

ENVIRONMENTAL CLEARANCE COMPLIANCE REPORT

October 2023 – March 2024

For

Granite Building Stone Quarry (Minor Mineral)

Of

M/s Kakkara Crushers Pvt. Ltd

At

Extent : 2.9130Ha.

Sy. No. : 100/2A

Village : Thimiri

Taluk : Thaliparamba

District : Kannur

State : Kerala.

EC No.: 83/2017 Dated: 05/01/2018.

To,

Date: 31/05/2024.

The Deputy Director General of Forests (c)
MoEF, Inetgrated Regional office,
Kedriya Sadan, 4th Floor, E&F Wings,
17th Main Road, Koramangala II Block,
Bangalore - 560 034

Respected Sir,

**Sub: Environmental Clearance Compliance Report for the period October 2023
– March 2024 pertaining to 'Granite Building Stone Quarry of M/s
Kakkara Crushers Pvt. Ltd'.**

Ref: Environmental Clearance No: 83/2017 Dated: 05.01.2018

As per conditions of the above referred Environmental Clearance (EC), please find enclosed compliance report for period from October 2023 – March 2024 of the EC Granted 'Granite Building Stone Quarry Project of M/s Kakkara Crushers Pvt. Ltd' by Ministry of Environmental & Forest under EPA (1986). Also enclosed relevant Annexures in Support of the compliance report for your perusal and record please. A soft copy of the same is sent by email for your record and perusal.

We hope you will find the attached Status Report in Order.

Thanking you,

Yours truly,

For 'Granite Building Stone Quarry Project of M/s Kakkara Crushers Pvt. Ltd.'



Mr. K F Varghese
Authorized Signatory.

Encl: as above

Cc: The Member Secretary

State Environment Impact Assessment Authority (SEIAA)

Directorate of Environment & Climate Change

4th Floor, KSTRC Bus Terminal, Thampanoor,

Kerala-01

Description of the Project

File No.	:	159/KNR/2017/DEIAA
Name of the project	:	GRANITE BUILDING STONE QUARRY (Minor Mineral) of M/s Kakkara Crushers Pvt. Ltd.
District and state	:	Kannur, Kerala
Taluk / Mandal	:	Thaliparamba
Village	:	Thimiri
Category & Schedule	:	Activity 1(a), Category B2
Khasara No. / Plot No. / Block / Gate No. etc.,	:	Survey No: 100/2A
Extent of Area	:	2.9130 Ha
Ownership / Occupancy	:	Private Land
Existence of public road/railway line, if any, nearby and approximate distance Nearest Port / Airport	:	The nearest railhead – Ezhimala (33 Kms) and Nearest airport – Kannur International Airport (58 Kms) from the mine.
Latitude & Longitude	:	N - 12°12'16.779" to N - 12°12'26.173" E - 75°22'32.239" to E - 75°22'39.629"
Address of Registered office	:	M/s Kakkara Crushers, Kanhirathinkal House, Ummarappoyil, Peringome (P.O.) Kannur District, Kerala- 670307

SPECIFIC CONDITIONS:

Sl. No	Condition	Status of Compliance
1	A Mines Manager shall be appointed to control, direct, manage and supervise Quarrying Operations as required under the Mines Act 1952.	A Mines Manager is appointed to supervise Quarrying Operations
2	Health and welfare measures for the persons employed shall be implemented.	Health and welfare measures for the employees are implemented and ensured.
3	Controlled blasting should be practiced, and blasting should be done only during day time. The mitigating measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.	All precautionary measures will be adopted while blasting operations are carried out. Controlled blasting was carried out using Nonel's and will be done in specified timings only.
4	Plantation shall be done which includes a green belt of adequate width around the Mining Lease area excluding the rocky area, along roads, overburden dumps and non-mineralized area by planting suitable native species in consultation with the local DFO/Agriculture Department.	Noted
5.	The drains should be regularly desilted and maintained properly. Check dams and gully checks shall be constructed wherever required to arrest siltation. De-siltation shall also be done every year before the onset of monsoon.	All civil structures made for arresting silt will be de-silted before onset of Monsoon.
6	Fencing must be maintained properly all around the lease area.	The entire lease area was fenced and photo was attached as Annexure – 02 .
7	The CSR should cover the felt needs of the locality with special emphasize for implementing ground water recharging techniques in and at the vicinity of the proposed site.	Noted
8	Appropriate sign boards should be displayed.	Appropriate sign boards are erected at prominent places. Photos of Sign Boards are attached as Annexure-1 .
9	The blasting time must be displayed and strictly adhered to.	Board showing the blasting time was erected and the photo was enclosed in Annexure – 01 .
10	Dust suppression mechanism must be in place.	Dust suppression system like water sprinklers is installed at prominent places. Photo of water sprinkler is attached as Annexure – 04 .

11	A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the biodiversity assessment, etc.	No rare and endemic species are present in the lease area.
12	The PPV values must be less than 10 mm/sec.	PPV values will be kept below 10 mm/sec.
13	The green belt shall be provided along the periphery.	Plantation were carried out in the 7.5m buffer zone all along periphery of the lease area.
14	Where the height of the bench formed during earlier workings exceeds the maximum reach of the excavator engaged for work, such bench height shall be reduced from top to bottom.	Agreed.
15	Loose or hanging rock or mineral boulder on the side wall shall be dressed down before engaging persons for work at the bottom of the bench.	Benches will be properly dressed by excavators If there is loose or hanging rock.
16	Permanent boundary pillars should be fixed by the proponent before commencing quarrying.	Permanent boundary pillars have been erected and maintained. Photo of Boundary pillar is attached as Annexure – 02 .
17	No quarry blasting to be undertaken and sustained till warning time limit expires and/or when continuous 48 hours rainfall exceeds 8cms and blasting shall not be resumed until 24-hours of rain free situation arises in the quarry locality based on the evaluation by the revenue officials.	Will be followed strictly.
18	All waste dumps and top soil dumps shall be properly stabilized using coir mats or bio regeneration. Proper drainage system shall be provided so that water is properly diverted away from the dumps slopes with no disturbance to the stability of the slopes.	Noted.
19	All dump slopes shall be sufficiently stabilized by using appropriate species mix of grass, creepers, shrubs and trees. This shall be done in consultation with the Forest department and local research institutes and experts I stabilization of mine dumps.	All dump slopes will be stabilized by plantation of using appropriate species mix of grass, creepers, shrubs and trees.
20	Garland drains of at least 2mts width shall be provided all along 7.5mts buffer zone to divert the water from entering the Quarry slopes. These drains shall be	Garland drains were provided.

	cleaned every year before the monsoon season.	
21	The water from the garland drainage shall be directed to the silt settling ponds. The clarified overflow from the silt settling ponds shall be directed to a Rainwater Harvesting (RWH) pond before releasing the clarified water to the natural water course.	The water from the garland drains was directed to SST and then to RWHP. Photo of Rainwater Harvesting Pond is attached as Annexure – 03 .
22	A retaining wall of stone rubble with wire mesh of sufficient width and strength (not less than 2m) shall be constructed at the bottom of the slope of the Quarry lease to arrest any likely roll of boulders during heavy rainfall.	Noted
23	The nearby storm water drainage (varattchaal) should be protected properly and quarrying activities should not any way interfere its natural flow	Agreed.
24	The overburden and other quarry waste should be managed properly as per the approved Mining Plan	Overburden will be stacked at the specified place and shall be used for reclamation purpose. Photo of the OB dump is attached as Annexure – 04 .

GENERAL CONDITIONS OF HEALTH:

1	First Aid kit provided in the work site. It shall be periodically maintained properly. Some labourers shall be trained on First Aid.	First Aid kits is provided in the work site and key personnel is trained to render first aid in case of emergencies.
2	Wholesome drinking water should be provided.	Wholesome portable drinking water is provided
3	Premises should be maintained as wet to suppress the dust.	Dust will be suppressed at the source using water Sprinklers. The photos of water sprinklers are enclosed as Annexure 2 .
4	Sanitary type of latrines and urinals should be provided.	Latrines and urinals are provided at site office.
5	Resting place to be provided for workers.	Resting place is provided to workers.
6	'No Smoking' board should be exhibited according to COTPA act.	'No Smoking' board was displayed according to COTPA act. The photos are enclosed as Annexure 1 .
7	Work should not be done in night.	Work is done only during day light.
8	Details of nearest hospital, shortest route to hospital and contact number etc. should be available	Board showing the details of nearest hospital, shortest route to hospital and contact number etc. is made available and Photo was attached in Annexure – 01 .
9	Approach roads should be maintained properly	Approach roads was maintained properly. The photos of Access Road is enclosed as Annexure 05 .

GENERAL CONDITIONS

1.	First Aid kit provided in the work site. It shall be periodically maintained properly. Some laborers shall be trained on First Aid.	First Aid kits will be provided in the work site and key personnel will be trained to render first aid in case of emergencies.
2.	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.	Environment monitoring cell is formed & is made functional. The details of Environmental monitoring cell are enclosed as Annexure-06 .
3.	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including approach roads and internal roads.	Suitable avenue trees are planted along either side of the tarred road, buffer zones and open parking areas.
4	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Solar Energy generation and utilization will be adopted.
5	Sprinklers shall be installed and used in the Project Site to contain dust emissions.	Water Tankers and Sprinklers were used in the Project Site to contain dust emissions. Photo of the water sprinkler is attached as Annexure – 07 .

6	Eco-restoration, including the Mine Closure Plan shall be done at the own cost of the Project Proponent.	Agreed.
7	At least 10 per cent of 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 the Pit is stipulated in the EC.	During the Closure of the mine, 10 percent of total excavated pit will be retained as water storage area and the remaining area will be reclaimed with stacked dumping & overburden and indigenous plant species will be planted.
8	Corporate Social Responsibility (CSR) agreed upon by the Proponent should be implemented.	CSR activities are being Carried out.
9.	The Lease area will be fenced off with barbed wires to a minimum height of 4 ft around, before starting of Mining. All the boundary indicators (boards, stores, markings, etc.) shall be protected at all times and shall be conspicuous.	Lease area is fenced off with barbed wires. Sign boards have been erected at prominent places. Photos of the Sign Boards were enclosed as Annexure-1 .
10	Warning alarms indicating the time of Blasting (to be done at specific timings) has to be arranged as per stipulations of the Explosives department.	Warning alarms indicating the time of blasting was arranged as per the stipulations. Blasting time and safety boards have been erected at all entrance to the mine. Photo of the sign board showing blasting time is enclosed in Annexure-1 .
11.	Control measures on noise and vibrations prescribed by KSPCB should be implemented	Control measures on noise and vibrations prescribed by KSPCB were implemented.
12	Quarrying activities should be limited to daytime as per KSPCB guidelines/specific conditions.	Quarrying activities were carried out in daylight only.
13	Blasting should be done in a controlled manner as specified by the regulations of the Explosives department or any other agency.	Controlled blasting will be done as per regulations.
14	A licensed person should supervise/control the Blasting Operations	Blasting supervision/control will be done by a Mining Official having DGMS Certificate.
15	Access roads to the quarry shall be tarred to contain dust emission that may arise during the transportation of material	Agreed
16	Overburden materials should be managed within the site and used for reclamation of Mine Pit as per Mine closure Plan/specific conditions	Overburden will be stacked at the specified place and shall be used for reclamation purpose. Photo of the OB dump is attached as Annexure – 04 .

17	Height of Benches should not exceed 5 M and width should not be less than 5 M, if there is no mention in the Mining Plan/specific conditions	The Height and width of the benches 5mx5m were maintained.
18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided	Agreed
19	Maximum depth of mining and general ground level at site shall not exceed 10m	Noted.
20	No Mining operations should be carried out at places having a slope greater than 45°	Mining operations will not be carried out at slopes greater than 45°.
21	Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow bricks envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.	Crusher unit is not within the Mining Lease.
22	Acoustic enclosures have been provided to reduce sound amplifications. Noise level will be kept within prescribed standards given by CPCB/KSPCB.	Requisite Personal Protective equipment (PPE's) is provided to all employees.
23	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Garland drains is constructed to channelize storm water and maintained properly.
24	The transportation of minerals should be done in covered trucks to contain dust emissions.	All trucks transporting materials will be covered by firmly tied tarpaulin.
25	The proponent should plant trees at least 5 times the loss that has been occurred while clearing the land for the project.	Agreed. Plantation photo was attached as Annexure – 08 .
26	Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.	Spent oil is re-used as a lubricant for drilling machines.
27	Explosives should be stored in magazines in isolated place specified and approved by the Explosive Department.	Explosives are stored in a Licensed Explosives Magazine, which is approved by PESO. Copy of explosive license is attached as Annexure-10 . The photo of Magazine is enclosed as Annexure - 9 .
28	A minimum buffer distance of 50 M from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.	No dwellings are situated within 100m from the boundary of the quarry.

29	100 M buffer distance should be maintained from forest boundaries	Mining area is not located near any forest areas.
30	Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.	Consent from KSPCB under Air and Water Act(s) is obtained. Copy of the Consent is attached as Annexure-II .
31	All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.	All required statutory clearances from the concerned authorities are obtained.
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 environment parameters/impacts as assessed, based on which only the EC 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.	There is no change in the scope of the project.
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 provisions of the Environment (Protection) Act,1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Agreed.
34	The stipulations by the Statutory authorities under different Acts and Notifications should be complied with including the provisions of 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	Agreed.
35	The project proponent should advertise in at least 2 newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the Project has been accorded Environment Clearance and the copies of the Clearance letters are available with the District Environment Impact Assessment Authority (DEIAA) office and may also be seen on the website of the Authority at www.environmentclearance.nic.in . The	Advertisements are given in two local newspapers and complied in earlier complied reports.

	advertisement should be made within 10 days from the date of receipt of the clearance letter and a copy of the same signed in all the pages should be forwarded to the Office of this Authority as confirmation.	
36	A copy of the clearance letter shall be sent by the proponent to the concerned Gram 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.	A copy of the Environmental Clearance is submitted to the concerned authorities. Copy of Panchayat license is attached as Annexure-12.
37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC 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 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 the MOEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office and also to the District Environment Impact Assessment Authority (DEIAA), as applicable.	Half yearly reports will be submitted as stipulated.
38	The details of Environment Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times Roman font of size 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	Details of Environmental Clearances is prominently displayed at the entrance to the Mine. Photo of the sign board is attached in Annexure-1.
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.	Agreed
40	No change in mining technology and scope of working should be made without prior approval of the DEIAA. No further expansion or modifications in the mine shall be carried out without prior approval of the DEIAA, as applicable.	Prior approval from the SEIAA will be sought in case of change of mining technology.

41	The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	No natural water course is obstructed. Necessary safeguard measures are taken to protect first order streams if originating from the mining lease in the future.
42	Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.	Monitoring of Ambient Air Quality was carried out. Monitoring Photos was attached as Annexure – 13 and Monitoring reports have been enclosed as Annexure-14 .
43	The top soil, if any, shall be temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The Over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8 m and the width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps 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 stabilization of the dump. The entire excavated area should continue until the vegetation becomes self- sustaining	Agreed
44	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of 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 de silted particularly after monsoons and maintained properly	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps.
45	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading points and transfer points-it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Regular water sprinkling will be done on all necessary roads with water tankers and sprinklers. The photos of water sprinklers are enclosed as Annexure-07 .

46	Fugitive dust emissions from all sources should be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and transfer points should be provided and properly maintained.	Water sprinkling is done on haul roads, loading and unloading points and transfer points to control dust emissions.
47	Measures should be taken for control of noise levels below 85 dB (A) in the work environment.	Measures like proper servicing of machine etc., are followed to control noise level.
48	A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive, who will report directly to the head of the Organization.	An Environment Management Cell is set up under the control of the Mines Manager. The details of EMC was mentioned in Annexure – 06.
49	The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.	Noted
50	The Regional Office of the MoEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.	We will extend full cooperation to any officer (S) from the regional of Office of MOEF & CC during their visit. All required data will be provided.
51	Any appeal against the Environment Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30days as prescribed under Section 16 of the National Green Tribunal Act, 2010	Noted.
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 withdrawal of this clearance and attract action under provisions of the Environment (Protection) Act, 1986.	Agreed
53	The SEIAA may revoke or suspend the order, for no implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Agreed

54	The above conditions shall prevail notwithstanding anything to the contrary, inconsistent or simplified, contained in any other permit, license or consent given by Any other authority for the same project.	Agreed
55	The order is valid for a period of 5 years of the expiry date of Mine lease period issued by the Government of Kerala, whichever is earlier	Agreed
56	The Environment Clearance will be subject to the final order of the courts in any pending litigation related to the land or the project, in any court of law	Agreed
57	The Mining operations shall be restricted to above ground water table and it should not intersect ground water table.	Mining operations has been restricted to above ground water table and due care will be taken so that mining does not intersect ground water table.
58	All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution checking center. Washing of all vehicles shall be inside the Lease area.	All transportation vehicles have PUC issued by an authorized center.
59	Project proponent should obtain necessary prior permission of the competent authorities for drawl of necessary quantity of surface and ground water for the Project.	Agreed
60	Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six-monthly reports to SEIAA.	No perennial nallah flows through the lease or exist around the Mine Lease.
61	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Agreed

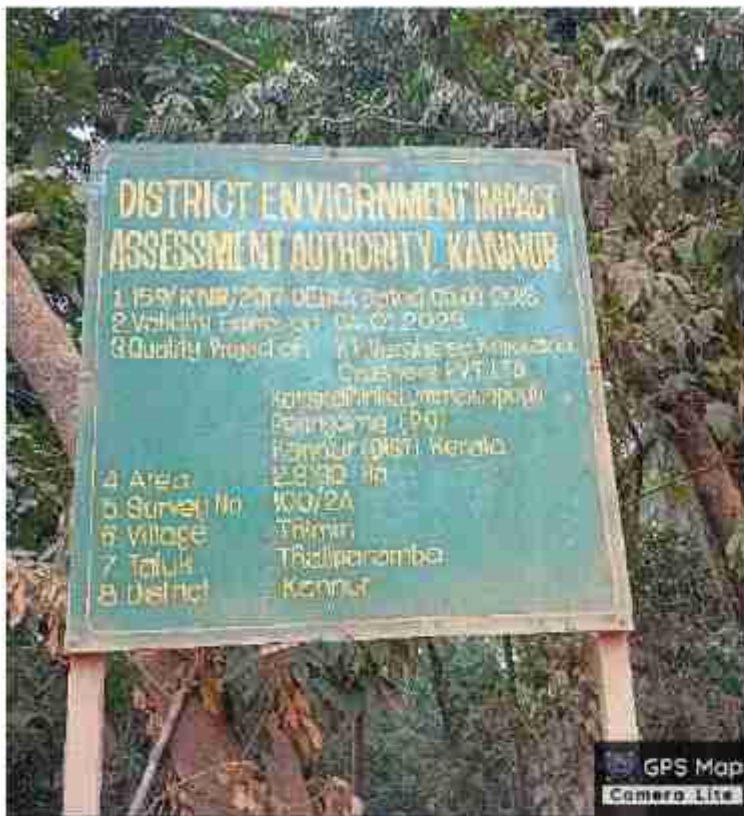
For 'M/s Kakkara Crushers Pvt. Ltd.'



K F Varghese
Authorized Signatory
Date: 31.05.2024.

Annexure – 01

Sign Boards



GPS Map
Camera Lite

695G-MJ, Thimiri, Kerala 670306, India

Latitude: 12° 12' 24.252" N
Longitude: 75° 22' 33.402" E
Local 01:15:22 PM
GMT 08:05:22 AM
Altitude: 112 meters
Monday, 18.03.2024



GPS Map
Camera Lite

Unnamed Road, Eandy, Kerala 670306, India

Latitude: 12° 12' 18.522" N
Longitude: 75° 22' 28.776" E
Local 01:10:33 PM
GMT 07:40:33 AM
Altitude: 78 meters
Monday, 18.03.2024



GPS Map
Camera Lite

694F+W3M, Eandy - Kadukkaram Rd, Eandy, Kerala 670306, India

Latitude: 12° 12' 20.154" N
Longitude: 75° 22' 28.128" E
Local 01:08:58 PM
GMT 07:38:58 AM
Altitude: 78 meters
Monday, 18.03.2024



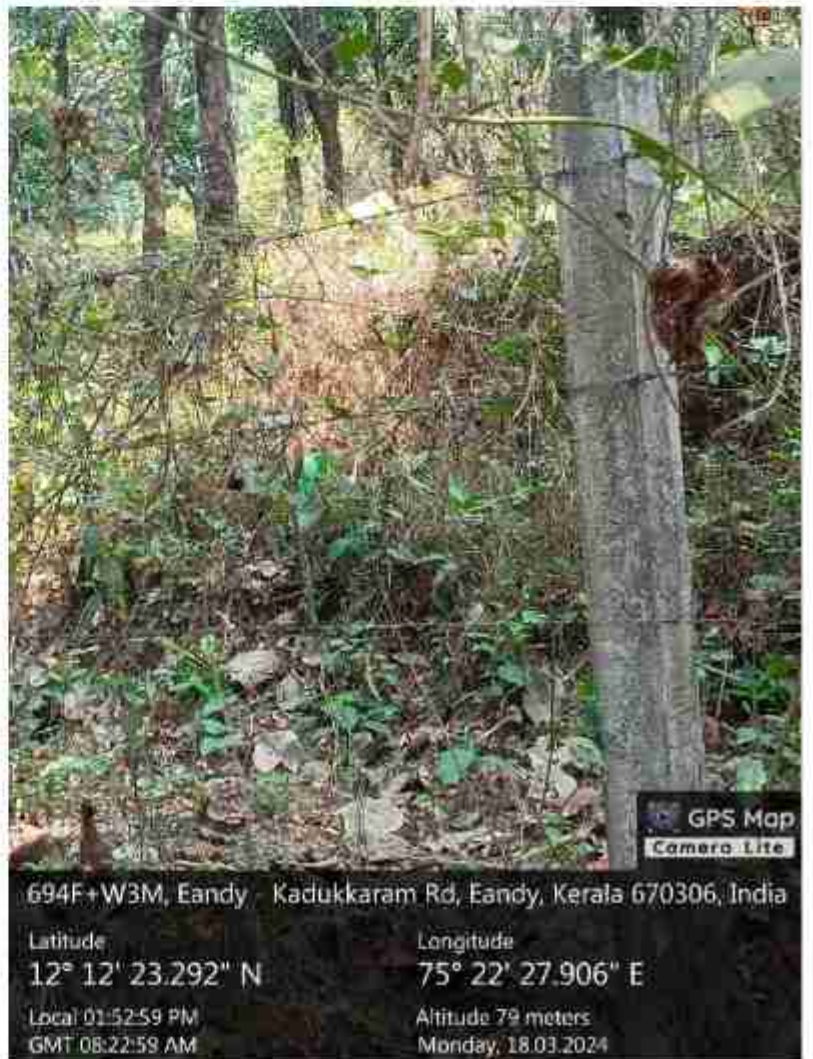
GPS Map
Camera Lite

Unnamed Road, Eandy, Kerala 670306, India

Latitude: 12° 12' N
Longitude: 75° 22' 29.64" E
Local 01:11:04 PM
GMT 07:41:04 AM
Altitude: 78 meters
Monday, 18.03.2024



Annexure – 02
Boundary Pillar & Fencing



Annexure – 03
Rain Water Harvesting Pond.



 **GPS Map**
Camera Lite

694F+W3M, Eandy - Kadukkaram Rd, Eandy, Kerala 670306, India

Latitude

12° 12' 18.918" N

Longitude

75° 22' 25.56" E

Local 02:02:48 PM

GMT 08:32:48 AM

Altitude 64 meters

Monday, 18.03.2024

Annexure – 04
OB Dump.



694F+W3M, Eandy - Kadukkaram Rd, Eandy, Kerala 670306, India

Latitude

12° 12' 17.67" N

Longitude

75° 22' 23.88" E

Local 02:04:49 PM

GMT 08:34:49 AM

Altitude 66 meters

Monday, 18.03.2024

Annexure – 05
Access Road.



 GPS Map
Camera Lite

6948+9R8, Eandy, Kerala 670306, India

Latitude

12° 12' 19.44756" N

Longitude

75° 22' 0.858" E

Local 02:02:07 PM

GMT 08:32:07 AM

Altitude 86 meters

Monday, 18.03.2024

Annexure – 06
EMC details.

Environmental Monitoring Cell

Sl.No.	Post	Name
1	Head of monitoring cell	K. F Varghese
2	Incharge	Arun Kumar
3	Member	Divin Varghese
4	Member	Sachin Varghese
5	Member	Sreejesh PC
6	Member	Mohanan APV

GPS Map
Camera Lite

Unnamed Road, Eandy, Kerala 670306, India

Latitude

12° 12' 17.874" N

Longitude

75° 22' 29.688" E

Local 01:11:35 PM

GMT 07:41:35 AM

Altitude 89 meters

Monday, 18.03.2024

Annexure – 07
Water Sprinkler.



GPS Map
Camera Lite

694F+W3M, Eandy - Kadukkaram Rd, Eandy, Kerala 670306, India

Latitude

12° 12' 21.618" N

Longitude

75° 22' 27.612" E

Local 01:55:09 PM

GMT 08:25:09 AM

Altitude 79 meters

Monday, 18.03.2024

Annexure – 08
Plantation.



GPS Map
Camera Lite

Unnamed Road, Thimiri, Kerala 670306, India

Latitude
12° 12' 21.288" N

Longitude
75° 22' 32.004" E

Local 01:21:28 PM
GMT 07:51:28 AM

Altitude 99 meters
Monday, 18.03.2024

Annexure – 09
Magazine.



 GPS Map
Camera Lite

694F+W3M, Eandy - Kadukkaram Rd, Eandy, Kerala 670306, India

Latitude

12° 12' 24.57" N

Longitude

75° 22' 29.604" E

Local 01:50:25 PM

GMT 08:20:25 AM

Altitude 72 meters

Monday, 18.03.2024

Annexure – 10
Explosive License.

अनुमति प्रारूप ई-3 (LICENCE FORM E-3)

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) में (प) देखिए।)

(See article 3(a) to (d) of Part I of Schedule IV of Explosives Rules, 2008)

(ए) उपयोग के लिए एक समय पर वर्ग 1, 2, 3, 4, 5 या वर्ग 7 के विस्फोटक या किसी भी वर्गों में वर्ग 6 के विस्फोटक रखने के लिए अनुमति

License to possess: (a) for one explosive of class 1, 2, 3, 4, 5 or 7 in a magazine

अनुमति सं. (License No.): E/SE/KL/22/233(E/105637)

वार्षिक फीस (Annual Fee Rs): 2400/-

1. License is hereby granted to

Shri K.P.Varghose (अधिभोगी / Occupier: K.P.Varghose), Mj, Director, M/s. Kalkara Coasters Pvt. Ltd., Kalkara PO, Kizhathimilam, Town/Village - Thimil, District-CANNUR, State-Kerala, Pincode - 670560



को अनुमति अनुदान की जाती है।

2. अनुमतिधारी की प्रकृति: Status of licensee: Company

3. अनुमति निम्नलिखित प्रयोजनों के लिए विधिवत है।

purpose for use of Nitrate Mixtures, Safety Fuse, Electric and/or Ordinary

License is valid only for the following purpose.

Detonators, के उपयोग के लिए

4. अनुमति विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिवत है।

License is valid for the following kinds and quantity of explosives -- (क) (a)

क्र. सं. (Sl. No.)	नाम और विवरण (Name and Description)	वर्ग और प्रभाग (Class & Division)	उप-प्रभाग (Sub-division)	मात्रा किसी एक समय में (Quantity at any one time)
1.	Nitrate Mixture	2.0	II	100 Kg.
2.	Safety Fuse	6.1	0	1550 Mtrs
3.	Electric and/or Ordinary Detonators	6.2	E	4000 Nos.

(आ) किसी एक कंटेनर यास में खरीदे जाने वाले विस्फोटक की मात्रा (अनुच्छेद 3(ख) और (ग) के अधीन अनुमति के लिए)

15 times

(B) Quantity of explosives to be purchased in a calendar month (applicable for license under article 3(b) and (d)) :-

as above.

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुमति परिवार की पृष्ठ होती है।

रेखाचित्र सं. (Drawing No.): E/SE/KL/22/233(E/105637)

The licensed premises shall conform to the following drawings:-

दिशांक (Date): 11/04/2019

6. अनुमति परिवार निम्नलिखित पते पर स्थित है। The licensed premises are situated at following address:

Survey No. 85, No. 100/2A, ग्राम (Town/Village): Thimil Village, Jullupuzha Taluk

पुलिस थाना (Police Station): Alakkode

जिला (District):

KANNUR

राज्य (State):

Kerala

पिनकोड (Pincode):

670306

दूरभाष (Phone):

9495689626

ई-मेल (E-Mail):

db.yu540@gmail.com

फैक्स (Fax):

7. अनुमति परिवार में निम्नलिखित सुविधाएं शामिल हैं।

Two cemented magazines

The licensed premises consist of following facilities.

8. अनुमति स्वयं - स्वयं पर पयानुबंधित विस्फोटक अधिनियम, 1984 और उसके अधीन विहित विस्फोटक नियम, 2008 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपबंधों के अधीन रखते हुए अनुदान की जाती है।

The license is granted subject to the provision of Explosives Act 1984 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 दया कथित रेखाचित्र (स्थान, संरचनात्मक संकेती और अन्य विवरण दर्शाते हुए)।

Drawings (showing site, constructional and other details as stated in serial No. 5 above).

2. अनुमति अधिकारी द्वारा द्वारा प्रेषित इस अनुमति की शर्तों और अतिरिक्त शर्तों।

Conditions and Additional Conditions of this license signed by the licensing authority.

3. दूरी प्रारूप DE-2 / Distance Form DE-2.

9. यह अनुमति तारीख 31 मार्च 2024 तक विधिवत रहेगी। This license shall remain valid till 31st day of March 2024.

यह अनुमति, अधिनियम या उसके अधीन विहित नियमों या अनुसूची 4 के भाग 1 के प्रवि निर्दिष्ट सेट/पार्ट के अधीन तथा उपर्युक्त इस अनुमति की शर्तों का अधिकांश करने या यदि

उपरोक्त परिहार योजना या उससे संलग्न उपबंध में दखिल विवरण के अनुरूप नहीं प्राप्त जाने पर निलंबित या प्रतिलोप की जा सकती है, यहाँ पर लागू है।

This license is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this license as set forth under Set VII, 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 plan and Annexure attached hereto.

तारीख: The Date - 11/04/2019

उप मुख्या विस्फोटक नियंत्रक | Dy. Chief Controller of Explosives

Ernakulam

Amendments :-

• Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 31/01/2022

नवीनीकरण के पत्रकन के लिए रसम

Stamp for Endorsement of Renewal

नवीनीकरण की तारीख Date of Renewal	अवधि की तारीख Date of Expiry	अनुदान अधिकारी के हस्ताक्षर और मध्यम Signature of licensing authority and stamp
26/02/2024	31/03/2029	Dy. Chief Controller of Explosives, Ernakulam

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

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

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Digitally signed by Deepak Kumar
Reason: License No. - E/SE/KL/22/233
LicMon-Ernakuam/E/105637

(सेट VIII / Set VIII)

मैगजीन में वर्ग 1, 2, 3, 4, 5, 6, और 7 के विस्फोटकों को बिक्री या प्रयोग हेतु रखने के लिए प्रत्येक एल.ई. 3 अनुच्छेद 3 (ख) से (ग) में मुख्य विस्फोटक निबंधक या विस्फोटक निबंधक द्वारा प्रदान किए जाने वाले अनुमति सं. E/SE/KL/22/233/E105637 की शर्तों निम्नलिखित हैं।
The following are the conditions of licence number E/SE/KL/22/233/E105637 to possess for sale or use, explosives of Class 1, 2, 3, 4, 5, 6 and 7 in a magazine in Form I.E-3 (articles 3(b) to (e)) granted by Chief controller of Explosives or Controller of Explosives.

- परिसर में किसी भी समय विस्फोटकों की मात्रा अनुज्ञापन योग्य क्षमता से अधिक नहीं होगी।
The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
- विस्फोटकों के भंडारण के लिए प्रयुक्त होने वाली मैगजीन अनुच्छेद 111 और अनुसूचि के उपबंध में निर्दिष्ट सुरक्षा दूरी बनाए रखना होगा।
The magazine used for storage of explosives shall maintain safety distance specified in Schedule II and armature in the licence.
- मैगजीन का प्रयोग उन सभी विस्फोटकों के, जो इस अनुमति में निर्दिष्ट हैं, रखे जाने के लिए और ऐसे रखे जाने से संबंध आधान या जोखर या उपकरणों के रखे जाने के लिए ही किया जाएगा, अन्यथा नहीं।
The magazine shall be used only for keeping all explosives specified in this licence and of receptacles, fix. or tools or implements for work connected with the keeping of such explosives.
- फैकरी की खोलने का काम और विस्फोटकों को तोड़ने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा।
The opening and packing of explosives and the weighing and pecking of explosives shall not be carried on in the magazine.
- दो या दो से अधिक वर्गों के विस्फोटकों को, बिना मैगजीन में रखे जाने की अनुज्ञा दी जा सकती है, मैगजीन में लगी रखे जायें जब उनमें से प्रत्येक को, ऐसे पदार्थ का स्वरूप का कोई संभवतः किम्वंदाक लगाकर या उनके बीच ऐसा संभवतः स्थान छोड़कर, परस्पर पृथक् कर दिया जाए कि किसी वस्तु से विस्फोटक में छाने वाली आग या होने वाला विस्फोट किसी अन्य वर्ण के विस्फोटक तक न पहुंच सके। परंतु -
(ग) 2 (नाइट्रेट मिश्रण), वर्ग 3 (नाइट्रो पॉक्सिड) के मिश्रित विस्फोटक, वर्ग 6 प्रभाग प्रभाग के अंतर्गत आने वाले सुरक्षा पसंते और वर्ग 6 प्रभाग 2 के अंतर्गत आने वाले विस्फोटक प्रेस (पसी), इनमें कोई गुलाब लोहा या दुस्वत नहीं है, एक दूसरे के साथ बिना किसी संभवतः किम्वंदाक या स्थान के रखे जा सकते हैं।
(घ) वर्ग 6 प्रभाग 3 के अंतर्गत आने वाले विस्फोटक प्रेस अलग रखे जायें।
(च) वर्ग 1 के अंतर्गत आने वाले बाक्य को अलग रखा जाएगा।
Two or more description of explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other: Provided that -
(g) the various explosives of Class 2 (nitro-mixtures), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1 and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space;
(h) Detonators belonging to Class 6, Division 3 shall be kept separately.
(i) Gun powder belonging to Class 1 shall be kept separately.
- वर्ग 3 (नाइट्रो पॉक्सिड) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात दिवस अनुज्ञापन प्राधिकारी की विशेष मंजूरी के मैगजीन में नहीं रखा जाएगा।
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.
- वर्ग 3 (नाइट्रो पॉक्सिड) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात मैगजीन में नहीं रखा जाएगा जब कि किसी विस्फोटक निबंधक ने इसके लिए विशेष मंजूरी दे दी हो।
(i) जब ऐसी मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक निबंधक से ऐसा लिखित प्रमाणपत्र अनिवार्य कर लिया जाए कि वह वर्ग 3 के अंतर्गत आने वाली अवधि वर्धित की गई हो और ऐसे प्रमाणपत्र के अनुमतिप्राप्ति करने पर उसको और मात्रा की जाने पर प्रस्तुत करेगा।
(ii) जब कोई विस्फोटक चमक शून्यता का न रह जाने के कारण या द्रवणीकरण या नाइट्रो प्लोअरसिन या इन नाइट्रो प्लोअरसिन के निकल जाने के किन्तु प्रकट होने के कारण मैगजीन में भांडारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुमतिप्राप्ति आने ही समय पर ऐसे विस्फोटक के निवारण के लिए ऐसे निदेशों का अनुपालन करेगा जो मुख्य निबंधक या विस्फोटक निबंधक जारी करें।
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.
(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on demand.
(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitro-compound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.
- मैगजीन के भीतरी भाग या उसमें लगी बेंचो, शेल्फो और उसकी फिटिंग का इस प्रकार सफाई किया जाएगा या उनसे इस प्रकार अंतरित या अदरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क होना न सके। भीतरी भाग में लगी बेंचो, शेल्फो और फिटिंग पराशय घिंट से मुक्त एवं साफ रहे जाएंगे तथा ऐसे विस्फोटक जो बले से खतरनाक रूप में प्रभावित हो सकते हैं, इस संबंध कर्मक सहायणी बरती जाएगी कि वहां कोई जल मौजूद न रहे; परंतु किसी लोहे या इस्पात के खुले होने के विनाशकारक से संबंधित इस बर्त का यह भाग देते किसी भवन में बाध्यकर नहीं होगा जिसमें वर्ग 6 (गैला बाक्य) के प्रभाग के विस्फोटक से बिल्कुल कोई विस्फोटक रखा गया है।
The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water therefrom.
Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.
- यदि लॉडेंट चालक का परीक्षण विस्फोटक निबंधक करता है तो अनुमतिप्राप्ति परीक्षण के लिए निहित ज्वार का संवय करेगा यदि परीक्षण आसमानाकारी साबित होता है तो उत्तरी ही परीक्षा अनुमतिप्राप्ति परीक्षण प्रत्येक परीक्षण के लिए जब तक की जाती रहेगी जब तक कि परीक्षण अधिकारी लॉडेंट चालक को समतुल्य संशोधित नहीं कर देता।
परंतु किसी एक परीक्षण के लिए देय परीक्षा किसी एक दिन के दौरान किसी चालक के किए गए सभी परीक्षणों के लिए प्रकृत होगी।
परंतु यह और कि यदि दो या अधिक लॉडेंट चालक एक ही मैगजीन से संबंध है तो ऐसे सभी चालकों के परीक्षण के लिए फीस ऐसी किसी फीस से अधिक नहीं होगी जो किसी एक लॉडेंट चालक के परीक्षण के लिए हर स्थिति में निहित की गई है।
If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test. In the event of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory.
Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day.
Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.
- उपयुक्त सभी लेब प्रिंटेड कार्यालय वस्तु, उपयुक्त जूतों के प्रयोग द्वारा तथा तलाशी लेकर या अन्यथा अथवा ऐसे किसी संघर्षी वस्तु द्वारा बाह्य संभवतः उपबंध किया जाएगा कि किसी परिसर में अग्नि, दिवासलार्ड अथवा ऐसे कोई स्तूपों या पदार्थ, जिससे विस्फोट हो सकता है या आग लग सकती हो, किन्तु इस खत के कारण ऐसी संरचना, स्थिति या स्वरूप में किसी फुटिस बटो का प्रवेश वर्धित नहीं है जिससे आग लगने या विस्फोट होने का खतरा न हो।
परंतु इस शर्त का यह भाग, जो लोहे या इस्पात के अपाकन को लागू होता है, ऐसे किसी भवन के संबंध में लागू नहीं होगा जिससे बिल्कुल कोई विस्फोटक नहीं रखा गया है।
Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory premises of fire, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion.
Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.

11. अनुज्ञापिका प्रत्येक बार ई-3 और बार ई-4 या बार ई-5, नरेशि तबत हा, म रमो विकोटका का अभिलेख-बार लखा रखांग और विस्फोटक नियम, 2008 के अणन प्रासकृत किती भी अधिकारी के समक्ष उसके ब्दास एसा करने की बांग की जाने पर ब्दाक पुस्तक और अभिलेख प्रस्तुत करेगा। स्टक पुस्तक बिहित प्रोफार्मा में पूरा सज्वाकित होगी।
The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so. The stock books in the prescribed proforma shall be page numbered.
12. परिसर में कोई परिवर्तन या तबदीली अनुज्ञापन प्राधिकारी के पूर्वानुमोदन बिना नहीं की जाएगी और अनुज्ञापिका ऐसी किसी शर्त का अनुपालन करेगा जो इस विहित अनुज्ञापन प्राधिकारी विनिर्देश करे।
No changes or alterations shall be carried out in the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.
13. मैगजीन सभी समय पर अच्छी मरम्मत की स्थिति में बनाई रहती जाएगी (या अच्छी हालत में बनाई रहती जाएगी)। यदि किसी कारणवश किसी विस्फोटक के भण्डारण के लिए मैगजीन अनुपयुक्त हो जाती है तो अनुज्ञापिका इस बात की सूचना अनुज्ञापन प्राधिकारी को तुरंत देगा।
Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.
मैगजीन का अनुज्ञापिका हर तिमाही के नियम 24 के उप-नियम 3 के अनुसार त्रैमासिक रिपोर्ट प्रस्तुत करेगा।
The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.
14. यदि सुरक्षा दूरी का कोई अधिकरण होता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को आवश्यक सलाह और कार्यवाही के लिए तुरंत दी जाएगी।
Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.
15. यदि कोई विस्फोटक बिना सूचना अनुपयोगी पाया जाता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को, भण्डारण प्राप्त करने के लिए, तुरंत दी जाएगी।
The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.
16. विस्फोटकों के पैकेटों के बड़े इस प्रकार शण्डाए जाएंगे कि कम से कम एक व्यक्ति भण्डारण किए गए सभी पैकेटों की हालत की जांच करने और प्रत्येक पैकेट की विभिन्न विधियों को पढ़ने के लिए उनके बीच से होकर आ जा सके।
The explosive packages shall be stocked in such a way as to allow movement of at least one person to check the condition of all packages stored and to read the manufacturing particulars of each package.
जोड़त चलवाकों की भूमि के लिए प्रतिरोध धारणांग न्यूनतम होगा और किन्हीं भी वजह में 10 ओंश से अधिक नहीं होगा।
The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.
17. मैगजीन के चारों ओर 15 मीटर की दूरी के अंतर्गत कोई शूलक घास या झाड़ी या ज्वलनशील सामग्री नहीं रहने दी जाएगी।
A distance of 15 metres surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials.
18. विस्फोटकों के प्रत्येक पैकेट की, जब उसे मैगजीन के भीतर शिप का रखा हो, ठीक दशा जांचने के लिए परीक्षा की जाएगी।
Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.
19. किसी मैगजीन/भण्डारण में किसी एक समय में चार व्यक्तियों से अधिक को नहीं रहने दिया जाएगा।
Not more than 4 persons shall be allowed inside the magazine or store house at any one time.
20. विस्फोटकों के खाली पैकेटों को सीधे-सीधे जहां से हटा दिया जाएगा और तुरंत नष्ट कर दिया जाएगा।
Empty packages of the explosives shall be removed at the earliest and destroyed.
21. अनुज्ञापिका और कार्यकारी को परिसर के भीतर आपातकाल के दौरान की जाने वाली प्रक्रियाओं से अवगत होना चाहिए।
The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.
22. निरीक्षण या नमूना अधिकारी को सभी सुविधाएं समय पर अनुमत परिसर में अबाध रूप से पहुंचने दिया जाएगा और वह सुनिश्चित करने के लिए कि अधिनियम और इन नियमों के उपबंधों और सुरक्षा विधियों को सम्पूण अनुपालन किया जा रहा है, अधिकारी को प्रत्येक सुविधा प्रदान की जाएगी।
Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.
23. यदि अनुज्ञापन प्राधिकारी या विस्फोटक विरोधक अनुज्ञापिका को अनुमत परिसरों या मशीनों, दूत या उपकरण में ऐसी कोई मरम्मत या परिवर्तन या परिवर्तन करने या विकारियों को लागू करने की स्थिति स्पष्ट में सुचित करता है जो परिसर के अंदर या बाहर या व्यक्तियों की सुरक्षा के लिए आवश्यक है, अनुज्ञापिका विकारियों को निषेधित करेगा और विनिर्देश अवधि के भीतर अनुपालन रिपोर्ट ऐसे प्राधिकारी को देगा।
If the licensing authority or a Controller of Explosives informs in writing, the holder of the license to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the license shall execute the recommendations and report compliance within the period specified by such authority.
24. अनुज्ञापिका मैगजीन में रखने और बिक्री के लिए प्राधिकृत विस्फोटक सूची में उल्लिखित अनुमत फैक्टरी या कंपनी से प्राधिकृत विस्फोटक/अतिशयवाली या सुरक्षा वाली खरीदेगा।
The licensee shall purchase authorised explosives/ fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.
25. शिप से अधिक ध्वनि स्तर उत्पादित करने वाले उपकरणों/पटाखों की बिक्री और रखने के लिए –
(क) जो करने की कानूनी चार मीटर की दूरी पर है, 125 डी बी (ए) या 145 डी बी (सी) के प्रतिबंधित होंगे;
(ख) भण्डारण (जुड़े हुए पटाख) को गठन करने वाले व्यक्तिगत पटाखों के लिए उपर्युक्त उल्लिखित सीमा 5 सेना (एएन) डी बी (सी) के प्रतिबंधित होंगे।
The possession and sale of fire-crackers generating noise level exceeding:
a) 125 dB(A) or 145 dB(C) at 4 metres distance from the point of burning shall be prohibited;
b) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be replaced by 5 log₁₀ (N) dB, where N = number of crackers joined together.
26. आग या विस्फोट वदरत दुर्घटना या नुकसान पटाखों की कमी या खोरी, तुरंत पक्ष के पुलिस थाने और अनुज्ञापन प्राधिकारी और अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय को रिपोर्ट की जाएगी।
Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

अतिरिक्त शर्तें (Additional Conditions):

1. अनुज्ञापिका प्राधिकारी शूट के अतिशयवाली को या प्रदर्शित करेगा, या रखेगा और या ही उसकी बिक्री करेगा। The licensee shall not exhibit, possess and sell fireworks of foreign origin.

कृते उप मुख्य विस्फोटक नियंत्रक
For Ds. Chief Controller of Explosives
दरणाकुलम | Erissalam

Note :- This is system generated document does not require physical signature. Applicant may take printout for their records.

Annexure – 11
Consent to Operate.



KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/KNR/ICO/OC/18/2018

Date of issue :23/12/2020

INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No : PCB/KNR/ICO-R1/19/2018

Ref : 1.Consent No: PCB/KNR/ICO/19/2018 dated 16/01/2018

2. Your Application No. 13934053 dated 16-09-2020

The 'Integrated Consent to Operate' issued as per reference above to M/s KAKKARA CRUSHERS PRIVATE LTD (QUARRY), KOOHAMBALAM, KAKKARA.P.O., MATHAMANGALAM (VIA), KANNUR DT - 670306 is hereby renewed up to 31/12/2025 and issued to M/s KAKKARA CRUSHERS PRIVATE LTD (QUARRY), KOOHAMBALAM, KAKKARA.P.O., MATHAMANGALAM (VIA), KANNUR.DT - 670306. The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

I. GENERAL

S.No.	Items	Description
1	I.1 VALIDITY	31/12/2025
2	I.6 SURVEY NUMBER	100/8884,100/8886,100/4876,100/4882,100/8885,100/4881,100/4807,100/4879,100/4880,100/4877,100/4878
3	I.10 CAPITAL INVESTMENT	104.70 Rs in Lakhs
4	I.13 ANNUAL FEE	25000/-
5	I.13. TOTAL FEE REMITTED	Rs.180320/-
6	I.14 ACTIVITY	QUARRYING IN 2.9130HECTERS OF LAND

II. Stack Details

Stack No.	Source of Emission	Emission Rate(Nm ³ /Hr)	Stack Height above		Control Equipment
			Ground Level(In Meters)	Roof Level(In Meters)	

III. CONDITIONS

5.2 Application for the renewal shall be submitted before 30/09/2025 with valid EC.

5.3 If any statement in the affidavit furnished along with the renewal application is found false, the consent issued will be revoked and further prosecution will be launched against the unit.

5.14 This consent is issued subjected to Environmental Clearance No.83/2017 by District Environmental Impact Assessment Authority letter No.159/KNR/2017/DEIAA Dated 05/01/2018

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

DATE :23/12/2020

**ANITA
KOYAN**

Digitally signed
by ANITA KOYAN
Date: 2020.12.24
09:02:17 +05'30'

SIGNATURE & SEAL OF ISSUING AUTHORITY
ENVIRONMENTAL ENGINEER



To

K.F. VARGHESE, KANHIRATHINKAL HOUSE, UMMARAPPOYIL, PERINGOME.P.O., KANNUR
DT - 670307

1. This digitally signed document is legally valid as per the Information Technology Act 2000

2. For verifying this document please go to krocmms.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 – 12
Panchayath License.



നമ്പർ: 538/2020-2021/A-8/9272/2020

തീയതി: 11/12/2020

ആലക്കോട് ഗ്രാമപഞ്ചായത്ത്

ആലക്കോട് പി.ഒ., കണ്ണൂർ (ജില്ല)

ഫീൻ: 870871, ഫോൺ: 9460-2255233, ഇ-മെയിൽ: alakkodepp@gmail.com

വ്യവസായം, വാണിജ്യം, സംരംഭകത്വം, മറ്റ് സേവനങ്ങൾക്കുള്ള ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസർ

(ഒ.കെ.പി.ആർ ആക്ട് നമ്പർ 232, FTE & OS ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസർ 1996)

ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസർ	കെ.എച്ച് വർഗ്ഗീസ്									
ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ	ജനറൽ നോട്ടീസ് കളക്ടർ കളക്ടർ ഓഫീസർ ഡെപ്യൂട്ടി ഓഫീസർ ക്ലർക്ക് പി.ഒ. കളക്ടർ ഓഫീസർ ഓഫീസർ ഓഫീസർ ക്ലർക്ക്									
സമാപനത്തിന്റെ പേര്, സ്വഭാവം	കളക്ടർ ഓഫീസർ ഡെപ്യൂട്ടി ഓഫീസർ ക്ലർക്ക്									
ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ പ്രവർത്തനങ്ങൾ	കാറ്റിഗോറിയിലെ ഓഫീസർ									
വാർഡ് നമ്പർ/കളക്ടർ നമ്പർ	XIX/റീ.സി 108/2A									
ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ	11/12/2020 മുതൽ 31/03/2025 വരെ									
ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ	<table border="1"> <thead> <tr> <th>രൂപ</th> <th>അപേക്ഷ നമ്പർ</th> <th>തീയതി</th> </tr> </thead> <tbody> <tr> <td>25000/- രൂപ</td> <td>120010103218</td> <td>11/12/2020</td> </tr> <tr> <td>2000/- രൂപ</td> <td>120010103218</td> <td>11/12/2020</td> </tr> </tbody> </table>	രൂപ	അപേക്ഷ നമ്പർ	തീയതി	25000/- രൂപ	120010103218	11/12/2020	2000/- രൂപ	120010103218	11/12/2020
	രൂപ	അപേക്ഷ നമ്പർ	തീയതി							
	25000/- രൂപ	120010103218	11/12/2020							
2000/- രൂപ	120010103218	11/12/2020								
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ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ										
ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ	<p>1. തിരുവനന്തപുരം - തിരുവനന്തപുരം വിവിധ വകുപ്പുകളുടെ സർവ്വീസുകളിൽ നിയമനിലയിൽ ഉള്ളവർക്ക് പ്രത്യേക ഏർപ്പാടാണ് അല്ലാത്തപക്ഷം സർവ്വീസുകളിൽ കാലാവധി കഴിഞ്ഞവർക്ക് ഡെപ്യൂട്ടി സെക്ഷനറി ഓഫീസിന് താഴെ പ്രവർത്തനങ്ങൾ നൽകുന്നു.</p> <p>2. W.A 1161/2020 തീയതി 1/10/2020 & W.P (C) 15962 തീയതി 21/12/2020 എൽ. കോടതി വിധികൾക്ക് വിധേയമായി മാത്രം പ്രവർത്തനങ്ങൾ നൽകുന്നു.</p>									

ഓഫീസ് ഉപയോഗിച്ച്



SECRETARY
ALAKODE GRAMA PANCHAYAT
P.O. ALAKODE
Ph. 9460-2255233

Annexure – 13
Monitoring Photos.



Annexure – 14
Monitoring Reports.



GLOBAL ENVIRONMENT & MINING SERVICES

(Consulting Engineers, Mine Designers, Geologist & Surveyors)

NABL ACCREDITED LABORATORY

1st Main Road, Basaveswara Bediavara,

HOSPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : +918394 220433, 295018

e-mail : gems_hpt@yahoo.com,

Website : www.globalmining.in

GEMS-LD/TF/11/01

Date: 10.01.2024

Analysis Report of Ambient Air Quality Monitoring

1	Name of the Customer/Address	:	Granite Building Stone Quarry of "Kalkara Crushers Pvt Ltd" Plot No: 2, 911 Ha, Sy. No: 1002A Thimil Village, Talpansim taluk, Kannur District, Kerala State.
2	Sample Description	:	Ambient Air Quality Monitoring
3	Sample Collected By	:	GLOBAL Environment & Mining Services
4	Particulars of Sample Collected	:	Combined Sampler (GT-241)
5	Duration of the Monitoring	:	24 Hour of Sampling
6	Location of Monitoring	:	Core zone area (AI)
11	Report Number	:	ULR-VC53232400001834F

Result

Date of Monitoring	PM10 [$\mu\text{g}/\text{m}^3$]	PM2.5 [$\mu\text{g}/\text{m}^3$]	SO ₂ [$\mu\text{g}/\text{m}^3$]	NO ₂ [$\mu\text{g}/\text{m}^3$]
	IS : 5182: (Part 2) 2006 (RA 2012)	USEPA 2001	IS : 5182: (Part 2) 2001 (RF 2014)	IS : 5182: (Part 6) 2006 (RF 2014)
10.01.2024	55.3	20.9	11.3	15.8
Standard	100	60	80	80

INFERENCE As per CPCB Standards,
Report Status: - Measured Values for the above parameters are within the limit.

End of Report


Analyzed By
J.M. Thippeswamy
Chemist




Authorized Signatory
K. Ramakrishna Reddy
Technical Manager

- Approved by: NABL, Accredited by Ministry of Environment, Forest and Climate Change for Laboratory
- Recognized by Government of Karnataka, Mysore, District: DTP/2012/100

Note:

- The result is valid only for the listed analytes & applicable parameters. Deliveries of products are not to be claimed or guaranteed.
- Water sampling and analysis is done after 10:00 AM, between 5:00 PM to 8:00 PM. For 24 hours and 7 days and 30 days samples, keep the date of issue of Analyte and test date in the report.
- This report is not to be used as a legal document or for any other purpose. It is for the use of the client only. It is not to be used for any other purpose.
- For further information, contact the Technical Manager. This report is valid only for the purpose stated in the report.



GLOBAL ENVIRONMENT & MINING SERVICES

(Consulting Engineers, Mine designs, Geologist & Surveyors)

SUB OFFICE: HOSPEL LABORATORY

3rd Main Road, Busaveswari Badavane,

HOSPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : +918394 229433, 295918

e-mail : gems_hps@yahoo.com,

Website : www.globalmning.in

GEMS-40/TE/11/01
Date: 14.01.2024

Analysis Report of Ambient Air Quality Monitoring

1	Name of the Customer/Address	Granite/Bulking Stone Quarry of "Kakkara Crushers Pvt Ltd" Econt: 29134a, Sy. No:100/2A Thimiri Village, Talipermana taluk Kannur District, Kerala State.
2	Sample Description	Ambient Air Quality Monitoring
3	Sample Collected By	GLOBAL Environment & Mining Services
4	Particulars of Sample Collected	Combined Sampler (GTI-241)
5	Duration of the Monitoring	24 Hour of Sampling
6	Name of the Station	(A2) Thimiri
7	Report Number	ULR-TC3322-0000018337

Results

Date of Monitoring	PM10 [$\mu\text{g}/\text{m}^3$]	PM2.5 [$\mu\text{g}/\text{m}^3$]	SO ₂ [$\mu\text{g}/\text{m}^3$]	NO ₂ [$\mu\text{g}/\text{m}^3$]
	IS: 5182: (Part 23) 2006 (RA 2012)	US EPA 2004	IS: 5182: (Part 2) 2001 (RI 2014)	IS: 5182: (Part 6) 2006 (RI 2014)
14.01.2024	49.5	17.6	10.8	13.3
Standard	100	60	80	80

INFERENCE:	As per CPCB Standards, Report Status: - Measured Values for the above parameters are within the limit. **End of Report**
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Analysed By
J.M. Thippeswamy
Chemist




Authorized Signatory
K. Ramakrishna Reddy
Technical Manager

- Approved by HOSPEL Laboratory by Manager, HOSPEL, Form and I Under Change No.1 Revision.
- Inspected by Government of Karnataka, Hospet Office, Govt. CRPS, Hospet.

Note:

- The test is done with reference to IS: 5182 (Part 23) 2006 (RA 2012) for PM10 and PM2.5, IS: 5182 (Part 2) 2001 (RI 2014) for SO₂ and IS: 5182 (Part 6) 2006 (RI 2014) for NO₂.
- When Sample is not collected after 24 hours, the test is done after 7 days and the report will be done after 10 days for ambient air quality monitoring.
- The report is valid only for the period shown in the Certificate of Analysis and is not valid for any other purpose without mutual permission for writing.
- The test is done in the laboratory of HOSPEL, Hospet, Karnataka. Any report issued by the laboratory is for the report number only.



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(Consulting Engineers, Mine Designers, Geologist & Surveyors)

NABL ACCREDITED LABORATORY

3rd Main Road, Basaveswara Badavane,

HOSPETE - 583291, Dist. Vijayanagara (Karnataka)

PH : +918394 229433, 295018

e-mail : gems_hp@yahoo.com,

Website : www.globemining.in

GEMS/07/11/01

Date: 16.01.2024

TEST REPORT OF AMBIENT NOISE LEVEL MONITORING

- | | | |
|---|---------------------------------|---|
| 1 | Name of the Customer/Address | ± Granite Building Stone Quarry of "Kakkara Crushers Pvt Ltd" |
| | | ± Eoem: 2,913 Hb., |
| | | ± Sp. No: 1002A |
| | | ± Thantri Village, Talipamerba taluk |
| | | ± Kannur District, Kerala State. |
| 2 | Sample Description | ± Ambient Noise Level monitoring |
| 3 | Sample Collected By | ± G.L.O.B.A.L. Environment & Mining Services |
| 4 | Particulars of Sample Collected | ± Noise Level Meter (Exunox-107) |
| 5 | Duration of the Monitoring | ± 24 Hours Sampling |
| 6 | Date of Analysis Completion | ± 11.01.2024 |
| 7 | Report No | ± ULR-TCS32324000011036F |

Results

Date	10.01.2024	11.01.2024
Name of the Location	Core Zone	Thimiri
Time (hrs)	M1	M2
6.00	37.2	38.5
7.00	38.5	38.2
8.00	38.8	40.1
9.00	40.7	41.5
10.00	42.8	45.7
11.00	41.5	41.5
12.00	40.2	40.4
13.00	47.7	45.8
14.00	48.5	46.2
15.00	51.7	49.5
16.00	52.8	50.7
17.00	51.7	48.4
18.00	50.4	49.3
19.00	49.5	50.1
20.00	46.7	47.2
21.00	43.1	45.8
22.00	42.4	44.1
23.00	40.3	42.2
00.00	39.7	40.1
01.00	38.1	39.4
02.00	37.8	38.5
03.00	36.4	37.6
04.00	34.4	37.8
05.00	35.4	36.4



- Approved by NABL & Recognized by Director of Environment, Forest and Climate Change for Laboratory
- Recognized by Government of Karnataka, Government, Govt of HOSPETE

Note:

- The work is undertaken only in the presence of client & applicable personnel. This document is available in hard or soft copy as per request.
- While preparing this report, the client's name, location, date, time, report number, etc. are not to be changed. If any change is required, the client must inform the client in writing.
- This report is for the use of the client only. It is not to be used for any other purpose without the written consent of the client.
- This document is confidential and its use is restricted to the client only. It is not to be used for any other purpose without the written consent of the client.



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3rd Main Road, Basaveswara Bahuvane,

HOSPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : +918194 229433, 295018

e-mail : gems_bpt@yahoo.com,

Website : www.globalmining.in

GEMSTONE IDENTIFICATION		
Color	51.8	50.7
L, min	21.4	16.4
Ld	40.2	46.7
Lr	33.6	29.8
Log	45.4	45.2

Area Code	Category of Area	Limit in dBA Leq	
		Day Time	Nighttime
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Quiet Area	50	40

Note	Day time shall mean from 8:00 am and 10:00 pm
	Night time shall mean from at least from 10:00 pm and 3:00 am
	Quiet zone is an area comprising not less than 100 metres around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
	Three categories of areas may be declared as one of the four above mentioned categories by the competent authority.
	"dBA Leq" denotes the time weighted average of the level of sound in decibels on scale A, which relates to human being. "A" weighted is a unit in which noise is measured.
"A" or dBA Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency spectrum characteristics of the human ear.	
Leq: It is energy mean or the noise level over a specified period.	


Authorized Signatory
 Technical Manager

- Approved by NABL & Registered in Ministry of Environment, Forest and the air Change in Karnataka
- Recognized by Government of Karnataka, Mysore City for NABL Lab.

Note:

- The result of test shall valid in the under weight & applicable provision. The document of analysis is under review and control.
- Sign Certificate will be document after 10 days. Month 3 Month. Every paper in the file. 1 Day per 10' sample from the date of issue of Certificate and the date of issue of Certificate.
- The report is not to be published publicly or to be used as evidence in the Court of law without the prior written consent of the authorized person or entity.
- The test result is not to be used as evidence in the Court of law without the prior written consent of the authorized person or entity.



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NABL ACCREDITED RECOGNIZED LABORATORY

3rd Main Road, Basavegowda Hadayane,

HOSPETE - 583201, Dist., Vijayanagara (Karnataka)

Ph : +918394 229433, 295018

e-mail : gems_hpt@yahoo.com,

Website : www.globalmining.in

GES/SLD/19/11/01
Date: 16.01.2024

ANALYSIS REPORT OF WATER QUALITY DATA

- 1 Name of the Customer/Address : Granite Building Stone Quarry of "Kalkara Crushers Pvt Ltd" Estate: 2.913 Ha., Sy. No:100/2A Thimiri Village, Taliparamba taluk, Kannur District, Kerala State.
- 2 Sample Collected By : GE.OBAL Environment & Mining Services
- 5 Date of sample collection : 19.01.2024
- 6 Date of sample Received : 12.01.2024
- 7 Date of sample Analyzed : 13.01.2024
- 8 Report Number : ULR-TC532324000001837F

Sl. No.	Parameters	Unit	Result	Test Protocol	Requirements/Limit Is : IS:5010:2012	
					Acceptable	Permissible
1	pH	-	7.47	APHA 22 nd Edition 2012 4500 D (Pg.No. 4-12 to 4-19)	6.5	8.5
2	Colour	Hecl	<3	IS: 3022 (PART 1)- 1986, IS: 2052 Part 1 (with Method)	5	15
3	Turbid	-	Ag	IS: 3021 Part 1 1984	Ag	Ag
4	Hardness	-	Ag	IS: 3075 (Part 1) - 1963, IS: 3075, Test Method	Ag	Ag
5	Total Solids	mg/L	1.20	APHA 22 nd Edition 2012 2100 B (Pg.No. 2-34)	5	5
6	Dissolved Solids	mg/L	174	APHA 22 nd Edition 2012 2100 B (Pg.No. 2-34)	-	-
7	Total Dissolved Solids	mg/L	186	APHA 22 nd Edition 2012 2540 B (Pg.No. 2-35)	500	2000
8	Total Alkalinity as CaCO ₃	mg/L	75	APHA 22 nd Edition 2012 2570 B (Pg.No. 2-35)	200	400
9	Total Hardness as CaCO ₃	mg/L	134	APHA 22 nd Edition 2012 2540 C (Pg.No. 2-36)	200	400
10	Calcium as Ca	mg/L	35	APHA 22 nd Edition 2012 5000 CA3 (Pg.No. 3-63)	75	200
11	Magnesium as Mg	mg/L	11.8	APHA 22 nd Edition 2012 3500 B-36 by Calculation	30	100
12	Chloride as Cl	mg/L	23	APHA 22 nd Edition 2012 4500 D (Pg.No. 4-72)	250	1000
13	Sulfate as SO ₄	mg/L	79	APHA 22 nd Edition 2012 4500 SO6-1 B (Pg.No. 4-93)	250	400
14	Nitrate as NO ₃	mg/L	7.1	APHA 22 nd Edition - 4500 NO ₃ - E (Pg.No. 4-111 to 4-132)	45	50
15	Nitrite Nitrogen as NO ₂	mg/L	0.1	APHA 22 nd Edition 2012 4500 NO ₂ F (Pg.No. 4-125 to 4-127)	45	-



- Approved by NABL & Recognized by Ministry of Environment, Forest and Climate Change, Government of India
- Recognized by Government of Karnataka, Mandated, Govt of COPE, India

Note:

- The result listed refers only to the tested sample & applicable parameter. The presence of pollutants is not to be inferred as a standard.
- Water samples will be preserved upto 1 (One) Month, if not used. For the purpose of re-testing, 7 (Seven) Days and 10 (Ten) Days will be the time of Month and one from when it becomes available.
- This report is not to be reproduced, wholly or in part, it cannot be used as evidence in the Court of Law & should not be used in any legal proceedings without prior permission in writing.
- Total liability of our laboratory is limited to the extent of amount. Any discrepancy regarding the report is to be raised through postal communication.



GLOBAL ENVIRONMENT & MINING SERVICES

(Consulting Engineers, Mine designers, Geologist & Surveyors)

SAREKARDEE CONSULTANTS LABORATORY

3rd Main Road, Banaveywaru Budavare,

HOSPETE - 583201, Dist., Vijayanagara (Karnataka)

PH : + 91 8394 229433, 295018

e-mail : gms_ygm@ybmhs.com,

Website : www.globmining.in

U/R-TC/32324800001837

15	Hardness	mg/L	4.52	APHA 22 nd Edition 8017-100-FD (Pg No. 4-90 to 4-91)	1.0	CL
16	Total Fe	mg/L	420	APHA 22 nd Edition - 3007-F-0 (Pg No. 3-40 to 3-42)	9.5	NR
17	Total Cu	mg/L	0.4	APHA 22 nd Edition 3017-50-100-F (Pg No. 3-99 to 3-100)	-	-
18	Total Zn	mg/L	0.67	APHA 22 nd Edition 3006-10-10 (Pg No. 3-40 to 3-42)	-	-
19	Total Hardness (CaCO ₃)	mg/L	NR	APHA 22 nd Edition - 8011-100-FD (Pg No. 4-90 to 4-91)	-	-
20	Chloride	mg/L	NR	APHA 22 nd Edition 8110-F (Pg No. 3-10 to 3-11)	-	-
21	SO ₄ & Sulfate	mg/L	NR	APHA 22 nd Edition 8110-F (Pg No. 3-10 to 3-11)	0.5	NR
22	Calcium as Ca ²⁺	mg/L	<0.001	APHA 22 nd Edition 8111-F (Pg No. 3-27 to 3-28)	0.02	NR
23	Copper as Cu	mg/L	<0.001	APHA 22 nd Edition 3111-F (Pg No. 3-10 to 3-11)	0.01	1.0
24	Sulfate as So	mg/L	<0.001	APHA 22 nd Edition 8111-F (Pg No. 3-27 to 3-28)	0.01	NR
25	Zinc as Zn	mg/L	<0.1	APHA 22 nd Edition 3111-F (Pg No. 3-20 to 3-21)	0.5	0.1
26	Iron as Fe	mg/L	NR	APHA 22 nd Edition 3111-F (Pg No. 3-20 to 3-21)	-	-
27	Total Phosphate	mg/L	0.001	APHA 22 nd Edition 8310-F (Pg No. 4-13)	-	-
28	Total Chloride*	mg/l (Cl ⁻)	45	APHA 22 nd Edition 8211-F (Pg No. 5-76)	-	-
29	Total Chloride*	mg/l (Cl ⁻)	45	APHA 22 nd Edition 8211-F (Pg No. 5-76)	-	-
30	Total Phosphate*	mg/l (P ⁻)	0.01	APHA 22 nd Edition 8310-F (Pg No. 4-13)	-	-

Note: NR - Below Detectable Limit

Ag - Agreed
NR - Not Released
NA - not Analyzed
A - Absent

Location: Thimiri

Kind of report


Analyzed By
Chemist




Authorized Signatory
Technical Manager

- Approved by HOSPET & Karnataka State Government, Government of Karnataka, Government of Karnataka, Government of Karnataka
- Recognized by Government of Karnataka, Government of Karnataka, Government of Karnataka

Note:

- The result of this report is for the specific sample & analysis only. The laboratory is not responsible for the quality of the sample.
- Significant figures shall be rounded off to 3 decimal places. The result of this report is for the specific sample & analysis only. The laboratory is not responsible for the quality of the sample.
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