

COMPLIANCE REPORT

OCTOBER 2021 – MARCH 2022

QUARRY PROJECT
M/S CHENDAYAD GRANITES PVT LTD
KANNUR DISTRICT
KERALA



Dt.10-06-2022

The Additional Principal Chief Conservator of Forests (C)
Ministry of Environment, Forests & Climate Change,
4th Floor, E& F Wing, Kendriya Sadan,
Koramangala, Bangalore - 560034

Ref :- File No. 45/KNR/2017/ DEIAA

**Sub :- Environment Clearance – Quarry project at Trippangottur Village,
Thalassery Taluk, Kannur District, Kerala – Compliance Report – Second half
- Reg.**

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for **1.5176 Ha.** by order No. **45/KNR/2017/ DEIAA** dated 02-09-2017 by District Environmental Impact Assessment Authority, Kannur, Kerala. The compliance report of **Second half (October 2021 – March 2022)** to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,
Yours respectfully,

For M/S Chendayad Granites Pvt. Ltd



Copy to

- 1. SEIAA , Thiruvananthapuram,**
- 2. RDO, Kannur**

Encl: - As Above

 Chendayad Granites Private Limited
CIN:U14102KL2011PTC028338
Building No.CPIIIC40,KSIDC Industrial Growth Centre,Veliyavelicham,Koothuparamba,Pin:670643,
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COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 45/KNR/2017/ DEIAA

Dated: 02-09-2017

BY

**DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
(DEIAA)**

FOR

**BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT**

AT

SURVEY NOS. 275/1A

TRIPANGOTTUR VILLAGE, THALASEERY TALUK

KANNUR DISTRICT, KERALA

BY

M/s Chendayad Granites Pvt. Ltd

KANNUR DISTRICT

KERALA

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INTRODUCTION

Quarry project of **M/S Chendayad Granites Pvt. Ltd** is situated at Survey No. 275/1A, Trippangottur Village, Thalassery Taluk, Kannur District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by District Environmental Impact Assessment Authority, Kannur on 02-09-2017. As part of general condition No.37 of Environmental Clearance order, half yearly compliance report needs to be submitted by the project proponent. The compliance report of Second half to the specific condition, health conditions and general conditions of the Environmental Clearance order for the period of **October 2021 - March 2022** is being submitted.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A – SPECIFIC CONDITIONS

01	A mines manager shall be appointed to control ,direct, manage and supervise the quarrying operations required under the mines Act ,1952	complied
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As per the mandate to monitor the extraction of minerals and to control, direct, manage and supervise the quarrying operations in the quarry the project proponent has appointed a mines manger as per the Mines Act 1952. Certificates of Mines engineer were attached as **Annexure No.2** and Form D is attached as **Annexure No 3.**

02	Health and welfare for the persons employed shall be implemented	complied
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As part of safety of labours, the project proponent has been provided facilities like housing, food, water and sanitation to the workers. The project proponent kept a First aid box in the project site. In association with Primary Health Centre of Local Self Government, the project proponent has conducted health check up for the labours.

03	Controlled blasting should be practiced and blasting shall be done only during day time. The mitigate measures for control of ground vibration to arrest the fly rocks and boulder should be implemented.	Complied
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To reduce adverse impact of blasting, the project proponent practice controlled blasting with NoENL. The blasting time in the quarry is in day time only. No work has there in the quarry site at Night. The blasting time in the quarry is in from 7 am to 6 pm. The mitigate measures to arrest ground vibration and fly rock is detailed in General condition No 11. The board showing the blasting time is attached as **Plate No. 1**

04	Plantation shall be done which includes a green belt of	Being
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	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.	Complied
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The project proponent has started to plant various saplings in the project site to develop a green belt around the project area. Avenue tress also planted along the road side to minimise the dust emission. To prevent air pollutions, a green belt is important in the mining site. In order to that the project proponent has taken the suggestion of agricultural department to plant the native species.. Photograph of plantation is given in **Plate No. 16.**

05	The drains should be regularly de silted and maintained properly check dam and gully checks shall be constructed wherever to required to arrest siltation. De siltation shall be done every year before the onset of monsoon	Complied
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To arrest the quarry waste entering in to the public drain and stream, the project has constructed De siltation chambers. These chambers are being de silted during summer season in regular interval.

06	Fencing shall be maintained properly all around the lease area.	Complied
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To enhance safety and to demarcate the lease area, the project has done fencing around the lease area. The photograph of the fencing is provided at **Plate No. 15.**

07	The CSR need redrafting with inclusion of felt needs of the locality with special emphasize for implementing ground water recharging water recharging techniques in and at the vicinity of the proposed site.	Complied
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The project proponent has redrafted the CSR by including the ground water recharging techniques and felt needs around the vicinity of project site.

08	Appropriates sign boards should be displayed.	Complied
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The appropriate sign boards are installed in the project site by the project proponent. The photographs of the sign boards are attached as **Plate No. 8**

09	The blasting time must be displayed and strictly adhered to.	Complied
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To provide notice to the labours and general public a board containing blasting timings are displayed on the site and on the boundaries in the project site. The photograph of the Time showing blasting board is attached as **Plate No.1.**

10	Dust suppression mechanism must be in place.	Complied
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The project splashes the haulage road and critical areas with the help of vehicles in regular intervals to arrest dust emissions from the road while transportation of materials.

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.	Complied
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As part of compensatory plantation, A Separate small plot has demarcated to preserve the endemic species by the project proponent. Various saplings were started to plant by the project proponent in the project site.

12	The PPV values must be less than 10 mm/sec.	Complied
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All the blasting activities are controlled by a qualified person. The project proponent is using NONEL for blasting Therefore the project proponent can limit the PPV under 10 mm/sec.

13	The green belt shall be provides around the periphery.	Complied
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The project proponent has provided Green belt around the project area. This can reduce air and noise pollution.

14	Where the height of the bench formed during earlier workings exceeds the maximum each of the excavator engaged for work, such bench height shall be reduced from top to bottom.	complied
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All mining activities are progressing under the supervision of qualified personals. To enhance safety and to make environment friendly quarrying, the excavation activity in the project is progressing by creating benches of 5m width x 5m height.

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.	Complied
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To avoid accidents in the quarry, to remove the loose or hanging mineral boulders on the side wall the project proponent deploys vehicles like JCB. The labours work on the bottom bench only after clearing such loose minerals form the side wall.

16	Permanent boundary pillars should be fixed by the proponent before commencing quarrying	complied
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To demarcate the mining area, permanent Boundary pillars were fixed at each bent of the lease area. This was done before initiating quarrying activities. The photograph showing the permanent boundary pillars are attached as **Plate No. 2**.

17	No quarry blasting to be undertaken and sustained till warning time limit expires and /or when continues 48 hours cumulative rainfall exceeds 8 cm and blasting shall be resumed until 24hrs	Complied
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	of rain free situation arises in the quarry locality based on the evaluation by the revenue officials.	
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The condition is being compiled by the project proponent when such situation arises. No quarry blasting to be undertaken and sustained till warning time limit expires and /or when continues 48 hours cumulative rainfall exceeds 8 cm and blasting shall be resumed until 24hrs

18	All waste dumps and topsoil dumps shall be properly stabilized by using coir mats or bio regeneration. Proper drainage system shall be provides so the water is properly diverted away from the dump slopes with no disturbance to the stability of the slopes.	Complied
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The waste dumps and topsoil dumps are being stabilised by using coir mats or bio regeneration. The drainages are constructed in the project site. This will help to manage the storm water during monsoon season.

19	All dumps slopes shall be sufficiently stabilized by using appropriate species mix of grass .creepers, shrubs & trees. This shall be done in consultation with the forest department and local research institution and experts in stabilization of mine dumps.	Complied
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The project proponent has planted appropriate grass on the dump to prevent sliding and soil erosion once it is attain its maximum capacity. The overburden and topsoil stacking is progressing in the project site. it is being stacked in the project site.

20	Garland drains of at least 2m width shall be provided all along 7.5 m buffer zone to divert the water from entering the quarrying slopes. These drains shall be cleaned every year before the monsoon season.	Complied
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To manage storm water, the project proponent has constructed garland drain to catch the rain water along 7.5 m buffer zone. This can divert the storm water entering the quarrying slopes.

21	The water from the garlands drainage shall directed to the silt settling ponds. The clarified overflow from silt settling ponds shall be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.	complied
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The water from the garlands drainage directed to the silt settling ponds. The RWH pond is under construction. The clarified overflow from silt settling ponds will be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.

22	A retaining wall of stone rubbles 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 area to arrest any likely roll of boulders during heavy rainfall.	complied
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To prevent soil erosion, at the bottom of the slope the project proponent has constructed a retaining wall with stone rubbles. This can prevent sliding and slumping.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

HEALTH

01	First Aid kit provide in the work site. It shall be periodically maintained properly. Some labourers shall be trained on First Aid.	Complied
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As part of safety measure, the project proponent is keeping first aid box in the project site. In order to use the first aid kit the training has been provided to selected labours. Photograph showing First Aid Box is attached as **Plate no.9**

02	Whole some drinking water should be provided.	Complied
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In the project area pure drinking water is available at all time for everyone in the project site.

03	Premises should be maintained as wet to suppress the dust.	complied
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The project proponent splashing water on haulage roads and loading and unloading point to reduce the emission of dust

04	Sanitary type of latrines and urinals should be provided.	Complied
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the project proponent has given sanitary type of latrine and urinals to every labour in the project site. The photograph of the sanitary type of latrines and urinals are attached as **Plate No 3**

05	Resting place should be provided for workers.	Complied
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To get proper rest to the labours, the project has arranged adequate rest rooms in the project area. The photograph of the Resting place provided for workers are attached as **Plate No 10**

06	'No Smoking' board should be exhibited according to COTPA	Complied
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	Act.	
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The project proponent has displayed No smoking area in the project site. The photograph of the No smoking Board is attached as **Plate No.4**

07	Work should not be done in night.	Complied
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To reduce the inconvenience of community, the quarrying activities are limited to day time only as per KSPCB guidelines. The working time of quarrying is from 7 am to 6 pm.

08	Details of nearest hospitals, shortest route to hospitals and contact no etc. Should be available.	Complied
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Details of nearest hospital, Fire station, Police station, etc are available in the project site. The Photograph of the emergency contact numbers are attached as **Plate No. 5**

09	Approach roads should be maintained properly.	Complied
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To arrest the dust emission and easy transportation, the approach road has been properly maintaining by the project proponent in the project site. The photograph of the approach road is attached as **Plate No. 11.**

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART – B – GENERAL CONDITION

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

As part of conservation, Rain water harvesting is a mitigation measure prescribed in Environment Management Plan. To collect rain water from the entire project land, the proponent has developed rain water harvesting pond in the quarrying area. The stored rain water is using for gardening & agriculture, wetting of roads, and other domestic purposes.

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

The project proponent has constituted an Environment Monitoring Cell (EMC) with Mr. C G George as head of the cell. The meetings of the cell convened periodically and evaluate the activities towards the stipulations of Environmental Clearance order. The details of the monitoring cell are given below in **Table No. 1.**

Table 1 - Environmental Monitoring Cell (EMC)

Sl. No.	Post	Name
1	Head of monitoring cell	C G George
2	Member	Jovin George
3	Member	Malla Suresh

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

To reduce air and noise pollution, the project proponent has planted various avenue trees along either side of the road. There are natural vegetations including trees, shrubs, herbs and climbers also present in the sides of road and parking area. The photograph of the sapling is attached as **Plate No. 14**. Photograph of plantation in the project site is attached as **Plate No. 16**. The purchase bill of plants is attached as **Annexure No.1**

04	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Complied
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Compliance:

As part of energy conservation, the project proponent has installed solar panels in the project site to generate and utilize maximum renewable energy.

05	Sprinklers shall be installed and used in the project site to contain dust emissions.	complied
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Compliance:

To reduce air pollution and to prevent dust emissions from the road while transportation of materials, the project proponent does splashes the haulage road and critical areas with the help of vehicles in regular intervals. The sprinklers are installed in the project site.

06	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.	Being complied
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Compliance:

As part of eco restoration, the project proponent has started to plant various saplings within the project area. The mine closure plan will be done at own cost of project proponent as agreed in the proposal.

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

The project proponent will retain 10 percent of total excavated pit as rain water storage area after closure of the mine. The remaining area will be reclaimed with stacked dumping of overburden and top soil. As part of its eco – restoration plan, the proponent has initiated steps to plant indigenous species as part of concurrent eco restoration.

08	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.	complied
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Compliance:

The project proponent has carrying out many activities for social integration and community development. The activities under Corporate Social Responsibility (CSR)/ Corporate Environmental Responsibility (CER) activities are executed in the sector of Health, Housing. The project proponent is intending to carry out more activities under CSR for inclusive growth in the community. The details of CSR provided in the period of second half is mentioned in **Table No. 2**.

Table No.2 – CSR/CER Details

Sector	Activity	Amount In Rs.
Housing	Benny karumbath construction aid	15020
Culture	kpa rahim smrithi sangamam	2000
Culture	caption lakshmi vayanasala	5000
Culture	meethal sri bhagavathi kshethram kaliyattam	5000
Culture	mooryad sri mangulath bhagavathi kavu thirayuthsavam	3000
House construction Aid	Chandran, Poovan, Narikode mala	35000

Housing	Chandran N Teyyadi Narikodemala	40000
Housing	Deepesh Thayyil Narikodemala	40000
Culture	GRAMASREE GRNDHALAYAM, MUDAVANGOD , 9446881666	25000
	Total	1,70,020

09	The lease area shall be fenced off with barbed wires to a maximum 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.	Complied
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Compliance:

The project proponent has installed fencing around the area where lease obtained. The complete installation of barbed metal wire fencing around the mining area is with height of 4 ft. The photograph of the fencing is provided at **Plate No. 15**.

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

The alarm can intimate the general public and labours that the blasting is going to happen. As per the stipulation of Explosive department and State Environment Impact Assessment Authority the project proponent has installed warning alarms (Siren) in the quarry site. The photograph of the warning alarms are attached as **Plate No. 6**

11	Control measures on noise and vibration prescribed by KSPCB should be implemented.	Complied
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Compliance:

To reduce noise level in the project site, the project proponent has implemented mitigate masseurs. The major noise generating sources from the mining activity is

working machineries, drilling, blasting and plying of vehicles. The following control measures are undertaken to bringing down the noise levels:-

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

Blast vibrations and control measures

- ❖ Controlled blasting technique is adopted in this project in order to reduce blast vibrations.
- ❖ Ordinary detonators are using for the blasting
- ❖ 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.

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

Quarrying activities are limited to day time only as per KSPCB guidelines. This will help to limit the sound pollution. The quarry working time is 7 am to 6.00 pm.

13	Blasting should be done in a controlled manner as specified by the regulations of explosives department or any other concerned agency.	complied
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Compliance:

The blasting is done in controlled manner by using ordinary delayed detonators. All blasting activities are carrying out with the specified regulations of explosive department. All blasting are under careful supervision of qualified persons. The

blasting time is fixed at 9.00 am-10.30 am, 2.00 pm- 3.00 pm and 4.00 pm to 5.30 pm. The photograph of the Time showing blasting board is attached as **Plate No. 1**.

14	A licensed person should supervise/control the blasting operations.	Complied
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Compliance:

The project proponent has appointed mines manager and foreman in the site to supervise/control exploitation of minor minerals including blasting at the project site. **Annexure No. 2** is showing the certificate of qualified person. The **Annexure No. 3** Shows the Form D.

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

To contain dust emissions and for the trouble free transportation of materials, the project proponent is maintaining the access road from the entrance of project site to quarry in good manner. The project proponent splashes water on the road to arrest the dust production during summer season. The Photograph of Access Road is attached as **Plate No. 11**.

16	Overburden materials should be managed within the site and used for reclamation of mine pits as per mine closure plan/ specific conditions.	complied
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Compliance:

The overburden and topsoil extract during the time of mining, these natural resources is staked in the project site. This is being used for plantation, haulage roads and land filling in the mining area. To prevent soil erosion grass is planted on the overburden and topsoil. To prevent soil erosion grass is planted on the overburden and topsoil. OB is attached as **Plate No. 12**.

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

To enhance safety and conserve environment, the project proponent extracted the minerals by creating benches. The benches will not exceed 5 meters of height and the width of the bench will have minimum of 5 meters. The photograph of the benches are Provided in **Plate No. 13**.

18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.	Complied
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Compliance:

The project proponent is using mat during blasting time in order to prevent fly rock. The correct quantity of explosive is used under the supervision of qualified person. The project proponent is using ordinary detonator and NONEL technology for blasting. Therefore there is no issue with fly rock in the community.

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

The project proponent is following the approved mining plan for the exploitation of building stone. Therefore mining depth does not exceed beyond 10 meter or not below the level of the nearest stream bed, whichever is less.

20	No mining operations should be carried out at places having a slope greater than 45°.	complied
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Compliance:

No mining operation is carried out with a slope greater than 45°.

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

To reduce sound amplification, the existing generators are enclosed, vegetation around the mining area helps to reduce noise and air pollution. This helps the noise level kept within prescribed standards.

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

The project proponent has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear plugs, safety belts, safety shoes, gloves, etc. to the labours in working site as part of safety.

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

To channelize the storm water, the project proponent has provided Garland drains with clarifiers to be provided in the lower slopes around the core area.

24	The transportation of minerals should be done in covered trucks to contain dust emissions.	complied
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Compliance:

The project proponent assures the trucks are covered before it leaving the project site to arrest the dust emission while transportation of materials.

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

The project proponent has been planting various saplings in the project area as a compensation of loss of trees while clearing the land for mining.

26	Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.	Complied
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Compliance:

The spent oil sold only to the approved recyclers, some time it is using as lubricant in the project site.

27	Explosives should be stored in magazines in isolated place specified and approved by the explosives department.	Complied
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Compliance:

As per the stipulation of competent authority, the project proponent has storing the explosives in magazine. The magazine was situated in an isolated place specified and approved by the explosives department.

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

To prevent possible fly rock and vibration to nearby houses, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project.

29	100 m buffer distance should be maintained from forest boundaries.	Complied
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Compliance:

The project proponent is maintaining a minimum of 100 meter buffer distance from forest boundaries.

30	Consent from Kerala Pollution Control Board under Water and Air Act(s) should have been obtained before initiating activity.	Complied
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Compliance:

The project proponent has obtained consent from KSPCB under Water and Air Act(s). The copy of certificate of “*Consent to Operate*” (Renewal) from Kerala State Pollution Control Board is provided in **Annexure No. 4**.

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

The certificates obtained from concerned statutory authorities are enclosed in **Annexure No.4, 5, 6, 7 & 8**. The details are given in **Table No 3**

TABLE 3 – APPROVALS FROM COMPETENT AUTHORITIES

Name of the Statutory approval	Name of the Statutory authority
“ <i>Consent to Operate</i> ”	Kerala State Pollution Control Board
Environmental Clearance order	State Environmental Impact Assessment Authority, Kerala
Explosive License	Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)
License for quarry operations	Gram Panchayath
Permit order	Directorate of Mining and Geology

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 as assessed, based on which only the EC is issued, the project would require	Noted
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	a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.	
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Compliance:

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

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

The project proponent is aware and agreed with right of authority to add additional safe guard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

34	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, The Environment (Protection) Act, 1986, the public liability (Insurance) Act, 1991 and EIA notification, 2006.	Complied
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Compliance:

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

1. The Environment Protection Act, 1986
2. Water (Prevention and Control of Pollution) Act, 1974
3. The Air (Prevention and Control of Pollution) Act, 1981
4. The Public Liability (Insurance) Act, 1991
5. Municipal Solid Waste (Management and Handling) Act, 2016
6. Hazardous and Other Wastes (Management and handling) Rules, 2016.
7. EIA notification, 2006

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

An advertisement in two local newspapers regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. . The copy of the advertisement given in two local newspapers is provided at **Annexure No.9**. The details of the news papers are given in the **Table No.4**.

Table No.4- Details of advertisement in news papers

Sl. No.	News paper	Language	Date of edition
1	Deepika	Malayalam	02-10-2017
2	The Hindu	English	07-10-2017

36	A copy of the clearance letter shall be sent by the proponent to concerned Grama/District Panchayath / Municipality /	Complied
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	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.	
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Compliance:

A copy of the Environment Clearance letter was submitted to the Panchayath Office. The project proponent did not receive any suggestions / representation from anywhere while the processing the proposal therefore did not give the copy of clearance letter to anyone. The Acknowledgement of the clearance letter sent to the panchayth is attached as **Annexure No. 10**

37	The proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in 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 MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.	Complied
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Compliance:

The compliance report is being submitted to the District Environmental Impact assessment Authority, Kannur, State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore as mail. The results of Monitored data is attached as **Annexure No. 11, 12 & 13**

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

Compliance:

As per the stipulation provided in Environmental Clearance order, the details of the Environmental Clearance are displayed on metallic board in the project site. The metallic board as specified in the conditions of Environmental Clearance order. Sign board with extent of lease area and boundaries are depicted at the entrance of the quarry and it can be visible to the public. **Plate No. 7** is the photograph of the Metallic board.

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

An assurance in the form of affidavit was already submitted to DEIAA, Kannur.

40	No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modification in the mine shall be carried out without prior approval of the SEIAA, as applicable.	Complied
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Compliance:

The project proponent is not intending to expand the area of mine, technology and scope of working. The project proponent will appear DEIAA, Kannur or SEIAA for Environment Clearance if the project proponent wants to expand its scope. The mining is progressing as per submitted plan.

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	Noted
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	order streams, if any originating from the mine lease shall be taken.	
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Compliance:

There is no such natural water course or thodu is flowing along the project site. The project proponent ensures the natural runoff of storm water. No first order stream is originating from the lease area.

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 un loading points & transfer point to reduce fugitive emissions.	Complied
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Compliance:

The project proponent has monitored the ambient air quality as per National Ambient Air quality Standard (NAAQS). The project proponent is intending to increase the splashing of water and installed sprinklers at loading, unloading and transfer points. This activity can reduce the fugitive emission.

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 staked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m 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 bump. The entire excavated area shall be backfilled. Monitoring and management of	Complied
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	rehabilitated areas should continue until the vegetation becomes self-sustaining.	
--	--	--

Compliance:

The natural resources like top soil and overburden is being stacked in a designated place within the project site. Only topsoil are being used for plantation. Overburden is being used for landfill and to construct haulage roads in the mining area. The excess stored in a designated place.

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 monsoon and maintained properly.	complied
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Compliance:

The project proponent has constructed effective garland drains to catch all the storm water during the time of monsoon season. These channels directs the water to the rain water collection pond. All sediments and silts will settle at the bottom of the pond and only cleared water will let out.

45	Effective safeguard measures such as regular water sprinkling shall be carries out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5}, such as haul road, loading an un loading points and transfer points – it shall be ensured that the Ambient Air Quality Parameters confirm to the norm prescribed by the Central Pollution Control Board in this regard.	complied
-----------	--	-----------------

Compliance:

The project proponent is regularly spraying water in critical areas prone to air pollution with the help of vehicle and sprinklers. The project proponent has initiated

steps to install sprinklers in critical areas to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The water spraying has been carried out regularly to arrest the dust emission. The vehicle for water spraying is properly maintained.

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

Compliance:

The project proponent splashes water in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The sprinklers and vehicle for water spraying are properly maintained.

47	Measures should be taken for control of noise levels below 85 dBA in the work environment.	complied
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Compliance:

The main sound generating activities are the playing of jack hammer, breaker, vehicles and blasting operations. The level noise from all these activities will not go beyond 85dBA. The project proponent has taken appropriate action to reduce the sound by employing possible measures. These are mentioned under the condition number 11.

48	A separate Environmental Management Cell with suitable qualified personal should be set up under the control of a senior executive, who will report directly to the Head of the Organization.	complied
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Compliance:

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent constitutes an Environment

Monitoring Cell with Mr. C.G George as the head of the Cell. The decision of each meetings had been recorded.

49	The funds earmarked for environmental protection 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 Environment Impact assessment authority (SEIAA) office.	complied
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Compliance:

The project proponent executes many activities under Corporate Social Responsibility (CSR) for community development. To implement these activities in a good manner, the project proponent has open an account for keeping the funds earmarked for environmental protection and CSR.

50	The Regional Office of 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.	Noted
----	---	--------------

Compliance:

The project proponent can extent all possible cooperation to the officers from regional office of MoEF & CC and can produce all data/information/reports when they are asking for.

51	Any appeal against this 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.	Noted
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There was no appeal against the Environmental Clearance within 30 days after issuing Environmental Clearance.

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 the provisions of Environment (Protection) Act, 1986.	Noted
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All data submitted during the appraisal time was factual and no data were concealed to get Environmental Clearance.

53	The SEIAA may revoke or suspend the order, for non implementation of any of the specific or this implementation of any 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.	Noted
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Compliance:

The project proponent is willing to implement the conditions stipulated in the Environment Clearance order. The project proponent can execute all possible measures in the project site for the conservation of environment.

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

The project proponent gives priority to the conditions stipulated in the Environment clearance Order for its execution.

55	This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Govt. of Kerala, whichever is earlier.	Noted
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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.	Noted
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57	The mining operation shall be restricted to above ground water table and is should not intersect ground water table.	Complied
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Compliance:

The project proponent restricts its mining operations above the ground water table.

58	All vehicle used for transportation and within the mine shall have “PUC” certificate from authorized pollution taking center. Washing of all vehicles shall be inside the lease area.	complied
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Compliance:

As part of reduce air pollution, the project proponent is monitoring the pollution level of all vehicles playing in the project site. This monitoring conducts only in authorized pollution testing center.

59	Project proponent should obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project.	Noted
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Compliance:

At present, the need of prior approval is not necessary to draw ground water and surface water for the project.

60	Regular monitoring of flow rates and water quality upstream and down streams of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported	Noted
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	in the six monthly report to SEIAA.	
--	--	--

Compliance:

There is no stream or springs flowing in and around to the mine lease area.

61	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Complied
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Compliance:

The project proponent has started an occupational health surveillance programme for the labours working in mining area in association with Primary Health center.

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PLATES

Plate No. 1

Board showing blasting time

Plate No. 2

Boundary Pillars

Plate No. 3

Sanitary Latrine and Urinals

Plate No. 4

No Smoking Board

Plate No. 5

Emergency Contact Numbers

Plate No. 6

Warning Alarms

Plate No. 7

Metallic Board

Plate No. 8

Sign Boards

Plate No. 9

First Aid Box

Plate No. 10

Resting Room

Plate No. 11

Access Road

Plate No. 12

Overburden

Plate No. 13

**Mining Area
Plate No. 14**

Eco restoration

Plate No. 15

Fencing
Plate No. 16

Plantation

ANNEXURE

Annexure No.1

Plant purchase bill

Annexure No.2

Certificate of licensed Person

Annexure No.3

Form D

Annexure No.4

Copy of Consent form PCB

Annexure No.5

Copy of Environmental Clearance

Annexure No. 6

Copy of Explosive

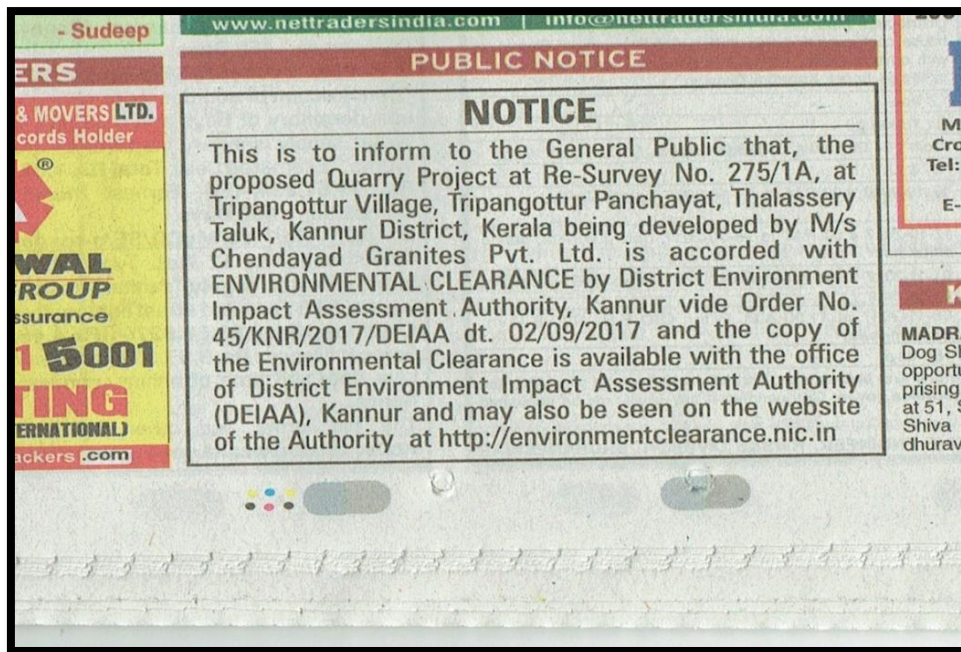
Annexure No. 7

Copy of license from Gram Panchayat

Annexure No.8

Copy of Lease

Annexure No. 9



Advertisement in News papers

Annexure No. 10

Copy of acknowledgement

Annexure No. 11

**TEST REPORT**

Test Report No: 20211211/R011	Date: 15-12-2021	Page 1 of 1
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CUSTOMER DETAILS	
Customer Name & Address	Mr. C.G George Joint Managing Director M/s Chendayad Granites (P) Ltd CP 3C40, KSIDC, Industrial Growth Centre, Mooriyad, Kannur District
Customer Reference	Test Request dt. 11-12-2021

SAMPLE DETAILS			
Product Category	Atmospheric Pollution	Sample Code	20211211/S011
Sample Name	Ambient Air	Sample Received on	12-12-2021
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	12-12-2021
Sampled by	Lab Authorized Sampler	Test Completed on	14-12-2021

DETAILS OF SAMPLING			
Sampling Location	South West Boundary, Poyiloor	Date of Sampling	11-12-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	73%

SAMPLING SITE DETAILS			
Survey No	275/1 A		
Village	Thripangottor	Taluk	Thalassery
District	Kannur	State	Kerala

TEST RESULTS- CHEMICAL PARAMETERS					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards
1	Particulate Matter, PM ₁₀	IS 5182 (Part 23):2006	µg/m ³	49.2	Max 100
2	Particulate Matter, PM _{2.5}	EPA 40 CFR (Part 50) Appendix - L	µg/m ³	20.5	Max 60
3	Sulphur Dioxide as SO ₂	IS 5182 (Part 2): 2001 RA 2017	µg/m ³	< 2.00	Max 80
4	Oxides of Nitrogen as NO ₂	IS 5182 (Part 6): 2006 RA 2017	µg/m ³	< 2.00	Max 80

Remarks:

End of Report

Shency Joy
Dy.TM-Chemical
Checked by:



Laiju P.N.
Laboratory Head
Authorized Signatory

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

Standard^S Environmental & Analytical Laboratories

Approval & Recognition: "A" Grade Laboratory approved by Kerala State Pollution Control Board.
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: sealab@gmail.com

Result of Air

Annexure No.12

**TEST REPORT**

Test Report No: 20211211/R012	Date: 15-12-2021	Page 1 of 1
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CUSTOMER DETAILS	
Customer Name & Address	Mr. C.G George Joint Managing Director M/s Chendayad Granites (P) Ltd CP 3C40, KSIDC, Industrial Growth Centre, Mooriyad, Kannur District
Customer Reference	Test Request dt. 11-12-2021

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	20211211/S012
Sample Name	Ambient Noise	Monitoring Commenced on	11-12-2021/ 06:00
Monitoring Location	North Side Boundary, Poyiloor	Monitoring Completed on	12-12-2021/ 06:00
Test Method	IS 9989:1981 RA:2008	Monitored by	Lab Authorized Sampler

MONITORING SITE DETAILS			
Survey No	275/1 A		
Village	Thripangottor	Taluk	Thalassery
District	Kannur	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	37.8	14:00	50.7	22:00	36.7
07:00	40.6	15:00	51.1	23:00	34.4
08:00	44.9	16:00	52.3	24:00	36.9
09:00	48.4	17:00	52.7	01:00	37.6
10:00	50.7	18:00	47.2	02:00	37.3
11:00	53.8	19:00	43.7	03:00	38.0
12:00	51.1	20:00	39.8	04:00	36.9
13:00	50.3	21:00	39.3	05:00	38.7

TEST RESULTS- CHEMICALPARAMETERS			
Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	49.2
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	37.2

Remarks:

End of Report

Shency Joy
Dy.TM-Chemical
Checked by:



Laiju P.N.
Laboratory Head
Authorized Signatory

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Result of Noise

Annexure No.13

**TEST REPORT**

Test Report No: 20211211/R013	Date: 15-12-2021	Page 1 of 2
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CUSTOMER DETAILS	
Customer Name & Address	Mr. C.G George Joint Managing Director M/s Chendayad Granites (P) Ltd CP 3C40, KSIDC, Industrial Growth Centre, Mooryad, Kannur District
Customer Reference	Test Request dt. 11-12-2021

SAMPLE DETAILS			
Product Category	Water	Sample Code	20211211/S013
Sample Name	Surface Water	Sample Received on	12-12-2021
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	5°C
Sample Quantity& Packing	1L & 250ml Plastic Bottles	Test Commenced on	12-12-2021
Sampled by	Lab Authorized Sampler	Test Completed on	14-12-2021

DETAILS OF SAMPLING			
Sample Source	Stream Water	Date of Sampling	11-12-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	30 °C

SAMPLING SITE DETAILS			
Survey No	275/1 A		
Village	Thripangottor	Taluk	Thalassery
District	Kannur	State	Kerala

TEST RESULTS- CHEMICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
1	Colour	IS 3025 (Part 4):1983 RA 2017	Hazen	1.0	Max 5
2	Odour	IS 3025 (Part 5):2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10):1984 RA 2017	NTU	0.4	Max 1
4	pH	IS 3025 (Part 11):1983 RA 2017	---	6.81	6.50 – 8.50
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	µS/cm	82.0	---
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	53.0	Max 500
7	Total Hardness as CaCO ₃	IS 3025 (Part 21):2009 RA 2019	mg/L	20.0	Max 200
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	4.80	Max 75
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	1.95	Max 30

Shency Joy
Dy.TM-Chemical
Checked by



Salini T.S.
Microbiologist
Authorized Signatory

Laiju P.N.
Laboratory Head
Authorized Signatory

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**TEST REPORT**

Test Report No: 20211211/R013	Date: 15-12-2021	Page 2 of 2
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TEST RESULTS- CHEMICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	9.99	Max 250
11	Total Alkalinity as CaCO ₃	IS 3025 (Part 23):1986 RA 2019	mg/L	18.1	Max 200
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.28	Max 1
13	Sulphate as SO ₄	IS 3025 (Part 24):1986 RA 2019	mg/L	2.18	Max 200

TEST RESULTS - BIOLOGICAL PARAMETERS					
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012
1	Total Coliform Bacteria	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml
2	E coli	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml

Remarks:

End of Report

Shency Joy
Dy.TM-Chemical
Checked by



Salini T.S.
Microbiologist
Authorized Signatory

Laiju P.N.
Laboratory Head
Authorized Signatory

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

Result of Water