
ENVIRONMENTAL ENGINEER



To
SRI.DINESH MON N.T,
NEENDUTHALAKKAL HOUSE,
P. O. KUNDUKAD,
MUTTIKKAL,
KARUVANKADU,
THRISSUR-680028

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000**
2. For verifying this document please go to kroemms.nic.in and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.

Annexure 10


अनुज्ञप्ति प्ररूप एल.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 I 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 रखने के लिए अनुज्ञप्ति

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/SE/KL/22/1(E84010)
वार्षिक फीस रुपए (Annual Fee Rs): 2400/-



Licence Photo v

1. Licence is hereby granted to
Shri NT Dineshmon (अधिभोगी / Occupier : NT Dineshmon), Neenduthalakkal House Muttikal Kundukadu P.O. Thrissur ,KUNDUKADU, Town/Village - KILLANNUR, District-THRISSUR, State-Kerala, Pincode - 680028

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : **Individual**

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

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)

क्र. सं.	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	मात्रा किसी एक समय में
Sr. No.	Name and Description	Class & Division	Sub-division	Quantity at any one time
1.	Nitrate Mixture	2,0	0	100 Kg.
2.	Safety Fuse	6,1	0	1100 Mtrs
3.	Electric and/or Ordinary Detonators	6,3	0	1000 Nos.

(ख) किसी एक कलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए] : 25 times as above.

(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] :

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्ति परिसर की पृष्ठ होती है।
The licensed premises shall conform to the following drawing(s):
रेखाचित्र क्र. (Drawing No.) E/SE/KL/22/1 (E84010)
दिनांक (Dated) 15/11/2018

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:
Survey No. 1244/1, ग्राम (Town/Village) : Killannur पुलिस थाना (Police Station) : Viyyur
जिला (District) THRISSUR राज्य (State) Kerala पिनकोड (Pincode) 680028
दूरभाष (Phone) 9744766116 ई.मेल (E-Mail) rudragranite@gmail.com फैक्स (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं। : Portable Magazines D Type No.706 and E type No.956
The licensed premises consist of following facilities.

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 शर्तों और अतिरिक्त शर्तों।
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 2018 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2018.

यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट शर्त-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिकरण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंकेत 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 - 31/10/2014

उप मुख्य विस्फोटक नियंत्रक | Dy. Chief Controller of Explosives Ernakulam

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 18/07/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 08/08/2018
- Amendment in Drawings/Facilities/Premises dated : 08/08/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 15/11/2018

नवीनीकरण के पृष्ठानक के लिए स्थान
Space for Endorsement of Renewal


उप मुख्य विस्फोटक नियंत्रक
Deputy Chief Controller of Explosives
एरनाकुलम Ernakulam

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
20/02/2018	31/03/2023	Sd/- Dy. Chief Controller of Explosives, Ernakulam

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरुपयोग विधि के अधीन गंभीर दंडित अपराध होगा।

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Annexure 11



നമ്പർ 02/2017-18 മുളകുന്നത്തുകാവ് ഗ്രാമ പഞ്ചായത്ത്

1994 ലെ കേരളാ പഞ്ചായത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ വകുപ്പുകൾ പ്രകാരവും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു കൊടുത്ത

ലൈസൻസ്

ലൈസൻസുടമസ്ഥന്റെ പേരും മേൽവിലാസവും	ദീനേശ് കോൽ. N.T. ബ്രഹ്മദേവൻ, 'ശ്രീകൃഷ്ണമന്ദിരം', നീണ്ടുരുത്തി (H) P.O. തൃശ്ശൂർ,
എന്താവശ്യത്തിന് ലൈസൻസ് അനുവദിച്ചു എന്ന്	കിരീടം വിജയ സെന്റർ - ശ്രീകൃഷ്ണമന്ദിരം, S/N 1244/1 P.
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡ് നമ്പരും	VI / 356.A.
ലൈസൻസിന്റെ കാലാവധി	31-3-2018.
ലൈസൻസ് ഫീസ്	4000/- രൂപ പൈസ 1160 2103994
നിമാർക്സ്	2018 ഫെബ്രുവരിയിൽ ലൈസൻസ് പുതുക്കിയിട്ടുണ്ട്.

നമ്പർ 02/2017-18 മുളകുന്നത്തുകാവ് ഗ്രാമ പഞ്ചായത്ത്




തിയ്യതി 01/04/2018

R. SUBRAMANIAN
Secretary (in charge)
Mulakunnathukavu Grama Panchayat

GLM -34 K / 2000

ലൈസൻസുടമസ്ഥൻ താഴെ പറയുന്ന വ്യവസ്ഥകൾ അനുസരിക്കേണ്ടതാകുന്നു.

1. പഞ്ചായത്ത് രാജ് ആക്ടും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു പ്രവർത്തിക്കേണ്ടതാകുന്നു.
2. തൊഴിൽ സ്ഥലവും പരിസരങ്ങളും വെടിപ്പായും വൃത്തിയായും സാംക്രമികരോഗാണുക്കൾ ഉണ്ടാകാത്തവിധത്തിലും പൊതുജനോപദ്രവമാകാത്ത വിധത്തിലും വ്യാപാരത്തിനു വച്ചിട്ടുള്ള ക്ഷേണപദാർത്ഥങ്ങൾ ഈച്ച, അണുക്കൾ, പൊടി മുതലായവയുടെ ശല്യം ഉണ്ടാകാത്ത വിധത്തിലും സൂക്ഷിക്കേണ്ടതാണ്.
3. തൊഴിൽ സ്ഥലവും അതിലുള്ള സാധനസാമഗ്രികളും പഞ്ചായത്തധികാരികൾക്കോ/സെക്രട്ടറി അധികാരപ്പെടുത്തുന്ന മറ്റ് ഉദ്യോഗസ്ഥർക്കോ പരിശോധിക്കുന്നതിന് ലൈസൻസുടമസ്ഥൻ വേണ്ട സൗകര്യം നൽകേണ്ടതും അവർ ആവശ്യപ്പെട്ടാൽ ഈ ലൈസൻസ് കാണിക്കേണ്ടതുമാകുന്നു.
4. പഞ്ചായത്തിൽ നിന്നും അനുവാദം സിദ്ധിച്ചശേഷമല്ലാതെ തൊഴിൽ സ്ഥലം മാറ്റാവുന്നതല്ലാത്തതും തൊഴിൽ നിർത്തുന്ന പക്ഷം വിവരം മുൻകൂട്ടി പഞ്ചായത്തിൽ അറിയിക്കേണ്ടതുമാകുന്നു.
5. ഏതൊരു പ്രവർത്തി ദിവസത്തിന്റേയും ഒടുവിൽ സ്ഥലം വൃത്തിയാക്കേണ്ടതാണ്.
6. ആ സ്ഥലത്തിന്റേയോ പുരയിടത്തിന്റേയോ, ഏതെങ്കിലും ഭാഗത്ത് വിഴുക്യോ നിക്ഷേപിക്കപ്പെടുകയോ ചെയ്യുന്ന ചപ്പുചവരോ, മൃഗങ്ങളുടെ തൂങ്ങുകളോ മറ്റ് പദാർത്ഥമോ ശേഖരിച്ച് സെക്രട്ടറിക്ക് തൃപ്തികരമായ രീതിയിൽ നീക്കം ചെയ്യിക്കേണ്ടതാണ്.
7. ലൈസൻസുകാരൻ ഏതൊരു കെട്ടിടത്തിന്റേയും ചുമരുകളുടെ അകവശത്തിന്റേ ഏതൊരു ഭാഗവും മേൽപറഞ്ഞ പുരയിടത്തിലുള്ള തറയും നടപ്പാതയും അവിടെ തെറിച്ച് വീഴാനിടയുള്ള ഏതെങ്കിലും ഭദ്രാവകമോ, മാലിന്യമോ ചപ്പുചവരോ, അസഹ്യമോ, ഉപവേകരമായ ഏതെങ്കിലും പദാർത്ഥമോ അവിടെ ലയിക്കുന്നത് തടയത്തക്കവിധം എപ്പോഴും നന്നായും കേടുപാട് തീർത്തും വയ്പിക്കേണ്ടതാണ്.
8. ലൈസൻസുകാരൻ മേൽപറഞ്ഞ പുരയിടത്തിലോ, അതോടു ചേർന്നോ ഉള്ള ഏതൊരു ഓവുചാലും, അഴുക്കുജലം കളയുന്നതിനുള്ള ഉപകരണവും എപ്പോഴും നന്നായും കേടുപാടുതീർത്തും വയ്പിക്കേണ്ടതാണ്.
9. ഏതെങ്കിലും തരത്തിലുള്ള താക്ക് രോഗമോ കുഷ്മ രോഗമോ പ്രണമോ ഉള്ള യാതൊരാളും കച്ചവടം നടത്തുന്നതിന് ഉപയോഗിക്കുന്ന യാതൊരു പരിസരത്തും പ്രവർത്തിക്കുവാൻ പാടില്ലാത്തതാകുന്നു.
10. ഏത് സ്ഥലത്തിന്റേ കാര്യത്തിൽ ലൈസൻസ് നൽകിയിരിക്കുന്നുവോ ആ സ്ഥലത്ത് എല്ലാവരും കാണത്തക്കവിധത്തിലുള്ള ഒരു ഭാഗത്ത് ലൈസൻസുകാരൻ തന്റേ പേരും, ലൈസൻസിന്റേ നമ്പരും ഉദ്ദേശവും കാണിക്കുന്ന ഒരു അടയാളപ്പലക വച്ചിരിക്കേണ്ടതാണ്.
11. അധിത്തം ആചരിക്കുന്ന കടകളുടെ ലൈസൻസ് റദ്ദുചെയ്യുന്നതാണ്.
12. മുകളിൽ കാണിച്ചിരിക്കുന്ന വ്യവസ്ഥകളിൽ ഏതെങ്കിലും ലംഘിക്കുന്ന പക്ഷം ഈ ലൈസൻസ് റദ്ദു ചെയ്യുന്നതാണ്.


R. SUBRAMANIAN
 Secretary (in charge)
 Mulankunnathukavu Grama Panchayat

Annexure 12



Annexure 13



Annexure 14



Photograph showing the details of the environmental clearance order prominently displayed in a metallic board

Annexure 15


POLUCHEM LABORATORIES (P) LTD.
CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

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TEST REPORT


page 01 of 01

Client Name & Address	Certificate No:	PL/AMB/RT/5060/2019
Mr. Dineshmon.N.T. M/s Rudra Granites Neenduthalakkal(H) Muttikal,Kundukadu P.O. Thrissur-680028	Date of issue:	04/06/2019
	Date of monitoring	30/05/2019 12.00 Hrs to 31/05/2019 12.00 Hrs
	Date of sample received:	01/06/2019
	Date of analysis Started	01/06/2019
	Monitoring Location	Quarry Owned By Mr. Dineshmon.N.T. M/s Rudra Granites Survey No.1244/1(pt) Village – Killanur Taluk – Thrissur District- Thrissur, Kerala.
	Sample description	Ambient air – Near East Side Boundary
	Sample code given by client	Nil



SL NO	PARAMETERS	TEST METHOD	RESULTS	Limits as per NAAQS
01	Particulate Matter (PM ₁₀)	I S 5182 Part 23 2006RA2012	54.3 µg/m ³	100 µg/m ³
02	Particulate Matter (PM _{2.5})	CPCB	30.2 µg/m ³	60 µg/m ³
03	Sulphur dioxide	I S 5182 Part 2 2001 RA 2017	7.3 µg/m ³	80 µg/m ³
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	6.4 µg/m ³	80 µg/m ³

Note: NAAQS-National Ambient Air Quality Standards


* End of the Report*

The results are related only to the sample collected for analysis. This certificate shall not be reproduced except in full and without the written permission with authorized signatory	For and on behalf of POLUCHEM LABORATORIES (P) LTD.  AUTHORIZED SIGNATORY SREEJA RAMESH QUALITY MANAGER POLUCHEM LABORATORIES (P) LTD.
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Annexure 16

		POLUCHEM LABORATORIES (P) LTD. CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104 Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com ACCREDITED BY KSPCB AS "A" GRADE LABORATORY	
TEST REPORT		page 01 of 01	
Client Name & Address Mr. Dineshmon.N.T. M/s Rudra Granites Neenduthalakkal(H) Muttikal,Kundukadu P.O. Thrissur-680028		Certificate No: PL/RT/SD/5061/2019	Date of issue: 04/06/2019
		Date of monitoring 30/05/2019 12.00 Hrs to 31/05/2019 12.00 Hrs	Monitoring Location Quarry Owned By Mr. Dineshmon.N.T. M/s Rudra Granites Survey No.1244/1(pt) Village - Killanur Taluk - Thrissur District- Thrissur, Kerala.
		Sample Description Ambient Sound Level (Leq)	
Monitoring Location	Time	Results	
Near East Side Boundary	12.00 Hrs	52.9 dB (A)	
	13.00Hrs	50.2 dB (A)	
	14.00Hrs	49.8 dB (A)	
	15.00Hrs	48.4 dB (A)	
	16.00Hrs	47.4 dB (A)	
	17.00Hrs	46.3 dB (A)	
	18.00Hrs	45.1 dB (A)	
	19.00Hrs	44.2 dB (A)	
	20.00Hrs	41.3 dB (A)	
	21.00Hrs	39.8 dB (A)	
	22.00Hrs	38.5 dB (A)	
	23.00Hrs	36.5 dB (A)	
	00.00Hrs	35.2 dB (A)	
	01.00Hrs	34.6 dB (A)	
	02.00 Hrs	33.5 dB (A)	
	03.00 Hrs	35.2 dB (A)	
	04.00 Hrs	38.4 dB (A)	
	05.00 Hrs	39.5 dB (A)	
	06.00 Hrs	41.2 dB (A)	
	07.00 Hrs	40.3 dB (A)	
08.00 Hrs	42.3 dB (A)		
09.00 Hrs	44.3 dB (A)		
10.00 Hrs	46.5 dB (A)		
11.00 Hrs	47.8 dB (A)		
Leq (Day time)	48.5 dB (A)		
Leq (Night time)	34.7 dB (A)		
For PoluChem Laboratories (P) Ltd.			
 Authorized Signatory SREEJA RAMESH QUANTITY MANAGER POLUCHEM LABORATORIES (P) LTD.			

Annexure 17



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TEST REPORT

Page 01 of 02

Ref.No. PL/RT/OW/5063/2019 Date of Issue: 04/06/2019

Name & address of customer : Mr. Dineshmon.N.T.
 M/s Rudra Granites
 Neenduthalakkal(H)
 Muttikal,Kundukadu P.O.
 Thrissur-680028


Project Site : Quarry Owned By Mr. Dineshmon.N.T.
 M/s Rudra Granites
 Survey No.1244/1(pt)
 Village – Killanur
 Taluk – Thrissur
 District- Thrissur, Kerala.

.Sample description : Water Sample
 Location of sampling : Quarry water
 Date of sample collected : 31/05/2019
 Date of analysis started : 01/06/2019
 Date of completion of analysis : 04/06/2019

Parameters tested	Test method	Result	Acceptable Limit as per IS 10500 - 2012
Color	IS 3025 (P) 04 – 1983 RA2017	5 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	BDL	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	6.67	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	86 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 – 1983 RA2014	36.2 mg/l	200 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 – 1986 RA2014	26.4 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	Min 0.2 mg/l
Chloride as Cl ⁻	IS 3025 (P) 26 – 1986 RA2014	22.3 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	8.6 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	4.2 mg/l	30 mg/l
Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.15 mg/l	0.3 mg/l
Sulphate as SO ₄	IS 3025 (P) 24 – 1986 RA2009	6.4 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.


 Authorized signatory
 SREEJA RAMESH



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Continuation of Test Certificate No: 5063/2019

Parameters tested	Test method	Results	Acceptable Limit as per IS 10500 - 2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.05 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59- 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41- 1992 RA2014	BDL	0.01 mg/l
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.05 mg/l
Aluminum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	BDL	1 mg/l

Note: BDL- Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters Tested	Unit	Test method	Results	Acceptable Limit as per IS 10500 - 2012
Coliforms	MPN/100ml	IS 1622: 1981 RA 2009	Absent	Shall not be detectable in any 100 ml sample
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Shall not be detectable in any 100 ml sample

For PoluChem Laboratories (P) Ltd.

Authorized Signatory.

End of the report

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QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD



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TEST REPORT

Page 01 of 02

Ref.No. PL/RT/OW/5062/2019

Date of Issue: 04/06/2019

Name & address of customer

: Mr. Dineshmon.N.T.
M/s Rudra Granites
Neenduthalakkal(H)
Muttikal,Kundukadu P.O.
Thrissur-680028

Project Site

: Quarry Owned By Mr. Dineshmon.N.T.
M/s Rudra Granites
Survey No.1244/1(pt)
Village – Killanur
Taluk – Thrissur
District- Thrissur, Kerala.

Sample description

: Drinking Water

Location of sampling

: Open well Water-Outside-South West Side-Own Property

Date of sample collected

: 31/05/2019

Date of analysis started

: 01/06/2019

Date of completion of analysis

: 04/06/2019

Parameters tested	Test method	Result	Acceptable Limit as per IS 10500 - 2012
Color	IS 3025 (P) 04 – 1983 RA2017	4 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	BDL	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	6.74	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	60 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 – 1983 RA2014	20.2 mg/l	200 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 – 1986 RA2014	17.3 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	Min 0.2 mg/l
Chloride as Cl ⁻	IS 3025 (P) 26 – 1986 RA2014	13.6 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	4.56 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	1.21 mg/l	30 mg/l
Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.12 mg/l	0.3 mg/l
Sulphate as SO ₄	IS 3025 (P) 24 – 1986 RA2009	BDL	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

Authorized signatory

QUALITY MANAGER

POLUCHEM LABORATORIES



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Continuation of Test Certificate No: 5062/2019

Parameters tested	Test method	Results	Acceptable Limit as per IS 10500 - 2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.05 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59- 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41- 1992 RA2014	BDL	0.01 mg/l
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.05 mg/l
Alumjnum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	BDL	1 mg/l

Note: BDL- Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters Tested	Unit	Test method	Results	Acceptable Limit as per IS 10500 - 2012
Coliforms	MPN/100ml	IS 1622: 1981 RA 2009	Absent	Shall not be detectable in any 100 ml sample
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Shall not be detectable in any 100 ml sample

For PoluChem Laboratories (P) Ltd.

End of the report

Authorized Signatory.

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