COMPLIANCE REPORT

APRIL 2021 – SEPTEMBER 2021

M/S PLANTERS AGGREGATES

(Quarry Project)
ERNAKULAM DISTRICT
KERALA



Dt. 14-12-2021

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 :- 1065/SEIAA/EC3/1912/2016

Sub :- Environment Clearance - Quarry project at Karukutty Village & Panchayath, Alwaye, Ernakulam District, Kerala- Compliance Report - First Half - Reg.

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 4.1885 Ha. by order No. 1065/SEIAA/EC3/1912/2016 dated 22.12.2017 by State Environmental Impact Assessment Authority, Kerala. The compliance report of First half (April 2021 – September 2021) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

For M/s Planters Aggregates

Mr. Saji Vadakkekara

(Proprietor)

Copy to:-The Member Secretary State Environment Impact Assessment Authority (SEIAA), Thiruvananthapuram, Kerala.

Encl: - As Above

Planters Aggregates

Palissery, Angamaly, Ezhattumugham P.O., Ernakulam, Kerala - 683577, Phone: 0484-2439166, 2439167, Mob. 9562141400. E-mail: planters group@yahoo.com

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 1065/SEIAA/EC3/1912/2016

Dated: 22.12.2017

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NO. 168
KARUKUTTY VILLAGE & PANCHAYATH, ALWAYE,
ERNAKULAM DISTRICT, KERALA

BY

M/S PLANTERS AGGREGATES,
ERNAKULAM DISTRICT
KERALA

INDEX

SI. No.	Particulars	Page No.
1.	Introduction	07
2.	Compliance Report – Specific conditions – Part A	08
3.	Compliance Report – General conditions – Part B	10
4	Plate	33
5	Annexure	47

LIST OF TABLES

Table	Particulars	Page No.
No.		
1.	The details of CSR/CER Activities	13
2.	The details of statutory approvals	21
3	The details of newspaper advertisement	24

LIST OF PLATES

Plate	Particulars	Page No.
No.		
1.	Photograph showing fencing for Rain Water Harvesting Pond	34
2.	Photograph of the avenue trees planted along the road side	35
3.	Photograph of solar street light	35
4.	Photograph showing the sprinkler installed in the project site	36
5.	Photograph showing eco restoration	37
6.	Photograph showing Barbed Metal wire fencing	37
7.	Photograph of Sign boards	38
8.	Photograph showing warning alarm installed in the project site	39
9.	Photograph of time showing quarry working time	39
10.	Photographs showing the tarred access road to the project site	40
11.	Photograph showing the stacked overburden / top soil.	40
12.	Photographs showing the miming area	41
13.	. Photograph of blasting mat	41
14.	Photograph of crusher	42
15.	Photograph of workers with personal protective equipments	42
16.	Photograph of Drainage	43
17.	Photograph of de-siltation trap	44
18	Photographs showing the covered trucks	44
19	Photograph of hazardous waste storage area	45
20	Photograph showing the magazine (Explosive storage area)	45
21	Photograph of EC Board	46

LIST OF ANNEXURES

Annexure	Particulars	Page No.
No.		
1.	Permission from DGMS	48
2.	Copy of the receipts of expenses incurred towards CSR activities	50
3.	Certificate of Licensed persons	55
4.	Copy of consent to operate from SPCB	60
5.	Copy of EC order	62
6.	Copy of Explosive License issued by the Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)	80
7.	Copy of License for quarry operations from Panchayath	81
8.	Copy of lease order from Dept. Mining and Geology.	82
9.	Newspaper advertisement	84
10.	Copy of monitoring report of noise level	85
11.	Copy of monitoring report of ambient air	86
12.	Copy of monitoring report of water	87
13.	Proof of compliance report submitted	93
14.	Affidavit	94
15.	PUC of vehicles	95
16.	Health check up	98
17.	Purchasing bill of blasting mat	100

INTRODUCTION

The quarry project of M/s Planters Aggregates is situated at Survey No. 168 at Karukutty Village & Panchayath, Alwaye, Ernakulam District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority on 22.12.2017. 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 First half to the specific conditions and general conditions of the Environmental Clearance order for the period of April 2021 – September 2021 is being submitted.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	The Mandatory distance between the existing and the proposed	Noted
	quarry should be maintained.	

Compliance:

The project proponent has obtained permission under Regulation 111(1) of Metalliferous mines Regulations, 1961 to change the mine boundary by extending the mine limits or work on the common boundaries of two quarries from Director General of Mines Safety (DGMS). The copy of Permission is attached as **Annexure No.1**. As per this permission, it is not necessary to maintain the distance between the existing and the proposed quarry.

02	If any plant species endemic to western Ghats are notice in the	Noted
	area they shall be properly protected in situ or by transplanting	
	to an appropriate location inside the lease area.	

Compliance:

The project proponent had conducted a bio diversity study and submitted the report at State Environmental Impact Assessment Authority (SEIAA), Kerala. The identified species of endemic to Western Ghats will be properly protected. The project proponent has planted various saplings in the project site. There are many trees are existing in and around the project site as green belt.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART - B - GENERAL CONDITIONS

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

Compliance:

Even though it is not specified in KMBER/KPBR to collect rain water in mining area, the proponent has developed rain water harvesting pond in the project site to collect rain water falling in the entire mining area. The storm water from all mining areas is properly channelized to this pond. It is situated in the lowest level of quarry area. The rain water is used for irrigation purposes, watering of plants, wetting of roads and for dust suppression system (mainly sprinklers system). The photographs of the ponds are attached as **Plate No.1.** The dimension of each rai water harvesting pond is mentioned below as L x W x D

Pond 1

 $45 \text{ Mtr} \times 60 \text{ Mtr} \times 5 \text{ Mtr}$

Pond 2

40 Mtr × 50 Mtr ×5 Mtr

Pond 3

 $40 \text{ Mtr} \times 150 \text{ Mtr} \times 5 \text{ Mtr}$

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

Compliance:

The Environmental Monitoring Cell (EMC) formed and made functional with Mr. Saji Vadakkekara as head of the monitoring cell. The EMC meeting arranges regularly for a sustainable environment.

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

Green belt is an important component in the mining sector. To reduce air and noise pollution, the project proponent has planted suitabale avenue trees along either side of the road. There is also natural vegetation including trees, shrubs and climbers are presents in the project area. The photograph of avenue trees is attached as **Plate No.2.**

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

Compliance:

As part of energy conservation, the project proponent has installed solar street lights in the project site to generate and utilize maximum renewable energy. The project proponent has installed 8 numbers of solar street lights. The photograph of the same is attached as **Plate No.3**.

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

Compliance:

The project proponent 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. To prevent dust emission 20 permanent sprinklers are installed in the project site. The photograph of the permanent sprinklers and vehicle for wetting is attached as **Plate No.4.**

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

Compliance:

As part of eco restoration, the project proponent has started to plant various saplings within the project area. The project proponent has planted about 100 tree saplings in connection with the instant project. The photograph of the same is attached

as **Plate No.5.** 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	Will	be
	retained as water storage areas and the remaining area should be	comp	lied
	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.		

Compliance:

The project proponent will retain 10 percent of total excavated pit as rain water storage area. The remaining area will be reclaimed with stacked dumping of overburden and top soil. As part of its eco – restoration plan, the project will plant indigenous plant species that are eco – friendly on the reclaimed area.

08	3	Corporate	Social	Responsibility	(CSR)	agreed	upon	by	the	Complied
		proponent	should	be implemented	-					

Compliance:

The project has carried out many activities under Corporate Social Responsibility (CSR)/ Corporate Environmental Responsibility (CER). The detail of CSR provided in the period is mentioned in the **Table No.1**. The receipts area attached as **Annexure No. 2**.

Sectors	Activities	Beneficiaries	Amount spent in Rs.
Health	Medical Aid	Babu	10000
	Medical Aid	We one pain & palliative care	500
	Medical Aid	Joy K A	3000
	Medical Aid	Tomy K T	2000
Medical Aid Jinu joh		Jinu john	3000
	Medical Aid	Gopalakrishnan	500

Table No.1 - CSR/CER Details

	Medical Aid	Muthiparamnil Mohanan	4000
	Medical Aid	Ravi K T	500
Infrastructure	House Maintenance	Subhramaniuan	11250
Development			
	House Maintenance	Jese veetika	6400
	House Maintenance	Soji Kotturan	4500
	House Maintenance	Gracy thomas	7500
	House Maintenance	Varghese P A	3300
	House Maintenance	Wilson	3750
	House Maintenance	Satheesh m k	4200
	House Maintenance	manesh	1000
	House Maintenance	Antu	1900
	House Maintenance	Delson poulose	7500
	House Maintenance	Anandhu subhran	3200
	House Maintenance	Dileep kumar	4200
Social welfare	Donation	Kerala cultural center	3000
	Donation	Immanuel Orphanage	89700
	Donation	Kerala pulayan maha sabha	2000
	Donation	Syamala ayappan	2000
	Donation	salgu	7500
	Donation	AITCU	500
	Donation	Kanivu charitable trust	6600
Education	Donation	Educational Service Society Of India	2000
		mala	
Skill	Donation	SNDP Library PAllissery	33000
Development			
	Total		228500

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

To demarcate the lease area, the project proponent has installed fencing with a height of 4 ft. around major part of the project site where Environmental Clearance and lease obtained before the starting of mining. All the boundary indicators are protected at all times and clearly visible at any time in a notificable way. The photograph of the fencing with barbed wire metals is attached as **Plate No.6**. The various sign boards can be seen in **Plate No.7**.

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

Compliance:

To comply condition stipulated by Explosive department and Environmental clearance order, the project proponent has installed warning alarms(siren) in the quarry site. The blasting timings are displayed in the prominent area by way of caution board. The photograph of the warning alarm is provided in **Plate No.8**.

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

Compliance:

To reduce noise level in the project site, the project proponent has implemented mitigate measures. 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:-

➤ The machineries like breaker and excavator has well sound proof cabin so that the machine operators can work without stress due to the sound.

- Proper maintenance of machinery and equipments
- > Personal protective devices i.e., earmuffs, ear plugs etc. are provided to workers working in high noise areas.
- The mining activity held in day time only.

Blast vibrations and control measures

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

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

Compliance:

To reduce the adverse impact of the quarry to the local community, quarrying activities are limited to day time only as per KSPCB guidelines. The photograph of board indicating the time of quarrying operation is attached as **Plate No.9**.

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

Compliance:

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

14	Α	licensed	person	should	supervise/control	the	blasting	complied	
	ор	erations.							

The project proponent has appointed licensed person in the site to supervise/control exploitation of minor minerals including blasting at the project site. The copy of certificates of licensed person is attached as **Annexure No.3**.

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

Compliance:

To contain dust emissions and for the trouble free transportation of materials, the project proponent has maintaining the access road to the quarry site. The project proponent splashes water on the road to arrest the dust production during summer season. The project proponent is regularly maintaining the access road in a good manner. The photograph of the access road is attached as **Plate No.10.** The access road has sufficient width of 7 to 8 meters and tarred about 200 meters length.

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

Compliance:

Overburden is an inevitable byproduct of building stone quarry. There is no old quarry in the site for restoration. The overburden materials are stored within the site at designated place. This will be used to restore the exploited area in future. The OB dump is attached as **Plate No.11.**

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

Compliance:

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. The photograph of the same is attached as **Plate No.12.**

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

Compliance:

The project proponent is using Nonel delay detonators for blasting therefore there is no incident of fly rock falling beyond 100 metres. The mat is using during blasting time to prevent fly rock. The correct quantity of explosive is used under the supervision of qualifies person. The photograph of the same is attached as **Plate No.13.** The bill copy if blasting mat is attached as **Annexure No. 17**

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

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. The instant project has started its mining activity in 2020.

20	No mining oper	rations should be carried out at places having a	Noted
	slope greater	than 45 ⁰ .	

Compliance:

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

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

To reduce the impact of sound to the labours in the unit, the project proponent ahs provided ear plugs. Vegetation around the mining area will help to reduce noise and air pollution. This helps the noise level kept within prescribed standards. The project proponent is trying to enhance the vegetative cover by planting more tree saplings. The photograph of the crusher unit is attached as **Plate No.14.**

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

Compliance:

The project proponent has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear muffs, safety belts, glows, etc. to ensure the safety of workers in working site. The workers with PPE are attached as **Plate No.15.**

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

Compliance:

The project proponent ensures that all storm water from the mining area is flowing in to the pond creating at mining area. The project proponent has constructed good drainages where it is necessary in the lower slopes of the project area for storm water management. The photograph of drainage is provided in **Plate No.16** and clarifiers in **Plate No.17**.

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

Compliance:

To avoid dust emission from the vehicle while transportation of materials the project proponent assure that the trucks are covered before leaving the site. The photograph of the same is attached as **Plate No. 18.**

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

The project proponent has started to plant various saplings in the project area as a compensation of loss of trees while the project is clearing the land for mining. The number of uprooted trees in the instant project is 90 and the number of planted tree saplings and floral species is 250. The project proponent is planning to plant more tree saplings in the project site.

2	26	Disposal of spent oil from diesel engines should be as specified	Complied
		under relevant Rules/Regulations.	

Compliance:

The used oil and oil filters are taken back by the supplier of oil. Therefore the project proponent needs not to keep the spent oil even for one day. The photograph of the same is attached as **Plate No.19.**

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

Compliance:

As part of safety, Explosives are stored in magazine. The magazine situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine was fenced with barbed metal wire. The photograph of the same is attached as **Plate No. 20.**

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

To keep a safe zone to the residents, community resource and public infrastructure, the norms of Kerala State Pollution Control Board regarding the distance criteria of houses, roads, rivers and worship places is adhered by the project. The distance of the nearest house is above 142 meter form the quarry, the KSPCB condition is 50 meter.

2	9	100	m	buffer	distance	should	be	maintained	from	forest	Noted
		bour	ndaı	ries.							

Compliance:

There is no forest near to the project site. The nearest forest is Sholayar Reserve Forest which is 8.50 km away from the project site.

3	0	Consent from Kerala Pollution Control Board under Water and	Complied
		Air Act(s) should have been obtained before initiating activity.	

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	Complied
	applicable, by project proponents from the respective competent	
	authorities including that for blasting and storage of explosives.	

Compliance:

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

TABLE 2 – APPROVALS FROM COMPETENT AUTHORITIES

Name of the Statutory approval	Name of the Statutory authority			
Environmental Clearance order	State	Environmental	Impact	Assessment
Valid up to 21-12-2022	Author	ity, Kerala		

"Consent to Operate" (Renewal)	Kerala State Pollution Control Board
Valid up to 31-03-2024	
Explosive License	Ministry of Commerce & Industry – Petroleum
Valid up to 31-03-2026	& Explosives Safety Organization (PESO)
License for quarry operations	Gram Panchayath
Valid up to 30-06-2023	
Lease order	Directorate of Mining and Geology
05-11-2031	

32	In the case of any change(s) in the scope of the project, extent	Noted
	quantity, process of mining technology involved or in any way	
	affecting the environemental 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.	

At present the project is running as per plan submitted in Environmental Impact Assessment Authority, Govt. of India and approved mining plan. There is no change in the scope of the project. The project will seek for a new Environmental clearance in the case of any change(s) in the scope of the project.

33	The Authority reserves the right to add additional safe guard	Noted
	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.	

Compliance:

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

The stipulations by Statutory Authorities under different Acts and Noted 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.

Compliance:

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

- > Kerala Minor Mineral Concession Rules, 2015.
- > Mines Act, 1952
- > Explosive Rules, 2008
- > Kerala Panchayat Raj Act, 1994
- > Water Pollution (Prevention & Control) Act, 1974
- > Air Pollution (Prevention & Control) Act, 1981
- > Environment Protection Act, 1986
- > EIA Notification, 2006 / 2009
- ➤ The Kerala Promotion of Tree Growth in Non-Forest Areas (Amendment) Act, 2007.
- 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.

An advertisement in two local daily newspapers (English and Malayalam) regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. The copy of the news paper advertisement is attached as **Annexure No.9**. The detail of the same is provided below in the table.

TABLE 3 – Newspaper Advertisement

Name of News paper	Language	Published date
Deccan chronicle	English	09-01-2018
Mangalam	Malayalam	09-01-2018

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

Compliance:

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

37	The proponent shall submit six monthly reports on the status of	complied
	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.

Compliance:

The compliance report is being submitted to the State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore both in hard copy as well as mail. The monitored data of Air, Water and Noise is attached as **Annexure No. 10, 11 & 12.** The proof of submission of last compliance report is attached as **Annexure No. 13.**

38	The details of Environmental Clearance should be prominently	Complied
	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	
	shall be depicted at the entrance of the quarry, visible to the	
	public.	

Compliance:

The details of Environmental Clearance are prominently displayed in a metallic board of 3 ft x 3ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extant of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public. The photograph of the EC board is attached as **Plate No.21**.

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

Compliance:

An assurance in the form of affidavit was already submitted to SEIAA Kerala. The copy of affidavit Submitted at SEIAA is attached as **Annexure No. 14.**

40	No change in mining technology and scope of working should be	Noted
	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.	

At present, the project proponent is not intending to expand the area of mine, technology and scope of working. The project proponent will appear 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	Noted
	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.	

Compliance:

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

42	Monitoring of Ambient air Quality to be carried out based on the	Complied
	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.	

Compliance:

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

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 rehabilitated areas should continue until the vegetation becomes self-sustaining.

Complied

Compliance:

The natural resources ie, top soil and overburden is stacked in a designated place within the project site. Only topsoil is used for plantation. Overburden will be used for landfill and to construct haulage roads in the mining area. The excess will be stored in a designated place as per the direction of State Environment Impact Assessment Authority (SEIAA).

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

Compliance:

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

45 Effective safeguard measures such as regular water sprinkling of 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 will increase the number of sprinklers in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points.

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.

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

Compliance:

The noise level from all these activities will not go beyond 85dBA. The main sound generating activities are the operation of jack hammer, breaker, vehicles and blasting. 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 Complied	i
	qualified personal should be set up under the control of a senior	
	executive, who will report directly to the Head of the	
	Organization.	

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent has constituted an Environment Monitoring Cell.

49	The funds earmarked for environmental protection and CSR	complied
	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.	

Compliance:

The project proponent could execute many activities under Corporate Social Responsibility (CSR) for community development. To implement these activities in a good manner, the project proponent has opened an account for keeping the funds earmarked for environmental protection and CSR. The amount spent under CSR is being reported through compliance report

50	The Regional Office of MoEF &CC located at Bangalore shall	Noted
	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.	

Compliance:

The project proponent will extent all possible cooperation to the officers form 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	Noted
	National Green Tribunal, if preferred within a period of 30 days as	
	prescribed under section 16 of the National Green tribunal Act, 2010.	

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.			

53	The	SEIAA	may	revoke	or	suspend	the	order,	for	non	Noted
	imple	ementatio	on of a	ny of the	spe	cific or this	s impl	ementat	ion o	f any	
	of a	ny of th	e abo	ve condi	tions	s is not s	atisfa	ctory. T	he S	EIAA	
	reser	ves the	right to	alter/mo	odify	the above	cond	litions o	r stip	ulate	
	any f	urther co	onditio	n in the i	ntere	est of envir	onme	nt protec	ction.		

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

54	The above conditions shall prevail not withstanding anything to	Noted
	the contrary, in consistent, or simplified, contained in any other	
	permit, license on consent given by any other authority for the	
	same project.	

Compliance:

The project proponent will give 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.			

56	The environmental clearance will be subject to the final order of	Noted
	the courts in any pending litigation related to the land or project,	
	in any court of law.	

5	57	The mining operation shall be restricted to above ground water	Noted
		table and is should not intersect ground water table.	

The project proponent will restrict its mining operations above the ground water table. The mining activity is started in 2020 back in the instant project site.

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

Compliance:

As part of reduce air pollution, the project proponent has been monitoring the pollution level of all vehicles playing in the project site. This monitoring is being conducted only in authorized pollution checking center. The copy of PUC certificate is attached as **Annexure No. 15.**

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.					

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	Noted
	down streams of the springs and perennial nallahs flowing in and	

around the mine lease area shall be carried out and reported in the six monthly report to SEIAA.

Compliance:

There is no stream or springs flowing in and around to the mine lease area. The project proponent will install de siltation trap and other mechanism to prevent sediments and wastes from the mining area to the public drainage system.

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

Compliance:

The project proponent has conducted occupational health surveillance program for the labours working in mining area, the details of labours is attached as **Annexure No. 16.**

PLATES

(Photographs of project)

Plate No.1





Rain Water Harvesting Pond

Plate No. 2



Avenue Trees Plate No. 3



Solar

Plate No.4



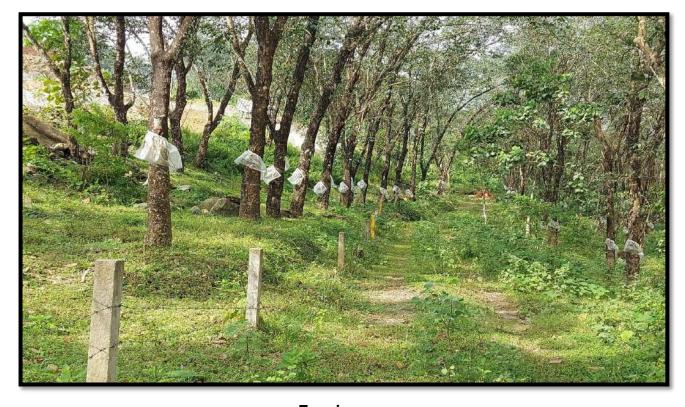


Sprinkler

Plate No.5



Eco restoration
Plate No.6



Fencing

Plate No.7





Signboard

Plate No.8



Warning Alarm
Plate No.9



Quarry working time

Plate No.10



Tarred Road Plate No.11



Overburden

Plate No.12



Mining area Plate No.13



Blasting mat

Plate No.14



Crusher
Plate No.15



Labors with PPE

Plate No. 16





Drainage

Plate No. 17



Clarifiers
Plate No. 18



Covered Truck

Plate No.19

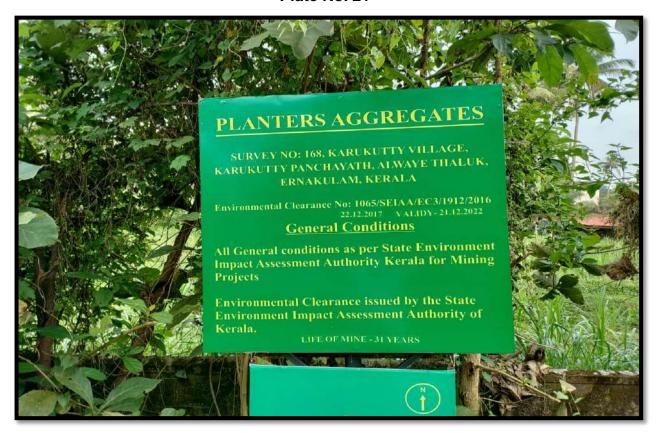


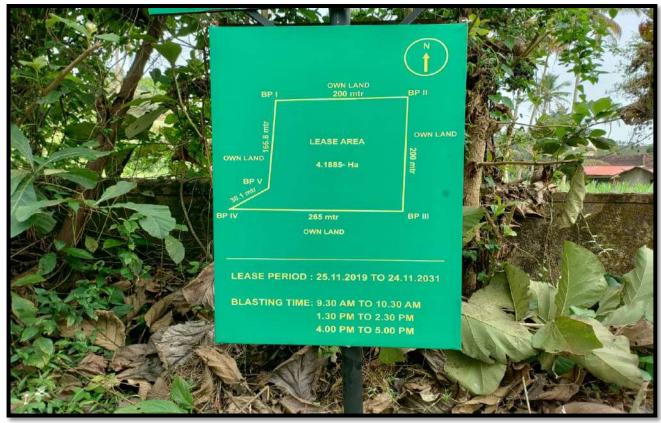
Hazardous Waste storage area Plate No. 20



Magazine

Plate No. 21





EC Board

ANNEXURE

3/28/2020

Email

Email Letter

Letter No 301468|SZ|Bengaluru Region|Perm|2020|6541|PLCommon_MMR1961|2



भारत सरकार Govt. of India श्रम एवं रोजगार मंत्रालय Ministry of Labour & Employment स्माज सुरक्षा महाजिदेशालय Directorate-General of Mines Safety



NO: 301468|SZ|Bengaluru Region|Perm|2020|6541

Date: 28/09/2020

From: The Director of Mines Safety,

Bengaluru Region,

DGMS, SZ, Bengaluru-560071.

To:

Shri Saji Vadakkekara

Owner: Planters Mine,

M/s Planters Aggregates,

Palissery, Angamaly,

Ezhattumugham PO, Ernakulam,

Kerala-683 577.

Subject: Permission under Regulation 111(1) of the Metalliferous Mines Regulations, 1961 to change the mine boundary by extending the mine limits of Planters Mine of M/s Planters Aggregates (Owner: Sri Saji Vadakkekara), Re. Sy. No. 168 (Re. Sy. Block No.1) of Karukutty Village, Aluva Taluk, Ernakulam District, Kerala State.

Sir,

Please refer to your Online application reference no. ID No.129384 dated 30.08.2020, letter no. Nil dated 28.08.2020, enclosing therewith a surface Plan No. PA/EMB/SPS/07-2020 dated 30.07.2020, Plan No. PA/PMB/SP/07-2020 dated 30.07.2020 on the above subject.

approval-permission-dgms.gov.in/PermissionExemptionRelaxation/PEREmailCorrespondence/Draft?q=haFFORI9cs7T%2fqG57XRuyw%3d%3d

1/2

/28/2020

Email

The matter has since been examined on the basis of the information furnished and plans & sections submitted by you. By virtue of the powers conferred on the Chief Inspector of Mines (also designated as Director General of Mines Safety) under the provisions of Regulation 111(1) of the Metalliferous Mines Regulations, 1961 and by virtue of the authorization granted to me by the Chief Inspector of Mines (also designated as Director-General of Mines Safety) under Section 6(1) of the Mines Act, 1952, you are hereby permitted to change the mine boundary of Planters Mine of M/s Planters Aggregates(Owner: Sri Saji Vadakkekara), by amalgamating the areas bounded by "P1 to P2, P2 to P3, P3 to P4, P4 to P5, P5 to P6, P6 to P7, P7 to P8, P8 to P9, P9 to P10, P10 to P11, P11 to P12, P12 to P13 P13 to P14, P14 to P15, P15 to P16, P16 to P1" as shown on Plan No. PA/NMB/SP/07-2020 dated 30.07.2020 in Survey number Re. Sy. No. 168 (Re. Sy. Block No.1) (lease Proc.No.660/2010-11/9439/M3/2010 Dated 03.01.2011 & Pro.No.450/2019-20/10951/M3/2018/DMG dated 06.11.2019) at Planters Mine of M/s Planters Aggregates(Owner: Sri Saji Vadakkekara), Sy. No. 168 of Karukutty Village, Aluva Taluk, Ernakulam District, Kerala State, subject to the following conditions being strictly complied:

1. The re-adjusted boundary shall be shown on all the statutory plans. As required under Regulation 3, a plan showing the new boundary shall be submitted within seven days of the said change to the Director-General of Mines Safety and the concerned Director of Mines Safety. The Plan shall also show the statutory barrier on all sides of the boundary, in green hatched lines, as per Regulation 111(2) of the Metalliferous Mines Regulations, 1961.

This permission is being issued especially under the Regulations mentioned above and without prejudice to any other provisions of law which may be or may become applicable at any time.

3. All the permissions/exemptions/relaxations granted in the past under various regulations of the Metalliferous Mines Regulations, 1961 and the Mines Rules, 1955, at the above mine shall also be valid for the new area granted under this permission.

4. This Directorate shall be informed as soon as the mining operations are commenced in accordance with the above permission and intimation about completion of mining operations should also be sent promptly and in any case not later than one month thereof.

- 5. In the event of any change in circumstances connected with the permission is likely to endanger life of the workmen employed in the mine or endanger the mine, the mining operation for which permission has been granted shall be stopped forthwith and intimation thereof sent to the concerned Director of Mines Safety and Dy. Director of Mines Safety. The said mining operations shall not be resumed without fresh written permission from this Directorate.
- If at any time anyone of the conditions subject to which this permission has been granted is violated or not complied with, this permission shall be deemed to have been revoked with immediate effect.
- 7. Above permission may be amended or withdrawn at any time if considered necessary, in the interest of safety.
- A hard copy of this permission shall always be kept in the office of the Manager of the mine for reference.

Your Faithfully

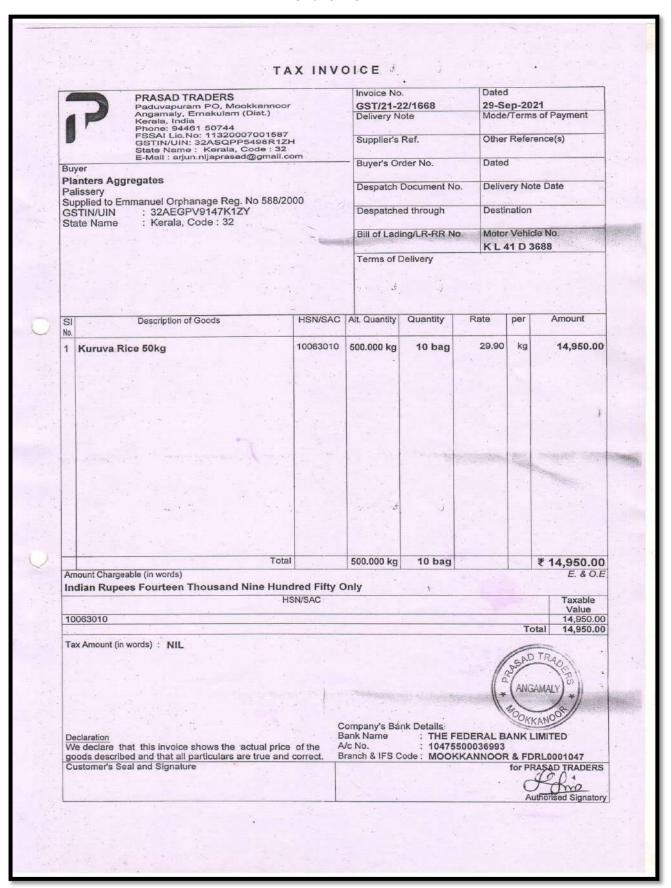
UMESH MADHUKAR RAO SAWAKAR (DIRECTOR(ACTING) - BENGALURU REGION)

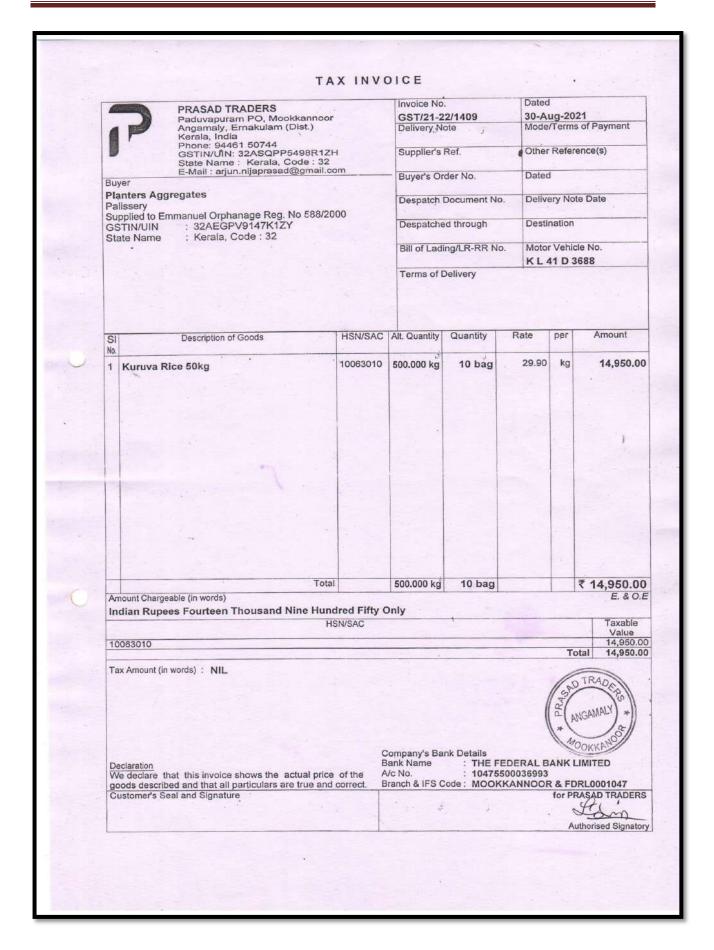
THIS IS A SYSTEM GENERATED DOCUMENT, DOES NOT REQUIRE ANY SIGNATURE.

approval-permission-dgms.gov.in/PermissionExemptionRelaxation/PEREmailCorrespondence/Draft?q=haFFORI9cs7T%2fqG57XRuyw%3d%3d

2/2

Permission from DGMS



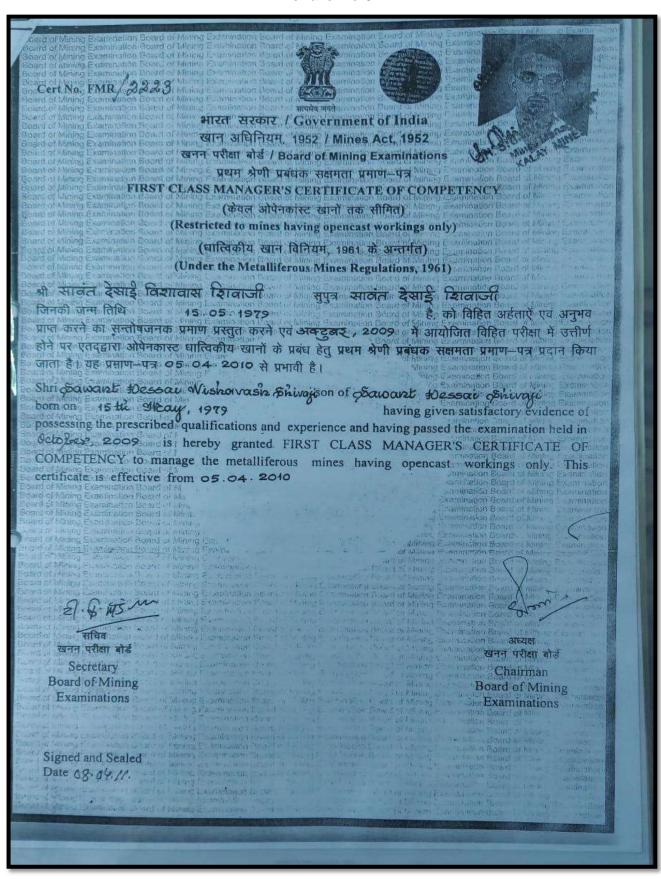


orond Blend & mod. D. D. ones amis of s. wish will am some amo. wood will and Brankows cons) wasent che con leng wood m)moo Ro- 4200/- (com michol nomo) or oumn's) Delegase on Dronom 2 cm Bamo orono We of my Bial of Balsing 9mf B1212 8010. D.D. no selever) 06/05/202) Ph-8943243403 oround Common, woo would, Queso as note, sommon m mind ormo. ~ Dong of one on and on of 5 vous) when wind (mo frong wind m) moo Ro- 32001- (200 i) Anialromo 200m of obel 29 moon ond oos Bland we em Dano orond Wz ozmy BID 998 A(8) 2) Zmb' nomi Chommo, neeloss). 80000 020 _ wiellegol. 03 05 2021 Phone - 8943501814

	orosond orand word 23600m, as sound most,
0	3000 8 mm moral armo. Som mal all amp roll of 1000000
	mom 6 nows) ~ Josep AM (mod) Engradad in mos.
	100 m 6 nows) march 4 m (mod 6 not wood on more. Rs - 75001 - (m 2) maser al no mod (mooning in) Mes 20 mg.
	oragino mont mem som som was em
	13 12 20 00 2 2 3 Dag on 6"
	Dung.
0	0,580,000
	P120(E% 18)
	22/04/2021.
	Phone - 9048054703

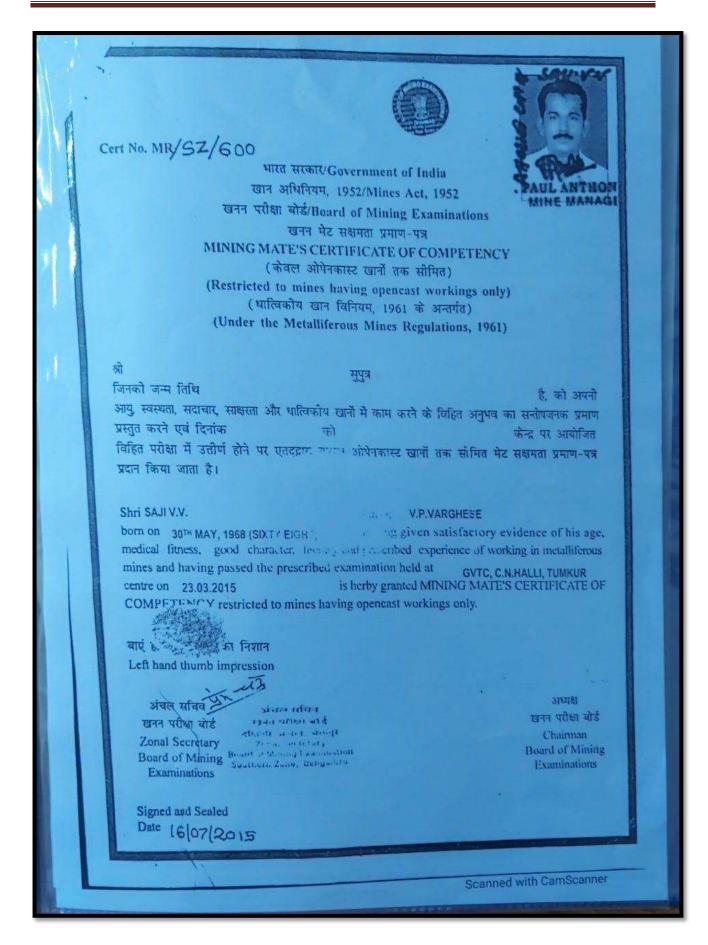
	EDAL	A CULTU	IDAL CE	NTRE	1
KE KE	ULTURAL (Registers	Registration No. KTM CO.: Peruva P. O., Pi	entific and Charitable S M/TC/278/2019 n-686610, Kerala	Date: 19/04/2	1
THE REPORT OF THE PERSON NAMED IN	RUVA-686 610	rom Plants	en) 94 Ag	erigete/s a sum	 of
rupees		1	only.		

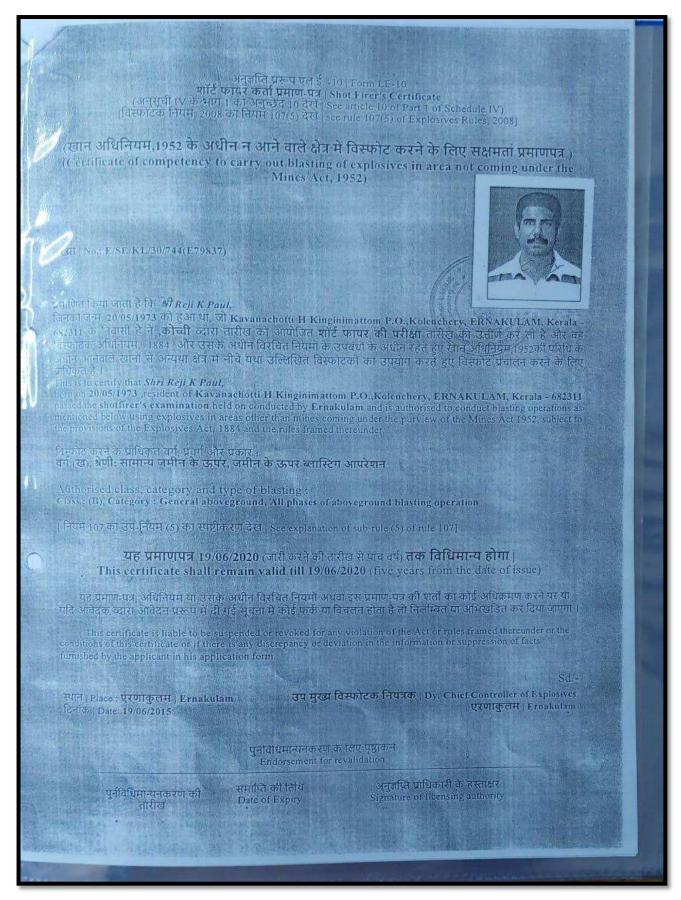
Copy of receipts of CSR/CER



100		
10.7		
	A Comprehensive Company of the Compa	
The A		
The section		
711		
	COVERNMENT	
*	DIRECTORATE GENERAL OF LABOUR	
	DIRECTORATE GENERAL OF MINRS SAFETY DHANBAD	
	No. Exam/Exempt/FM/UR/756 167 Date - 10 11 0 2	
10.00	ori Adil Pache	
	B.G.M.L. Contract Work MRMORANDUM	
8	PO. Loudoha	
	Distt. Burdwan Ref.: His application dated 26.8.93	
	application dated (0.8.9)	
1-8	By virtue of c-	
	By virtue of Government Notification No. 712(E)	
	Adil Pasha	
	S/O Abdul Rahaman of Village Doddu Vallag Madi	
	Thana Corearum	
	State Warmetele	
	Born on 1st September 1964	
	possessing a Diploma in Mining Engineering and Mine Surveying	-11
	approved under Regulations 18 of MMR 1961, and on completion	3
	of prescribed experience	
	of prescribed experience has become eligible to work in a	
	possession of Forements G-118.	
0	Mes Regulations 1961 mbs - a	
	remains in forme	
	remains in force.	
3.		
0 9		2
	to have	
	Board of Marie tary, 11 1153	
	Board of Mining Examinations & Director of Mines Safety(Exam)	
3	, and	4:
	18/01/06 MM	
19 4,5	(Director of Mines Safety, Chennal Region.	
	Vand cymo, 26/2/200	_
	Ancl.: 1. Matric Cert. 2. Diploma Cert.	>
	J. ROLL (March 1 M. Com. C	
	5. Medical & Character Ck.	
	Market Barrier Committee C	







Copy of certificates of licensed persons





KERALA STATE POLLUTION CONTROL BOARD

FILE NO.: PCB/EKM/DO-1/OA-405/15

Date of issue :23/02/2019

INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No: R15ERRCTOR955373

Ref: 1. CONSENT NO: R15ERRCTOA964516 dated 10.4.2015 2. Consent No: R15ERRCTO955373 dated: 06/03/2016

The 'Integrated Consent to Operate' issued as per reference above to M/s PLANTERS AGGREGATES, PALISSERY, EZHATTUMUGHAM.P.O, ANKAMALY, ERNAKULAM - 683577 is hereby renewed up to 21/12/2022 and issued to M/s PLANTERS AGGREGATES, PALISSERY, EZHATTUMUGHAM.P.O, ANKAMALY, ERNAKULAM - 683577 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	Survey no.	168
2	Category	RED
3	Validity	21.12.2022

II. Stack Details

Stack No.	Source of	Emission	Stack Hei	ght above	Control
	Emission Rate(Ni	Rate(Nm3/Hr)	Ground Level(In Meters)	Roof Level(In Meters)	Equipment

III. CONDITIONS

- 3.1 The consent issued will be valid only for a period, during the period when all other statutory or necessary clearances from other concerned authorities valid.
- 3.2 The consent issued from the board is only with respect to the powers vested under the water Act 1974 Air Act 1981 and The Rules there under. The operation of the quarry shall be commenced only after obtaining clearances from all concerned Authorities.

Page1

- 3.3 There shall not be any quarrying activity between 6 pm to 6 am
- Mining activities shall be done only in the area marked by Mining & Geology. 3.4
- 3.5 The PM10 in ambient air at the boundary shall not exceed 100 microgram/m3
- The PM 2.5 in ambient air at the boundary shall not exceed 60 microgram/m3 3.6
- 3.7 The sound level (Leq) at 1 m outside the boundary of the site should not exceed the ambient noise Standard applicable to the adjoining areas.
- Conditions given in the Environmental clearance shall be strictly complied with. 3.9 Mining shall be done only in the marked area in the mining plan attached with EC.

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

MINI MARY SAM Date: 2019.02.25 10:34:04 +05'30'

Digitally signed by MINI MARY

DATE: 23/02/2019

SIGNATURE & SEAL OF ISSUING AUTHORITY **Environmental Engineer**



SAJI VADAKKEKARA, VADAKKEKARA HOUSE, MANGATTOOR, KOLENCHERY.P.O, ERNAKULAM - 682311

- 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.

Copy of consent from PCB



Validity expires on 21.12.2022

Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: SEIAA- Environmental Clearance for the Stone quarry project in Survey No. 168, Karukutty Village, Karukutty Grama Panchayat, Alwaye Taluk, Ernakulam District, Kerala State by Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates - Granted - Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No. 1065//SEIAA/EC3/1912/2016

Dated, Thiruvananthapuram 22.12.2017

- Ref. 1. Application dated.17,12.2015 from Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577
 - 2. Minutes of the 69th meeting of SEAC held on 9th & 10th March 2017
 - 3. Minutes of the 73rd meeting of SEAC held on 30th & 31st May 2017
 - 4. Minutes of the 71st meeting of SEIAA held on 20.07.2017
 - 5. Minutes of the 74th meeting of SEIAA held on 09th October 2017
 - 6 Minutes of 76th meeting of SEIAA held on 16th November 2017
 - 7. Affidavit dt.30.11,2017 received from Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates

ENVIRONMENTAL CLEARANCE NO.102/2017

Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577, vide his application dated 17.12.2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 168, Karukutty Village, Karukutty Grama Panchayat, Alwaye Taluk, Ernakulam District, Kerala State for an area of 4.1885 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II(M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per Notification No.S.O.141 (E)

Page 1 of 15

dt.15.01.2016 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Details of the project as furnished by the applicant are as follows;

BASIC INFORMATION OF QUARRY (To be filled in by the Project Proponent)

PART A

-174		I. Project details
	File No.	1065 / EC3 / 2016 / SEIAA
2.	Name /Title of the project	Environment Clearance for Building Stone Quarry (Minor Mineral) project of M/s Planters Aggregates
3.	Name and address of project proponent.	Mr. SAJI VADAKKEKARA (Applicant & Proprietor), M/s PLANTERS AGGREGATES, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683577
4.	Owner of the land	The land for the proposed quarry is a private owned land and the land is possessed in the name of M/s Planters Aggregates.
5.	Survey No. District/Taluk/ and Village etc.	Survey No. 168, Karukutty Village, Alwaye Taluk, Ernakulam District, Kerala
6.	Details of period of lease or permit with number including the beginning and expiry date of lease /permit period (Copy to be attached)	The proposed project proposal is for an area of 4.1885 ha. [with mine lease (P. O. No. 717/2005-2006/2017/M3/2006) valid up to April, 2018] out of the total area of 16.80 ha. But there was no quarrying operation carried out in the said land.
7.	Present Status of the project. a. Date & Year of starting the work of the quarry project. b. whether the quarry is working at present or not? c. If stopped working since when?	The proposed project proposal is for an area of 4.1885 ha. [with mine lease (P. O. No. 717/2005-2006/2017/M3/2006) valid up to April, 2018] out of the total area of 16.80 ha. But there was no quarrying operation carried out in the said land.
8.	Date of	17/12/2015
9	Brief description	The land for the proposed quarry is a private owned land and the land is possessed in the name of M/s Planters Aggregates. The targete

Page 2 of 15

	Details of Authorized	production of mine will be 1,00,000 MTA. The estimated project cost will be Rs. 8 Crores. The expected life of mine estimated will be of about 31 years. The mining operation will be carried out by opencast semi-mechanized method as per approved Mining Plan. Mr. SAJI VADAKKEKARA (Applicant & Proprietor),
10	Signatory and address for correspondence	M/s PLANTERS AGGREGATES, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683577
		Land Details
11	C)Extent of area in hectares	4.1885 hectares
12	d)Is the property forest land/ Govt. land / own land/patta land	The land for the proposed quarry is a private owned land.
13	e)Quantity of top soil/over burden produced and managed	A total quantity of 93,543 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped / stacked separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation as part of eco-restoration. About 17,452 cu. m of overburden (OB) will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation.
14	f)Latitude and Longitude	Lafitude (N) 10°16'27.60" to 10°16'35.21" Longitude (E) 76°24'59.17" to 76°25'08.73"
15	g/Topography of land and elevation	Part of the proposed land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. The highest elevation of the lease area is 115 m MSL and lowest is 65 m MSL
16	h)Slope analysis	Slope of the lease area is towards North side.
17	i)Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	Due care will be taken to provide channel all around the foot of hill to collect run off and also to avoid soil erosion. There is no danger of flood or inundation as the proposed working is above the normal ground level. The area is not susceptible to flood.
18	j)Access road to the site width and condition	7m wide tarred road.
19	impact on the	No, the land used will be fully reclaimed and rehabilitated by backfilling the pits and plantation and pond. Plantation and afforestation will add to the improvement in environment and aesthetic beauty of the area.

Page 3 of 15

	proposal site	
_1		Mining details
20	I)Minimum and Maximum height of excavation.	The exploitation of mineral is being done from 115 m to 55m MSL in conceptual phase.
21	Life of mine proposed.	About 31 years.
22	Underground mining if any proposed	No underground mining proposed.
23	Method of Mining	The working will be carried out by opencast semi-mechanized method as per the approved Mining Plan
24	Distance from the adjacent quarry	There is one quarry of Mr. Saji Vadakkekkara (M/s Planters Aggregates) in operation within 500m radius which is accorded with environment clearance for an area of 4.8033 ha which is contiguous with the application area.
25.	Cluster condition if any	No cluster condition
26	Has "No cluster certificate" submitted?	Cluster Certificate issued by Department of Mining and Geology, Govt. of Kerala is already submitted with E.C. application.
27.	Distance from nearby habitation	Nearest house is at 142 m towards N side of the lease area.
28	Distance from nearby forest, if applicable	Sholayar Reserve Forest, 8.50 km, NE
29	Distance from protected area, Wildlife Sanctuary, National Park etc.	None within the study area
30	Distance from nearby streams /rivers National Highway and Roads	Chalakkudy River, 2.50 km, N
31	Is ESA applicable? If so distance from ESA limit	Not in ESA
32	Has approved mining plan, prepared by RQP submitted?	Yes, the approved mining plan prepared by RQP is already submitted along with E.C. Application.
33		1,00,000 MTA

Page 4 of 15

	production in TPA	
34	Details of mining process	The mining will be done by open cast semi-mechanized method mining. The bench height and width will be maintained 5 m. Excavated material is transported to the crusher unit existing with the complex for further processing. The exploitation of mineral being done from 115 m to 55m MSL in conceptual phase
		I. Details of Project cost
35	Land cost	Rs. 8 Crores (All inclusive)
36	Plant and Machinery	Rs. 8 Crores (All inclusive)
37	Total Cost	Rs. 8 Crores (All inclusive)
38	V. Financial Statement including funding sourceand details of	Rs. 8 Crores (All inclusive) Insurance = Insurance to the quarry workers would provide through insurance company. Funding = Own source & bank loan
+	insurance etc.	Air Pollution Mining activities will generate certain
9	fanagement Plan	quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations. Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust. To avoid the dust generation from the drilling operations, wet drilling method will be adopted. Drill machines will be equipped with dust collectors. Use of appropriate explosives for blasting and avoiding overcharging of blast holes. Controlled blasting techniques will be adopted. Watering of haul road and other road at regular intervals. Provision of dust filters/ mask to workers working at highly dust prone and affected areas. Provision of green belt all along the

Page 5 of 15

	T - I		The extracted mineral will be transported
			from the quarry to the end user by adopting
2			following measures so as to minimize dust
			emissions.
			 In case of long transportation the trucks after loading will be covered with tarpaulin sheets. Speed of the vehicles will be maintained
			within the prescribed limits.
			Trucks will not be over loaded and will be maintained to the body level
19		Water	Provision of storm water collection pond with an
		Pollution	appropriate capacity. The water requirement for sprinkling on sources of dust emission, on roads,
			landscaping etc. Can be met from the stored
	9		rainwater in the pond.
		Noise	The major noise generating source from the
		Dollowsee	proposed activity is working machinery,
			drilling, blasting and plying of vehicles. The
	1		following control measures are to be
			undertaken to bring down the noise levels:-
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 Proper maintenance of machinery,
	1		equipments and improvement on design
			of machines.
			• Use of personal protective devices i.e.,
	1		earmuffs and earplugs by workers, who are
			working in high noise generating areas.
		16 Apr.	• Creation of wide green belt of dense
			forage between mine areas and residential
	The state of the s		colonies.
			Proper training to personnel to create awareness about adverse noise level
			effects.
			• Planned noise monitoring at suitable
			locations in the plant and outside location for proper effective remedial actions.
	1	Solid Waste	
		Management	The topsoil excavated from the quarry
	The state of the s	Management	will be dumped / stacked separately at
		N.	pre-determined place and
	1		subsequently will be utilized in
			spreading over reclaimed areas for
			plantation as part of eco-restoration.
			Precautions will be taken to limit the
			height of the topsoil dump / stacked to
			height of the topson dump / stacked to
		11	5 to 6 meters in order to preserve its
			fertility and shelf life. It will be
			suitably protected from soil erosion and infertility by planting fodder
	1 1	11	and intertitity by planting lodder

Page 6 of 15

			grass and leguminous plants during temporary storage.		
			Overburden Management		
		11	This waste will be utilized within the pit for		
			lying of haul roads. At the end use, OB can		
		11	be reutilized as soil base for plantation.		
	Î	Eco-	The year wise programme of eco-restoration		
		restoration	for the life of mine will be made and about		
	T .		2,250 trees will be planted in an area of		
			2.2427 ha.		
	VI. Whether	Yes.			
40	Environment Management Plan				
40					
	or Eco restoration Plan satisfactory?				
	VII. Does	Detailed Enviro	onment Management Plan is already submitted with		
	it suggest	E.C. Application	n.		
41	mitigation				
Τ1	measures				
	for each				
_	activity	L AND A			
(min)	VIII. If Pre-	Detailed Pre-Feasibility Report (PFR) is already submitted with E.C.			
42	Feasibility Report	Application.			
_	(PFR) satisfactory				
43	IX. Does it need public hearing	Not Applicable			
	X. Details of	No litigation per	ndin a		
44	litigation and Court	1.0 Magazon pol	Kill S		
	verdict if any				
	XI. Details of	None /			
45	public complaint, if				
	any				
		The following G	ovt. Orders / Policies are to be followed:-		
	XII. Details of	Consents from	n Kerala State Pollution Control Board.		
16	statutory sanction	Permission from Property Permission	om Mining & Geology Department.		
1	required .	Permission from Permission Permission	om Explosive Department		
4	OLAN PROPERTY.		om Panchayat Office.		
	XIII.If CRZ	Not Applicable			
47					
	applicable?				
	Enviror	ment Impact Ass	PART B		
_	Environ	Impact Ass	sessment and Mitigation Measures pact on water		
	a) Details - f		equirement is about 15 KLD in which 1 KLD is for		
18	a) Details of water	domestic which	would be sourced from open well, 12 KLD for dust		
101	requirement per	suppression syste	em in mine as well as ancillary units and 2 KLD for		
	day in KLD	plantation will be	e sourced from storm water pond.		
19	b) Water source		stic requirement would be sourced from open well, 12		

Page 7 of 15

-	_	,	KLD for dust suppression system in mine as well as ancillary units
		/sources.	and 2 KID for plantation will be sourced from storm water pond.
-	6)	Expected water	1 KLD for domestic requirement, 12 KLD for dust suppression system
50	c,	use per day in	in mine as well as ancillary units and 2 KLD for plantation
30		KLD.	
	d)	Details of water	12 KLD for dust suppression system in mine as well as ancillary units
S11700	٠	requirements	and 2 KLD for plantation will be sourced from storm water pond.
51		met from water	
		harvesting.	
	-	What are the	No significant impact envisaged on ground water due to the mining
		impact of the	project.
52		proposal on the	
		ground water?	
		How much of	Nil
		the water	
		requirement can	
		be met from the	
F 2		recycling of	
53		treated waste	100 miles 100 mi
		water?	The second of
		(Facilities for	
		liquid waste	
		treatment)	coderring and from the mine office will
		What is the	The sewage to a tune of 0.80 KLD generated from the mine office will
		incremental	be diverted to the septic tank followed by soak pit.
		pollution load	
54		from waste	
9.		water generated	
		from the	
		proposed	
_		activities?	Storm water drains with silt traps will be suitably constructed all
			along the periphery of the pit area to collect the run-off from the
980000			lease area and divert into the storm water pond/tanks proposed
	M		within the complex.
	1	How is the	All measures will be taken not to disturb the existing drainage
		storm water	pattern adjacent to the other property.
55	1	from within the	> De-siltation traps and storm water collection pond proposed for
		site managed?	silt removal.
		231	The storm water collected from the lease area will be utilized for
			dust suppression on haul roads, plantation within the premises
			etc.
		Impa	et on Riodiversity and Eco restoration Programmes
_	Т	Will the	Due to the mining activities, there will be loss of some native species
	3	project	and vegetation. However, some of these species will be planted at the
		involve	end use for eco-restoration.
50	5	extensive	REMONANCE SERVICE SERV
	~		
	1	clearing or	

Page **8** of **15**

	of vegetation (Provide details)	
57.	What ate the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantation/landscaping)	The year wise programme of eco-restoration for the life of mine will be made and 2,250 trees will be planted in an area of 2.2427 ha. Ecological restoration for the mined area by plantation of the species as per the time schedule suggested below: - First Six months — Herbs & grass Next Six months — Shrubs Next Six months onwards — Trees Selection of species is based on High Dust Capturing, Soil Holding Capacity, ground water recharge capacity etc. More focus is given for medicinal plants.
58	Is there any displacement of fauna — both terrestrial and aquatic. — If so what are the mitigation measures? Presence of any endangered species or red listed category (in detail)	Not applicable No endangered species found at site
		Impact on Air Environment
59	What are the mitigation measures on generation of dust. Smoke and air quality	Details already provided at EMP section at Sr. No. 39 above.
60	Details of internal traffic management of the site.	Designated space will be provided for parking of truck / tipper within the site. For the purposes of mining activities, existing roads are sufficient. However, haul road will be suitably developed within the proposed area. Speed of the vehicles will be maintained within the prescribed limits (Speed Governor fitted).
61	Details of noise from traffic, machines and vibrator and mitigation measures	Details already provided at EMP section at Sr. No. 39 above.

Page **9** of **15**

		×
62.	Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	Details provided at EMP section at Sr. No. 39 above and air, noise and water sampling reports were already submitted with EC Application.
63	Air quality monitoring in detail	Details provided at EMP section at Sr. No. 39 above and air, noise and water sampling reports were already submitted with EC Application.
- 1	100	Energy Conservation
64	Details of power requirement and source of supply.	The total power requirement will be 75 kW, which will be drawn from diesel engine. Fuel Quantity – 16 to 20 lt/hr.
65	Details of renewable energy (non – conventional) used.	We will promote renewable energy resources
		Risk Management
66	Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	Detailed Environment Management Plan is already submitted with E.C. Application.
67	Are proposals for fencing around the quarry satisfactory? Storage of explosives / hazardous substance in detail.	Barbed wire fencing will be done all around the quarry site. The stone quarry mine will result in increase in frequency of blasting for mining the mineral. However, controlled blasting with optimum charge of holes will be carried out to loosen the rock. Explosion hazards are envisaged due to mishandling of explosives. Explosives will be handled with utmost care in compliance of conditions imposed by Chief Controller of Explosive & Metalliferous Mines Regulation, 1961.
	Facility for solid waste management	Top soil and over burden generated from the site will be stored separately on earmarked place and will be used for eco-restoration and internal road development.
	7197	Socio Economic Impacts
60	Will the project cause adverse effects on local communities disturbance to	No No
68	sacred sites or other cultural values. What are the safe guards proposed?	94 Tr
69	Will the proposal	The mining project will directly / indirectly develop the area by

Page **10** of **15**

	result in any changes to the demographic structure of local population. If so, provide details.	providing employment opportunities. With the proposed development in and around the area there will be many supporting facilities/infrastructure eventually leading to the development of the area.
7	satisfactory. Give details	Yes. A detailed study on social status of the project site surroundings & need base study on proposed CSR activities were carried out and the copy of report was submitted with EC Application. The project proponent will set apart Rs. 10 Lakhs (non-recurring) and Rs. 10 Lakhs (recurring) for CSR activities for the welfare of the local community in consultation with the local body.
71	What are the projects benefits in terms of employment potential?	Due to the mining activity and due to the attached ancillary unit, there will be workers attracted to the project area. It is proposed to employ 22 persons in the project.
		PART C
72	Details of NABET approved EIA Consultant engaged-Their name, address and accreditation details	M/s Environmental Engineers & Consultants Pvt. Ltd. (NABET Accredited Consultant Organization) Head Office: A1-198, Janak Puri, New Delhi. Branch Office: C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala. Summary and Conclusion
73.	implementation of the project.	It is predicted that socio-economic impact due to this project will positively increase the chance of more employment opportunities for local inhabitants. There are no Resettlement and Rehabilitation issues involved in this project. The project infrastructures will be of use to people of the area. The revenue of the State Govt. will be definitely increasing due to the proposed activity. The entire project area is devoid of any endangered flora and fauna. It is proposed to reclaim the land and develop green cover for eco-restoration with native species to a maximum possible extent. Additionally, an area is earmarked outside the proposed mining area for compensatory mass plantation. Also, a storm water pond is proposed outside the mining area for storage of rain water and for its subsequent use so as to conserve fresh water consumption. Thus the proposed project is not likely to affect the environment or adjacent ecosystem adversely.
74	Explanation of how adverse impact have been mitigated.	Detailed Pre-Feasibility Report (PFR) with Environment Management Plan (EMP) is already submitted with E.C. Application.

Page **11** of **15**

2. The proposal was placed in the 69th meeting of SEAC held on 9th & 10th March 2017. Further to the intimation the Proponent and the RQP attended the meeting and RQP made a power point presentation about the salient features of the project. The Committee appraised the proposal based on the Mining Plan, Pre-feasibility Report and all other documents submitted along with Form1. The proponent agreed to set apart Rs.10 lakh (non-recurring) and Rs.10 lakhper annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat. The Committee decided to defer the item for field inspection. During Field visit, whether the conditions stipulated in the E.C given for the adjoining quarry of the proponent have been adhered to has to be examined closely.

Subsequently, site visit was conducted on 08.04.2017 by Subcommittee consisting of Er.P.Sreekumaran Nair, Dr.K.G.Padmakumar & Dr.E.A.Jayson. The representatives of the proponent were present at the site at the time of site visit. The report is as follows;

Mr. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577, vide his application received online 19/12/2015 and, has sought Environmental Clearance under ELA Notification, 2006 for the quarry project in Sy. No. 168, Karukutty Village &KarukuttyGramaPanchayat and Re-Survey No. 168, Karukutty Village &KarukuttyGramaPanchayat, Alwaye Taluk, Ernakulam District, Kerala Statefor an area of 4.1885 hectares. The proposed project site falls within Latitude 10°16′27.60″ to 10°16′35.21″ N to Longitude 76°24′59.17″ to 76°25′08.73″ E. The lease area consists of 4.1885 hectares, which is private own land. The proposed project is for quarrying of 1,00,000 MTAof building stone.

Distance of the mining area from the nearest human settlement is recorded as 142m towards N side. The project area does not fall into any ESA village. Sholayar R.F.—is at 8.5 Km. NE. Nearest river is Chalakkudy River, at 2.50 km, North. There is one quarry in operation located within 500m radius. The run-off from the lease area shall have to be passed through channels and will be stored in storm water pond which could be recycled in Mine/ Crusher units, run as ancillary unit by the proponent.

The haul road and service roads has been laid dust free, Display boards placed commendably well and the whole premises has been kept clean and this is a well-managed quarry. The committee was impressed with cleanliness and the green belt around, and evensports court and recreation facility has been provided for the use of employees and workers. A quarry of the same management is working adjacently with environmental clearance. This quarry is now functioning with benches and the overburden is also stored in the designated places.

- 3. The proposal was considered in the 73rd meeting of SEAC held on 30th and 31st May 2017. The Committee verified the additional documents submitted by the proponent and found satisfactory. Based on the Mining plan, Form.1, all other documents submitted with the proposal and the field visit report, the committee decided to **Recommend for issuance of EC** subject to general conditions in addition to the following specific condition.
 - If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the

Page 12 of 15

lease area.

The proponent agreed to set apart Rs. 10 lakh (non-recurring) and Rs. 10 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local body.

4. The proposal was placed in the 71st meeting of SEIAA held on 20.07.2017. Authority accepted the recommendation of SEAC and decided to issue EC subject to obtaining legal opinion as decided in the 66th SEIAA meeting whether quarrying on lease areas without Environmental Clearance would also come under the scope of violation.

EC is recommended subject to the general condition in addition to the following specific condition.

If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.

The proponent should set apart an amount of Rs. 10 lakh (non-recurring) and Rs. 10 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local body. A notarised affidavit for the commitment of CSR activities and agreeing all the general and specific conditions should be submitted before the issuance of EC.

- 5. Then the proponent vide letter dt.15.09.2017 stated that though there is a mine lease for the area under consideration, there is no mining activity in progress in the area and therefore there is no violation of the provisions of law. The Sub Committee report states that the Mining activity is in progress in the adjoining land to the area under consideration which is already obtained Environmental Clearance. Since no mining activity is carried out in the proposed area the proponent requested to accord EC for the project.
- The proposal was placed in the 74th meeting of SEIAA held on 09th October 2017.
 Authority decided to conduct a site visit to verify the present status of the project.

Accordingly the Chairman and the Member SEIAA conducted the site visit on 25.10.2017 to M/s Planters Aggregates, owned by Mr.Saji Vadakkekara (Proprietor), Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577, as per the decision of 74th SEIAA to verify the present status of the project. The Administrator, SEIAA was also present. The project is fresh one and no quarrying operations are carried out at the project site.

7. The proposal was finally placed in the 76th meeting of SEIAA held on 16th November 2017. Authority accepted the recommendation of SEAC and decided to issue EC subject to the general condition in addition to the following specific condition.

Page 13 of 15

- The mandatory distance between the existing and the proposed quarry should be maintained.
- If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.

The proponent should set apart Rs. 10 lakh (non-recurring) and Rs. 10 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local body and the details should be forwarded to SEIAA. A notarised affidavit for the commitment of CSR activities and also agreeing to all the general and specific conditions should be submitted before the issuance of EC. The proponent has submitted the affidavit vide reference 7th cited agreeing all the above conditions.

- 8. Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the proposed quarry project of Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577, in Survey No. 168, Karukutty Village, Karukutty Grama Panchayat, Alwaye Taluk, Ernakulam District, Kerala for an area of 4.1885 hectares, subject to the specific conditions as in para 7 above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining (items 1 to 61), appended hereto will be applicable and have to be strictly adhered to.
- 9. The Clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The undertakings and conditions subject to all the mining features, Environmental Management Plans as undertaken in the Mining Plan and EMP submitted to SEIAA will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.
- 10. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.
- 11. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.
 - Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or

Page 14 of 15

monitoring.

- ii. Instances of violation if any shall be reported to the District Collector, Ernakulam.
- iii. The given address for correspondence with the authorised signatory of the project is Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angama ly, Ernakulam, Kerala-683 577.

Sd/-P.H.KURIAN I.A.S, Member Secretary (SEIAA)

To,

Sri. Saji Vadakkekara (Proprietor), M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683 577

Copy to,

- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
- 2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala.
- 3. District Collector, Ernakulam
- 4. Director, Mining & Geology, Thiruvananthapuram -4.
- 5. The Member Secretary, Kerala State Pollution Control Board
- 6. District Geologist, Ernakulam
- 7. Tahsildhar, Alwaye Taluk, Ernakulam
- 8. Chairman, SEIAA.
- 9. Website.
- 10. S/f
- 11. O/c

Forwarded/By Order

Administrator, SEIAA

Page 15 of 15

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

- Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
- Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- Sprinklers shall be installed and used in the project site to contain dust emissions.
- Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- 7. 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 E.C.
- Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
- 9. The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.
- Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
- Control measures on noise and vibration prescribed by KSPCB should be implemented.
- Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
- Blasting should be done in a controlled manner as specified by the regulations of Explosives
 Department or any other concerned agency.
- A licensed person should supervise/ control the blasting operations.
- Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- 16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
- 17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
- 18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- 19. Maximum depth of mining from general ground level at site shall not exceed 10m
- 20. No mining operations should be carried out at places having a slope greater than 45°.
- Acoustic enclosures should have been provided to reduce sound amplifications in addition to the
 provisions of green belt and hollow brick envelop for crushers so that the noise level is kept
 within prescribed standards given by CPCB/KSPCB.
- The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- 24. The transportation of minerals should be done in covered trucks to contain dust emissions.
- 25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- 28. A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
- 29. 100 m buffer distance should be maintained from forest boundaries.

- Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
- 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.
- 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 E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponentshall apply and get the approval of this Authority.
- 33. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (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.
- The project proponent should advertise in at least two local 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 Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) office 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 a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/
 District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if
 any, from whom suggestions / representations, if any, were received while processing the
 proposal. The Environmental Clearance shall also be put on the website of the company by the
 proponent.
- 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 MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
- 38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
- 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.
- 40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
- 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.
- 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.
- 43. The top soil, if any, shall 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 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 dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

- 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 desilted particularly after monsoon and maintained properly.
- 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 PM_{2.5} 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.
- 46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- Measures should be taken for control of noise levels below 85 dBA in the work environment.
- 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.
- 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.
- 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.
- 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.
- 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.
- 53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or thisimplementation 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.
- 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.
- 55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
- 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.
- 57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
- 58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
- Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
- 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.
- 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.

For Member Secretary, SEIAA Kerala

Copy of Environmental Clearance Order

	अन्जण्ति प्र (विस्फोटक नियम, 2008	रुप एल. ई3 LICE! की अनसची 4 के भाग 1	NCE FORM LE-3 के अनच्छेद 3(क) से (घ)	देखिए।)	
/ a	(See article 3(a) to (c	I) of Part 1 of Schedule I	V of Explosives Rules, 2	008)	· &
(ग) उपयोग के लिए	एक समय पर वर्ग 1,2,3,4,5 या : Licence to possess : (c)	for use, explosives of clas		7,36,55	
अनुज्ञप्ति सं. (Licence No.) वार्षिक फीस रुपए (Annual	: E/SC/KL/22/751(E33224) Fee Rs): 2400/-				Sell
1. Licence is hereby granted	l to			अरितः एकार	13 //
Saji Vadakkackara (M Ernakulam, Town/Villag	धेओगी / Occupier : Saji Vadakl e District-, State-, Pincode - 6	kaekara). Vadakkekara 1 82311	House, Mangattoor, Kole	icherpy Govi India	
को अनुजन्ति अनुदत्त की 2. अनुजन्तिधारी की प्रास्थि।	ो जाती है। ति Status of licensee : Individua	d	11:9//		
	प्योजनों के लिए विधिमान्य है।	possess for u	sc of Safety Fuse ভিন্ত onators, - ক ও্রম্মান্ট	inary Detorator, Nitr	ate Mixture,
	the following purpose. निम्नतिखित किस्मों, प्रकार और bllowing kinds and quantity of ex	मात्रा के लिए विधिमान्य	₹1 ·	Of Explosives, CZ, Kell	
ST.	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	मार्जिन कि मियलि	मय में
Sr. No.	Name and Description	. Class & Division	Sub-division	· Quantity at any on	e time
1.	Nitrate Mixture Electric Detonators	2,0 6,3	0	150 Kg. 2500 Nos.	
3.	Safety Fuse	6,1	0	2500 Mtrs	
<u>4</u>	Ordinary Detonator	6,3	0	2500 Nos.	
(ख) किसी एक कलैंडर मास (b) Quantity of explosives t	में खरीदे जाने वाले विस्फोटक की o be purchased in a calendar month[मात्रा [अनुच्छेद 3(ख) और (applicable for licence under	(ग) के अधीन अनुज्ञप्ति के article 3(b) and (c)] :	तिए]	20 times as above.
	खाचित्रों) से अनुज्ञप्त परिसर की । all conform to the following draw		रेखाचित्र क्र. (Drawing दिनांक (Dated) 27/12	No:) E/SC/KL/22/751(/2005	E33224)
6. अन्जप्ति परिसर निम्नि	त्रेखित पते पर स्थित हैं। The lice (Town/Village): Karukutty			Land Control of the	Station) : Karukutty
जिला (District) दूरभाष (Phone)	ERNAKULAM	राज्य (State) ई. मेल (E-Mail)	Kerala	पिनकोड (Pincod फैक्स (Fax)	
	नितिखित सुविधाएं अंतर्विष्ट हैं। ensist of following facilities.	: T and G typ	e portable magazine an	d D type portable ma	gazine
8. अनुज्ञप्ति समय -समय अतिरिक्त शर्तो और निम The licence is granted sul	पर यथासंशोधित विस्फोटक अधि निलखित उपाबध्दों के अधीन रहत bject to the provision of Explosivional conditions and the following	ते हुए अनुदत्त की जाती es Act 1884 as amended i	है।		
1. उपर्युक्त क्रम सं.	5 में यथा कथित रेखाचित्र (स्थान	, सन्निर्माण संबंधी और :	अन्य विवरण दर्शित कर	ते हुए)।	
Drawings (show	ing site, constructional and other	details) as stated in serial	No. 5 above.		
	गरी व्दाररा हस्ता क्षरित इस अनुज Additional Conditions of this licen				
	Distance Form DE-2.	ice signed by the needsing	g additiontly.		
9. यह अनुज्ञिष्त् तारीख 31	मार्च 2007 तक विधिमान्य रहेगी।				
	या उसके अधीन विरचित नियम				र्णित इस अनुजिप्त
की शर्तों का अधिक्रमण व प्रतिसंहत की जा सकती	करने या यदि अनुज्ञप्त परिसर यं	जिना या उससे संलग्न उ	पबंध में दर्शित विवरण	के अनुरूप नहीं पाए जा	ने पर निलंबित या
This licence is liable to b under Set VIII, wherever	e suspended or revoked for any v applicable, referred to in Part 4 o	iolation of the Act or Rule f Schedule V or if the lice	es framed there under or ensed premises are not fo	the conditions of this li ound conforming to the	cence as set forth description shown in
the plans and Annexure a	mached hereto.		24		Sd/-
तारीख. The Date - 27/1	2/2005	संयुक्त	त मुख्य विस्फोटक नियं		
 Amendment of Quantity 	of Explosives/Monthly Purchase of Explosives/Monthly Purchase of Explosives/Monthly Purchase ਜਰ	Limit dated: 30/06/2011	लिए स्थान /	2000	
नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	1 10	अनुज्ञापन प्राधिकारी Signature of licens	के हस्ताक्षर और स्टाम ing authority and stamp	4
14/03/2016	31/03/2021		Dy. Chief Controller	of Explosives, Ernakula	ım
	45,380		कृते उप मुख्य	विस्फोटक नियन्त्र	d)
			For Deputy Chief	Controller of explosi	763
			प्रामानुसम हता	akulam	-

Copy of Explosive license



License from Gram Panchayat

No. 10951/M3/2018

Directorate of Mining & Geology Kesavadasapuram, Pattam Palace .P.O,

Thiruvananthapuram - 4 Tel Fax: 0471 2447429

e-mail: director.dir.dmg@kerala.gov.in

www.dmg.kerala.gov.in Date: 19-02-2019

From

The Director of Mining & Geology

To Shri. Saji Vadakkekara, S/o. V. P. Varghese,

Vadakkekara House, Mangattoor,

Kolenchery. P. O, Ernakulam District - 682 311

Sir,

Sub:- Mines and Minerals – Minor Mineral – Granite (Building Stone) – Application for quarrying lease under KMMC Rules 2015 – Letter of Intent - forwarding of-reg.

Ref:- 1. Your application for quarrying lease dated. 21.04.2018.

2. Letter No. DOE/1088/E2/18 dtd. 26/09/2018 of the Geologist, District Office, Ernakulam.

3. Kerala Minor Mineral Concession Rules 2015.

Please refer to the references cited above. As per the reference 1st cited, you have applied for a quarrying lease for a period of 12 years from this office for the extraction of granite building stone from an area of 4.1885 Hectares in Re - Survey Block No. 1, Re - Survey No. 168 of Karukutty Village of Aluva Taluk of Ernakulam District [as shown in the Survey Map No. C1. 1908/18 issued by Tahsildar, Aluva enclosed]. Vide reference cited 2 above, District Geologist, Ernakulam forwarded your application to this office with recommendations to issue Letter of Intent. On scrutiny of application and other documents received from the Geologist, it is seen that a quarrying lease can be granted to the precise area shown in the map under the provisions contained in the KMMC Rules 2015. However, for granting quarrying lease you have to produce following documents through District Geologist to the satisfaction of this office in accordance with the relevant statutes.

DOCUMENTS TO BE PRODUCED

- Mining plan approved by the District Geologist as stipulated in the KMMC Rules 2015, for the precise area as per the survey map.
- 2. Environmental Clearance as stipulated in EIA Notification 2006 for the precise area.
- 3. Consent to operate quarry from the Kerala State Pollution Control Board for the precise area.
- Explosive licence from the authorities concerned for appropriate quantity of explosives required for extraction of mineral from the precise area as mentioned in the approved mining plan.



5. D & O Licence from the Local Self Government authorities concerned for operating quarry in the precise area.

In addition, you shall make arrangements for the survey and demarcation by errection of boundary pillars of the said area by the revenue authority not below the rank of a Tahsildar or Asst. Director of the Department of Survey and Land Records and shall produce a certificate in this regard issued by authorities concerned.

It is further informed that the duration of lease as well as annual production of mineral will be decided based on the approved mining plan and documents submitted.

It is also informed that as per the provisions contained in the KMMC Rules 2015 this letter of intent shall be sufficient for the purpose of issuing necessary licenses/consents/Clearances/NOCs etc. by the other statutory authorities concerned. In the event of granting of quarrying lease you may also need to produce new Possession & Enjoyment Certificate at the time of grant of quarrying lease.

It is further informed that this letter of intent is valid for a period of one year from the date of issue. In case you have any valid reason for seeking extension of period of this LOI, the same may be obtained before the expiry of this LOI. Your application for Quarrying Lease shall deemed to have been rejected, if you fail to produce above mentioned documents before the expiry of LOI.

ADDITIONAL DIRECTOR OF MINING &GEOLOGY

Encl: Photocopy of Survey Map showing precise area

Copy to:-

1. The Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.

2. The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.

3 The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam

4. Kerala State Pollution Control Board, District Office, Ernakulam District.

5. The Secretary, Karukutty Grama Panchayath, Ernakulam District

6. The Tahsildar, Aluva Taluk Office, Emakulam District.

For kind attention of statutory authorities

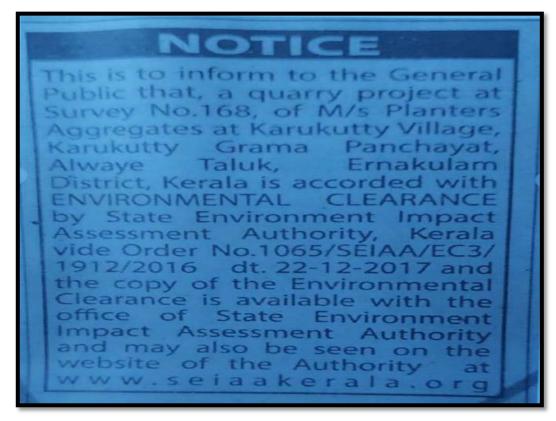
[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/ clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to extract and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of quarrying lease granted by this office. All the Survey Nos./Re-Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid documents.]

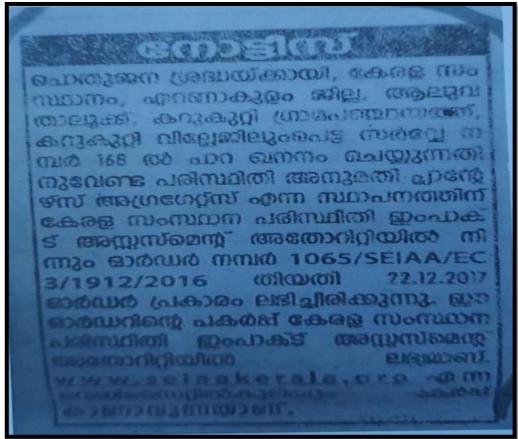
7. The Geologist, District Office, Ernakulam (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).





Lease order





Newspaper Advertisement





TEST REPORT

ULR No: TC540221000004004F Date: 28-07-2021 Page 1 of 1

	CUSTOMER DETAILS
Customer Name & Address	M/s Planters Aggregates Karukutty, Aluva, Ernakulam District
Customer Reference	Test Request dt : 22-07-2021

	DETAILS OF	MONITORING		
Product Category	Atmospheric Pollution	Sample Code	EN	N21070083
Sample Name	Ambient Noise	Monitoring Commenced on	22	2-07-2021 / 06:00
Monitoring Location	South side boundary	Monitoring Completed on	23	3-07-2021 / 06:00
Test Method	IS 9989:1981 RA:2008	Latitude		
Monitored by	Mr. Rahul E J Lab Authorized Sampler	Longitude		
	SAMPLING S	ITE DETAILS		
Re-Survey No.	168, Block - 1)
Village	Karukutty	Taluk		Aluva
District	Ernakulam	State		Kerala

MONITORING RESULTS - Leq						
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	
06:00	37.7	14:00	50,6	22:00	36.6	
07:00	40.5	15:00	51.0	23:00	34.6	
08:00	44.7	16:00	52.1	24:00	37.1	
09:00	48.2	17:00	52.5	01:00	37.8	
10:00	50.6	18:00	47.1	02:00	37.5	
11:00	53.7	19:00	43.6	03:00	38.2	
12:00	51.0	20:00	39.7	04:00	37.1	
13:00	50.2	21:00	39.2	05:00	38.9	

SI. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	49.1 .
2	Ambient Sound Level (Leq) Night Time (23:00 to 05:00)	dB(A)	37.4

Remarks:

ja Joseph nical Manager Checked by: ***End of Report***

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

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

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

Result of noise

ANNEXURE No.11





TEST REPORT

ULR No: TC540221000004003F Date: 28-07-2021 Page 1 of 1

	CUSTOMER DETAILS
Customer Name & Address	M/s Planters Aggregates Karukutty, Aluva, Ernakulam District
Customer Reference	Test Request dt : 22-07-2021

TO THE PARTY OF	SAMPLE	DETAILS	
Product Category	Atmospheric Pollution	Sample Code	EN21070082
Sample Name	Ambient Air	Sample Received on	23-07-2021
Sample Conditions at	Fit for Analysis	Test Commenced on	24-07-2021
Receipt Sampled by	Mr. Rahul E J Lab Authorized Sampler	Test Completed on	27-07-2021
	DETAILS OF	SAMPLING	
Sampling Location	East Side Boundary	Date of Sampling	22-07-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	69%
Location Coordinates		Temperature	31ºC
	SAMPLING S	ITE DETAILS	
Survey No.	168, Block - 1	VIV.	
Village	Karukutty	Taluk	Aluva
District	Ernakulam	State	Kerala

	т	EST RESULTS - CHEMICAL PARAM	METERS		
Sl. No	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS
1	Particulate matter (PM10)	IS 5182 Part 23: 2006 RA 2017	1 µg/m³	49.6	100 (Max)
2	Particulate matter (PM _{2.5})	EPA 40 CFR Part 50 Appendix - L	μg/m³	20.5	60.0 (Max)
3	Sulphur dioxide (SO ₂)	IS 5182 Part 2: 2001 RA 2017	μg/m³	< 2.00	80.0 (Max)
4	Nitrogen dioxide (NO ₂)	IS 5182 Part 6: 2006 RA 2017	μg/m³	< 2.00	80.0 (Max)

Remarks:

End of Report

ja Joseph nical Managor Checked by:

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.

Standard⁵ Environmental & Analytical Laboratories

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

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

Result of ambient air

ANNEXURE No.12





TEST REPORT

Date: 28-07-2021 Page 1 of 3 ULR No: TC540221000004006F

	CUSTOMER DETAILS
	M/s Planters Aggregates
Customer Name &	Karukutty, Aluva,
Address	Ernakulam District
Customer Reference	Test Request dt : 22-07-2021

	SAMPLED	ETAILS	Le Print La Company
Product Category	Water	Sample Code	WT21070176
Sample Name	Quarry Water	Sample Received on	23-07-2021
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity& Packing	2 litre & Plastic Bottle	Test Commenced on	24-07-2021
Sampled by	Mr. Rahul E J Lab Authorized Sampler	Test Completed on	28-07-2021
Information Provided by Customer	707		
	DETAILS OF	SAMPLING	
Sample Source/Location	Inside the quarry	Date of Sampling	22-07-2021
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C
Latitude		Longitude	
	SAMPLING SI	TE DETAILS	
Re-Survey No.	168, Block - 1		
Village	Karukutty	Taluk	Aluva
District	Frankulam	State	Kerala

		TEST RESULTS- CHEMICAL P	ARAMETER	es	
SI. 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	1.00	5.00 (Max)
2	Odour	IS 3025 Part 5: 2018		Agreeable	Agreeable
3	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	0.40	1.00 (Max)

ency Joy TM Chemical

Salir Microbiologist

Authorized Signatory

Authorized Signatory Checked by:

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.

Standard⁵ Environmental & Analytical Laboratories

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017

vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

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





Page 2 of 3 Date: 28-07-2021 ULR No: TC540221000004006F

TEST RESULTS- CHEMICAL PARAMETERS						
SI.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012	
		IS 3025 Part 11:1983 RA 2017		6.92	6.50 - 8.50	
04	pH	IS 3025 Part 14:1984 RA 2019	μS/cm	148		
05	Conductivity	IS 3025 Part 16:1984 RA 2017	mg/L	96.0	500 (Max)	
06	Total Dissolved Solids Total Hardness (as	IS 3025 Part 21:2009 RA 2019	mg/L	50.0	200 (Max)	
	CaCO ₃)	IS 3025 Part 40:1991 RA 2019	mg/L	9.60	75.0 (Max)	
08	Calcium (as Ca)	IS 3025 Part 46:1994 RA 2019	mg/L	6.33	30.0 (Max)	
09	Magnesium (as Mg)	IS 3025 Part 32:1988 RA 2019	mg/L	11.9	250 (Max)	
10	Chloride (as Cl) Total Alkalinity (as	IS 3025 Part 23:1986 RA 2019	mg/L	34.2	200 (Max)	
	CaCO ₃	IS 3025 Part 53:2003 RA 2019	mg/L	0.18	1.00 (Max)	
12	Iron (as Fe)	IS 3025 Part 24:1986 RA 2019	mg/L	3.10	200 (Max)	
13	Sulphate (SO ₄)	IS 3025 Part 60: 2008 RA 2019	mg/L	<0.10	Max 1.0	
14	Fluoride as F Arsenic as As	APHA 23rd Edition 3111C:2017	mg/L	BDL (LOD- 0.001	Max 0.01	
15	Copper as Cu	IS 3025 Part 42: 1992 RA 2019	mg/L	BDL (LOD- 0.016)	Max 0.05	
17	Manganese as Mn	IS 3025 Part 59: 2006 RA 2017	mg/L	BDL (LOD- 0.016)	Max 0.1	
18	Cadmium as Cd	IS 3025 Part 41: 1992 RA 2019	mg/L	BDL (LOD- 0.003)	Max 0.003	
19	Chromium as Cr	IS 3025 Part 52: 2003 RA 2019	mg/L	BDL (LOD- 0.05)	Max 0.05	
20	Zinc as Zn	APHA 23rd Edition 3111B:2017	mg/L	0.008)	Max 5.0	
21	Mercury as Hg	IS 3025 Part 48: 1994 RA 2019	mg/L	BDL (LOD- 0.001)	Max 0.001	
22		IS 3025 Part 47: 1994 RA 2019	mg/L	BDL (LOD- 0.01)	Max 0.01	
23		APHA 23rd Edition 3111D:2017	mg/L	BDL (LOD- 0.03)	Max 0.03	

Checked by:

Microbiologist

Authorized Signatory

Laboratory Head

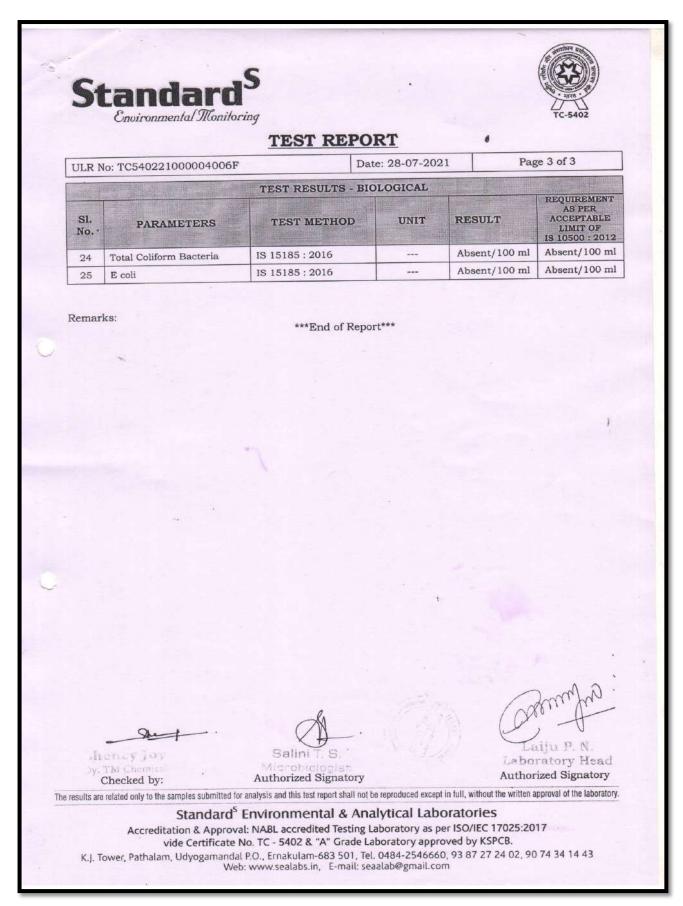
Authorized Signatory

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

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

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



Result of Quarry water





ULR No: TC540221000004005F	Date: 28-07-2021	Page 1 of 3

	CUSTOMER DETAILS
Customer Name & Address	M/s Planters Aggregates Karukutty, Aluva, Ernakulam District
Customer Reference	Test Request dt : 22-07-2021

	SAMPLEL	ETAILS			
Product Category	Water	Sample Code	WT21070175		
Sample Name	Bore Well	Sample Received on	23-07-2021		
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C		
Sample Quantity& Packing	2 litre & Plastic Bottle				
Me Pobul E I		Test Completed on	28-07-2021		
Information Provided by Customer					
	DETAILS OF	SAMPLING			
Sample Source/Location	Bore Well	Date of Sampling	22-07-2021		
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C		
Latitude		Longitude			
	SAMPLING SI	TE DETAILS			
Re-Survey No.	168, Block - 1				
Village	Karukutty	Taluk	Aluva		
District	Ernakulam	State	Kerala		

		TEST RESULTS- CHEMICAL P	ARAMETER	RS	
SI. 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	1.00	5.00 (Max)
2	Odour	IS 3025 Part 5: 2018		Agreeable	Agreeable
3	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	0.70	1.00 (Max)

St ney Jo

Checked by:

Microbiologisu

Authorized Signatory

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

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

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





ULR No: TC540221000004005F Date: 28-07-2021 Page 2 of 3

		TEST RESULTS- CHEMICAL F	ARAMETER	S	
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012
04	pH	IS 3025 Part 11:1983 RA 2017		6.71	6.50 - 8.50
05	Conductivity	IS 3025 Part 14:1984 RA 2019	μS/cm	223	
06	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	144	500 (Max)
07	Total Hardness (as CaCO ₃)	IS 3025 Part 21:2009 RA 2019	mg/L	62.0	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40:1991 RA 2019	mg/L	17.6	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46:1994 RA 2019	mg/L	4.38	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2019	mg/L	44.5	250 (Max)
11	Total Alkalinity (as CaCO ₃)	IS 3025 Part 23:1986 RA 2019	mg/L	32.2	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53:2003 RA 2019	mg/L	0.36	1.00 (Max)
13	Sulphate (SO ₄)	IS 3025 Part 24:1986 RA 2019	mg/L	8.14	200 (Max)
14	Fluoride as F	IS 3025 Part 60: 2008 RA 2019	mg/L	<0.10	Max 1.0
15	Arsenic as As	APHA 23rd Edition 3111C:2017	mg/L	BDL (LOD- 0.001	Max 0.01
16	Copper as Cu	IS 3025 Part 42: 1992 RA 2019	mg/L	BDL (LOD- 0.016)	Max 0.05
17	Manganese as Mn	IS 3025 Part 59: 2006 RA 2017	mg/L	BDL (LOD- 0.016)	Max 0.1
18	Cadmium as Cd	IS 3025 Part 41: 1992 RA 2019	mg/L	BDL (LOD- 0.003)	Max 0.003
19	Chromium as Cr	IS 3025 Part 52: 2003 RA 2019	mg/L	BDL (LOD- 0.05)	Max 0.05
20	Zinc as Zn	APHA 23rd Edition 3111B:2017	mg/L	BDL (LOD- 0.008)	Max 5.0
21	Mercury as Hg	IS 3025 Part 48: 1994 RA 2019	mg/L	BDL (LOD- 0.001)	Max 0.001
22	Lead as Pb	IS 3025 Part 47: 1994 RA 2019	mg/L	BDL (LOD- 0.01)	Max 0.01
23	Aluminium as Al	APHA 23rd Edition 3111D:2017	mg/L	BDL (LOD- 0.03)	Max 0.03

aney los

Checked by:

Salini T. S. Microbiologist

Authorized Signatory

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

Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017





4			
	ULR No: TC540221000004005F	Date: 28-07-2021	Page 3 of 3

TEST RESULTS - BIOLOGICAL							
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012		
24	Total Coliform Bacteria	IS 15185 : 2016		Absent/100 ml	Absent/100 ml		
25	E coli	IS 15185 : 2016		Absent/100 ml	Absent/100 ml		

Remarks:

End of Report

acy Joy

Checked by:

Salini T. S. Microbiologist

Authorized Signatory

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

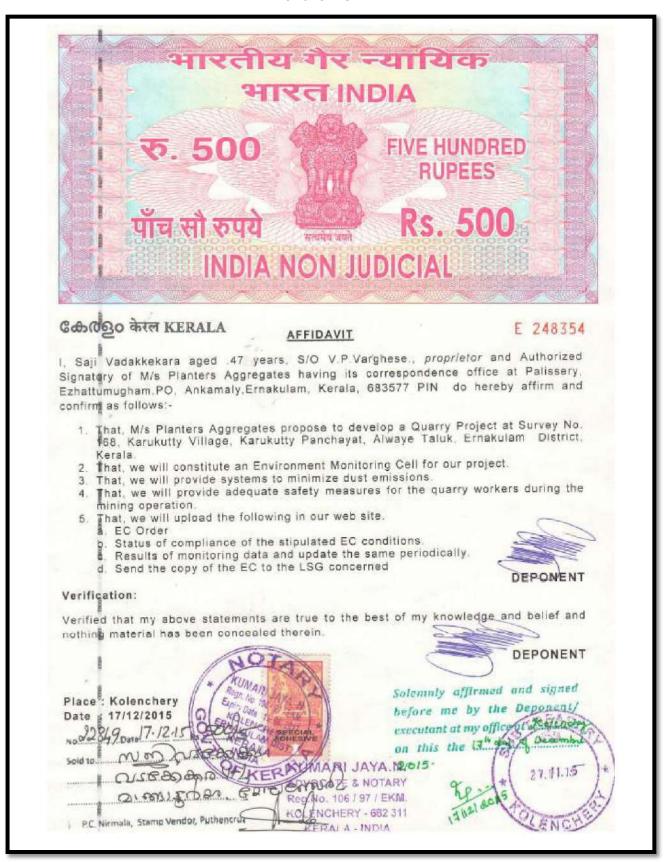
Accreditation & Approval: NABL accredited Testing Laboratory as per ISO/IEC 17025:2017 vide Certificate No. TC - 5402 & "A" Grade Laboratory approved by KSPCB.

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

Result of Bore well



Proof of compliance report submitted



Affidavit

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By:

Government of Kerala

Date : 17/08/2021 Time : 10:17:38 AM Validity upto : 16/02/2022



Certificate SL. No. : KL06300070004441

 Registration No.
 :
 KL41C8060

 Date of Registration
 :
 25/Mar/2010

 Month & Year of Manufacturing
 :
 February-2010

Valid Mobile Number : *****6485
Emission Norms : BHARAT STAGE III

Fuel : DIESEL : KL0630007

7N

rees : Rs.110.0(GST as applicable)

MIL observation :

Vehicle Photo with Registration plate 60 mm x 30 mm



Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
5	Carbon Monoxide (CO)	percentage (%)		
ng Emissions	Hydrocarbon, (THC/HC)	ppm		
	СО	percentage (%)		
High idling emissions	RPM	RPM	2500 ± 200	
	Lambda	1)=	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	2.45	0.32

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note: 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://vahan.parivahan.gov.in

Authorised Signature with stamp of PUC operator

(Optional for State)

60mm x 20 mm



POLLUTION UNDER CONTROL CERTIFICATE

Authorised By: ANGAMALI SRTO Motor Vehicles Department, Kerala



Minass tred

Value

0.38534

TEST RESULT : PASS VALID TILL: 11/Jan/2022

Certificate St. No...

KL06300050003379

Light Absorption Coefficient (Permissible

Limit)

Registration No.:

KL63D0926

DIESEL DRIVEN VEHICLES Certified that the vehicle conforms to the standards prescribed under rule 115(2) of CMV Rules 1989

MEC2412BCGP0*****

Chassis No. Engine No.:

400951000*****

Class of Vehicle

Goods Carrier

Make .

DAIMLER INDIA COMMERC

Model .

VEHICLES PVT. LTD SHARATBENZ 2528C

Vehicle Category

HEAVY GOODS VEHICLE

Date of Registration

18/Mar/2016

Emission Norms.

BHARAT STAGE III

Fuel

DIESEL

12/Jul/2021

മോട്ടോർ വാഹന വക്യു

MOTOR VEHICLES DEPARTMENT

Time of Testing Fee Charged: 09:18:04

Rs.150.0

(one hundred fifty

rupees only)

In case of any Complaint Please write to The Transport Commissioner Kerala

Auto Emission Testing Centre Codet

Testing Centre Name: HI-TECH POLLUTION TESTING CENTRE

Centre Address: IX/178 VENGOOR

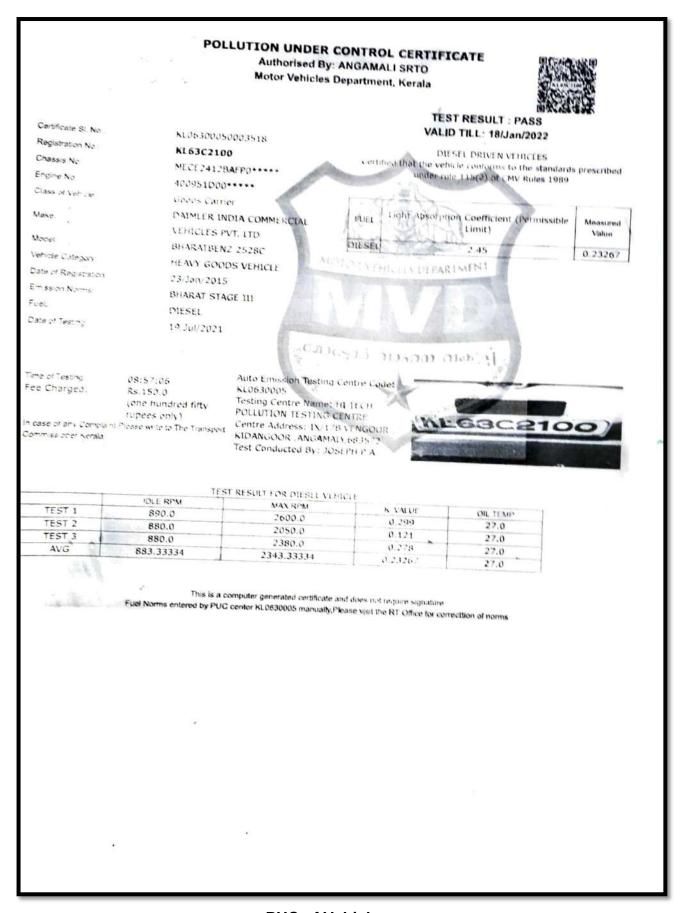
KIDANGOOR ,ANGAMALY,683571 Test Conducted By: JOSEPH P A



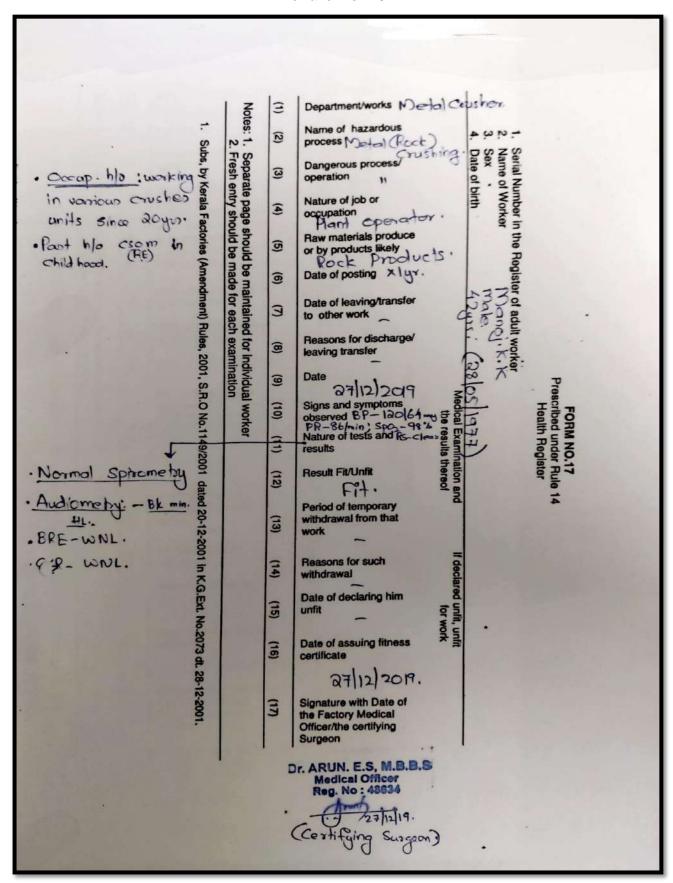
TEST RESULT FOR DIESEL VEHICLE

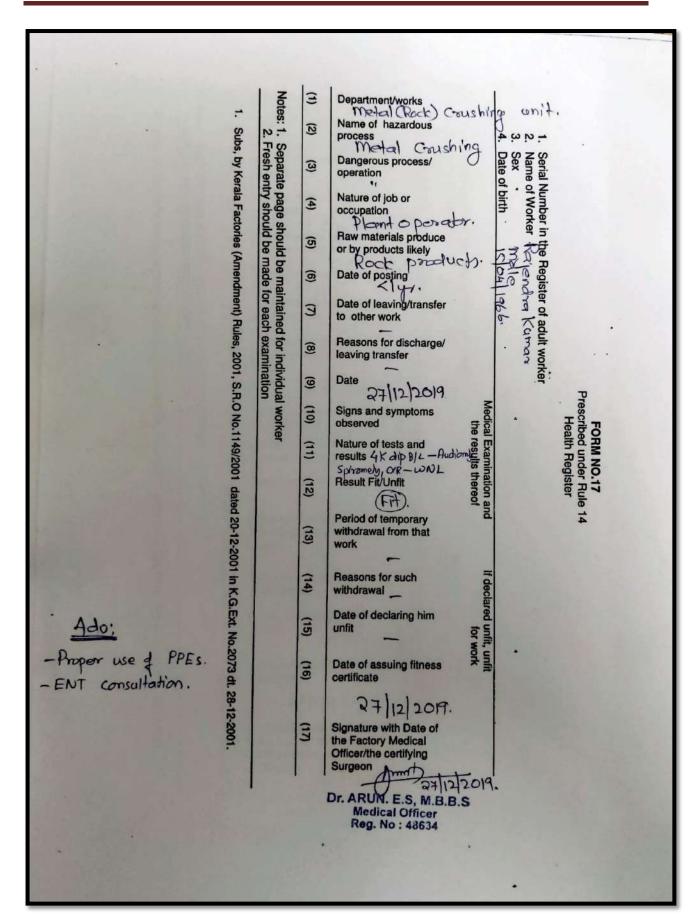
- PERSONAL	IDLE RPM	MAX RPM	K_VALUE	OIL TEMP	
TEST 1	640.0	2600.0	0.421	27.0	
TEST 2	630.0	2380.0	0.359	27.0	
TEST 3	780.0	2530.0	0.379	27.0	
AVG	683.33334	2503.33334	0.38634	27.0	

This is a computer generated certificate and does not require signature Fuel Norms entered by PUC center KL0630005 manually, Please visit the RT Office for correction of norms



PUC of Vehicles





Health check up

7		ax Invoice)			(ORIG	SINAL FO	R REC	IPIENI)
			Invoice N		e-Way Bill No 1713 4318 6354	100	Dated 17-Jun-2021		
			Delivery		1/13 4310 0329	Mo	de/Terms	of Pay	yment
			Supplier	's Ref.		Ott	ner Refere	nce(s))
			Buyer's	Order	No.	De	ited		
			Despato	h Doc	ument No.	De	elivery No	te Date	,
39-16/7 ANKAMALY, KARUKUTTY PANCHAYATH					rough		estination	AM	THE STATE
					LR-RR No.	M	otor Vehic	le No.	
S	TIN/UIN : 32AEGPV9147K1ZY te Name : Kerala, Code : 32		Terms	of Doll	uan)				
IV	er (if other than consignee)	10 11 21	_ rems	or Deli	very				
L/	ANTERS AGGREGATES	1							
A	RUKUTTY PANCHAYATH NAKULAM KERELA	10474							
	TIN/UIN : 32AEGPV9147K1ZY ate Name : Kerala, Code : 32							3	
						1 2 2	Disc. %		Amount
1	Description of Goods	HSN/SAC	Quanti	ty	Rate	per	DISC. 76		diodin
BLASTING MATS		40040000	51	5 NOS 43,200.00 NOS 2,16,0		,16,000.00			
S. Academical	IGST OUTPUT								38,880.00
-	Total		5	NOS		10	1 2 6	₹ 2,	54,880.00
A	mount Chargeable (in words)	red Fighty (Only			2011			E. & O.E
11	NR Two Lakh Fifty Four Thousand Eight Hund	Tou Lightly	,	2.40	kable	STATE OF THE PARTY	rated Tax	1111-14 Puril	Total Tax Amount
-					/alue 6,000.00	Rate 18%		30.00	38,880.00
	0040000		Total		6,000.00		38,8	80.00	38,880.00
T	ax Amount (in words) : INR Thirty Eight Thousan Company's PAN : APHPT3972L		Company Bank Nam	s Bani	k Details	001751 MPET 8	UTIB000	2960	
						- 1	for GLOBA	L MINE	ERAL WORKS

Bill Copy of Blasting Mat