COMPLIANCE REPORT

October 2021 to March 2022

M/s PLANTERS AGGREGATES

(Quarry Project)
ERNAKULAM DISTRICT
KERALA



Dt. 11-06-2022

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

Ref :- 1065/SEIAA/EC3/1912/2016

Sub :- Environment Clearance - Quarry project at Karukutty Village & Panchayath, Alwaye, Ernakulam District, Kerala- Compliance Report - Second 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 Second half (October 2021 – March 2022) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully, For M/s Planters Aggregates

Mr. Saji Vadakkekara

(Proprietor)

Copy to:-The Member Secretary

State Environment Impact Assessment Authority (SEIAA), Thiruvananthapuram, Kerala.

Encl: - As Above

Planters Aggregates

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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

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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 October 2021 – March 2022 is being submitted.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	The Mandatory distance between the existing and the proposed	Obtained	
	quarry should be maintained.	permission	
		from	
		GDMS	

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	Complied
	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 are protected be planting more saplings.

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:

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 rain 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 \times 50 Mtr \times 5 Mtr

Pond 3

40 Mtr \times 150 Mtr \times 5 Mtr

0	2	Environment Monitoring Cell (EMC) as agreed under the affidavit	Complied
		filed by the proponent should be formed and made functional.	

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	complied
	tarred road and open parking areas, if any, inclusive of approach	
	road and internal roads.	

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	Noted 1	for
	at the own cost of the project proponent.	complian	ce

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.		

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.

80	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**.

Table No.1 – CSR/CER Details

Sectors	Activities	Beneficiaries	Amount spent in Rs.
Health	Donation of Food provisions	Emmanual Orphanage	74,750
	Treatment support	Anitha Sanal	5,000
	Treatment support	Abthony	1000
	Treatment support	Thankappan	1000
	Treatment Support	Baiju Davis	1000
	Treatment Support	Santha Baskaran	5,000
		Suresh P A	5,000
		Shibu Issac	5,000

		Usha suresh	1000
		Srikanth P T	1000
		Geetha	1000
		Sunil N A	2500
		Sahavdevan Naduveli	16,000
		Stephan T V	10,000
		Remya Lijo	1350
		Shyla Varghese	5000
Marriage	Maariage	Mallika raman	10,000
	Marriage	Subran P K	10,000
Culture	Donation for Temple	Munnorpolly bagavathy Satha	5,000
		Palissery badrakali temple	1500
		Shano Aprem Thabore	2000
Housing	Housing House maintenace Thankappan		8000
	Omana Snathosh		3400
		Biji Chandran	13000
		Babu Paneli	4500
	Vysak K S		8000
	P A Varghese		5000
		Ibin benadict	6000
1		Saji P Thomas	8000
		Yakob V K	500
		Ridhin Baby	1000
		Sukumaran M	2500
		Sujith V S	8000
Welfare	Donation	Vishwakairali Charitable Society	1000
		Ambalathuruthu Road	19250
		State Child welfare dept.	7,000
		KPMS Angamali	500
Education	Donation		1500

	Total		2,61,250
09	The lease area shall be fenced off with barbe	d wires to a	Complied
	maximum height of 4ft around, before starting of r	nining. 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. 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**.

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.

1	4	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**.

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. 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.	

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.**

1	8	Mats to reduce fly rock blast to a maximum of 10 PPV should be	Complied
		provided.	

Compliance:

The project proponent is using NoNEL technology 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 ope	rations should be carried out at places hav	ing a Complied
	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	d
	amplifications in addition to the provisions of green belt and	
	hollow brick envelop for crushers so that the noise level is kept	

within prescribed standards given by CPCB/KSPCB.

Compliance:

To reduce the impact of sound to the labours in the unit, the project proponent has 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.**

22	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**.

23	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.	

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.**

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

Compliance:

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.

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.**

2	8	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.

Compliance:

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.

2	29	100	m	buffer	distance	should	be	maintained	from	forest	Noted
		boui	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

<u>TABLE 2 – APPROVALS FROM COMPETENT AUTHORITIES</u>

Name of the Statutory approval	Name of the Statutory authority		
Environmental Clearance order	State Environmental Impact Assessment		
Valid up to 21-12-2022	Authority, 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 environmental 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.	

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 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.

Compliance:

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

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 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.

Compliance:

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.

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.

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 first order stream is originating from the lease area.

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

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 is being 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.

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

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

Compliance:

The project proponent is regularly spraying water in critical areas prone to air pollution with the help of vehicle and sprinklers. The project proponent has increased the number of sprinklers in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points.

46	Fugitive dust emission from all the sources should be controlled	Complied	l
	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.

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

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	
	qualified personal should be set up under the control of a senior	
	executive, who will report directly to the Head of the	
	Organization.	

Compliance:

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	for
	monitor compliance of the stipulated conditions. The project	complia	nce
	authorities should extend full cooperation to the officer(s) of		
	the regional Office by furnishing the requisite data/information/		
	monitoring reports.		

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.

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.

There no appeal against this EC at any court of Law

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.

There is no concealing of factual data or submission of false / fabricated data during the time of appraisal for obtaining EC

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

Compliance:

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.	

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

This order is valid for a period of 5 years or the expiry date of mine Noted lease period issued by the Govt. of Kerala, whichever is earlier.

The project proponent has approached the SEIAA for re validation of EC since the life of mine is more than 5 years.

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.

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

Compliance:

The project proponent has restricted its mining operations above the ground water table. The mining activity is started in 2020 at the instant project site.

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	Noted
	the competent authorities for drawl of requisite quantity of	
	surface water and ground water for the project.	

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 has installed 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

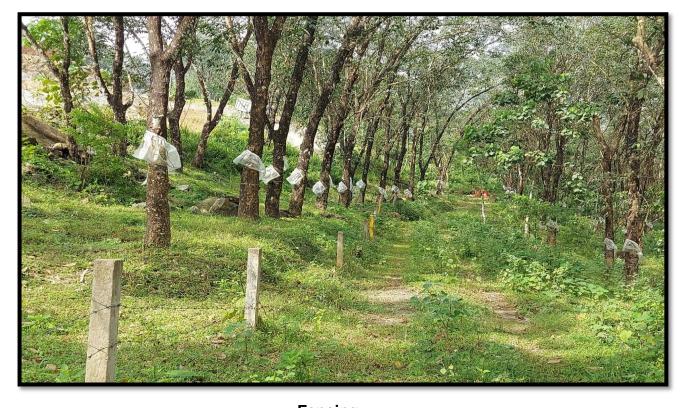




Sprinkler



Eco restoration
Plate No.6



Fencing





Signboard

Plate No.8



Warning Alarm
Plate No.9



Quarry working time

Plate No.10



Tarred Road Plate No.11



Overburden



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

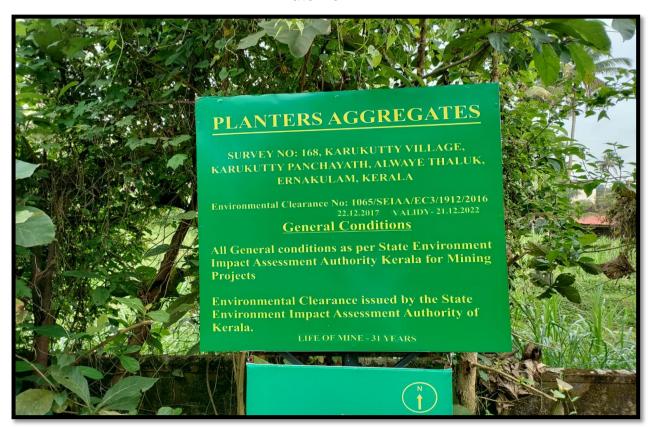


Hazardous Waste storage area Plate No. 20



Magazine

Plate No. 21





EC Board

ANNEXURE

9/28/2020

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 रवाज 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 & Plan No. PA/NMB/SP/07-2020 dated 30.07.2020 on the above subject.

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.
- 6. 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.
- 8. A hard copy of this permission shall always be kept in the office of the Manager of the mine for reference.

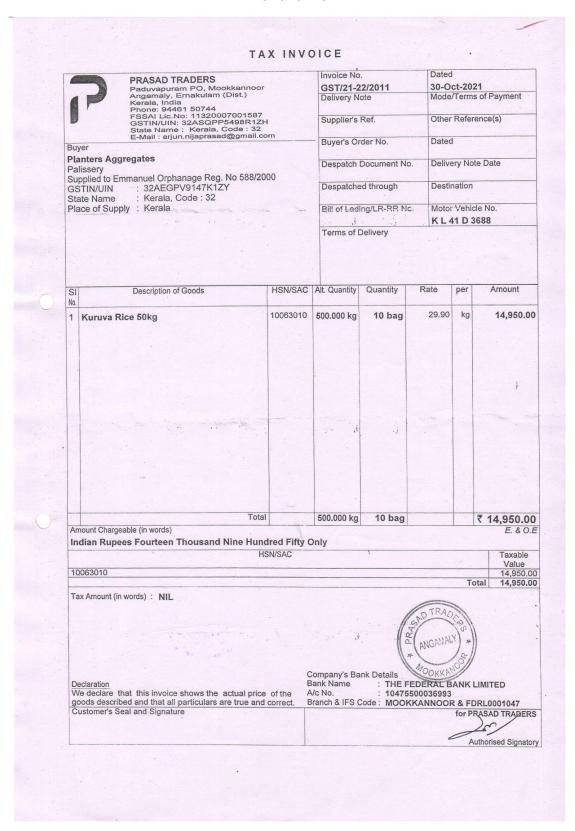
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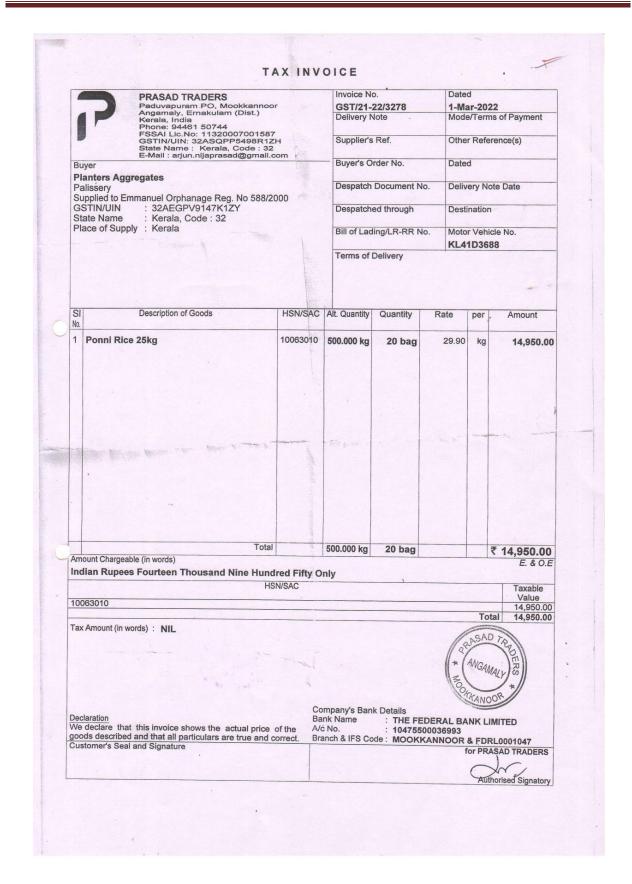


UMESH MADHUKAR RAO SAWAKAR (DIRECTOR(ACTING) - BENGALURU REGION)
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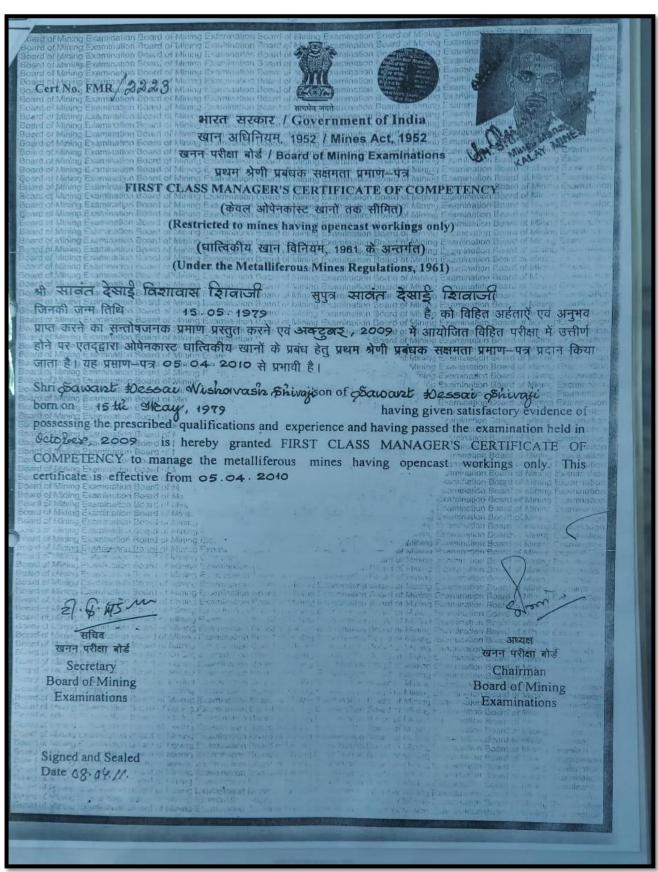
Permission from DGMS





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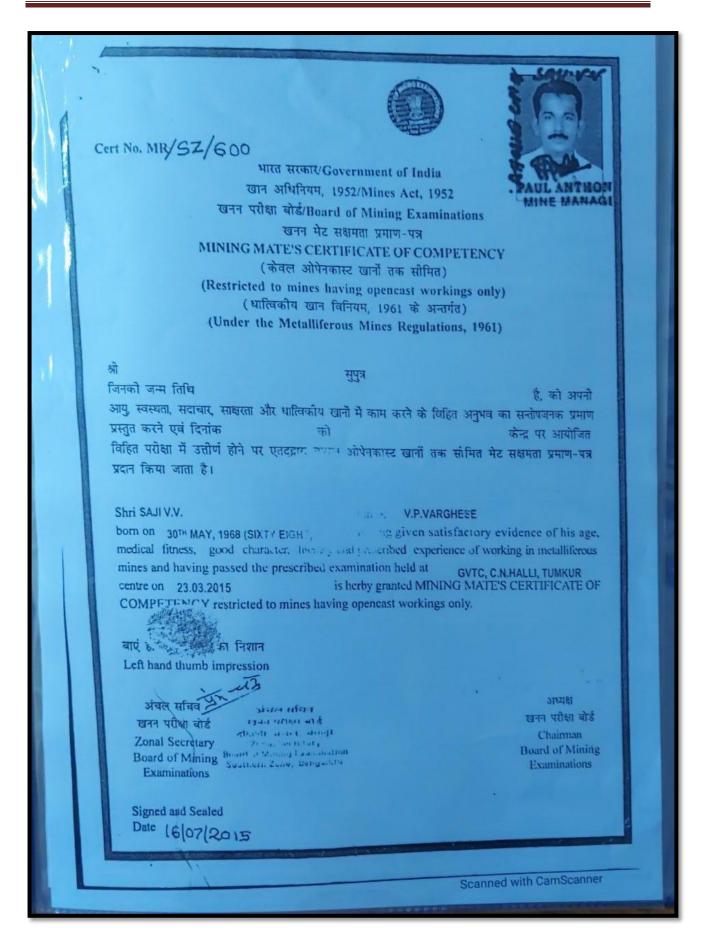
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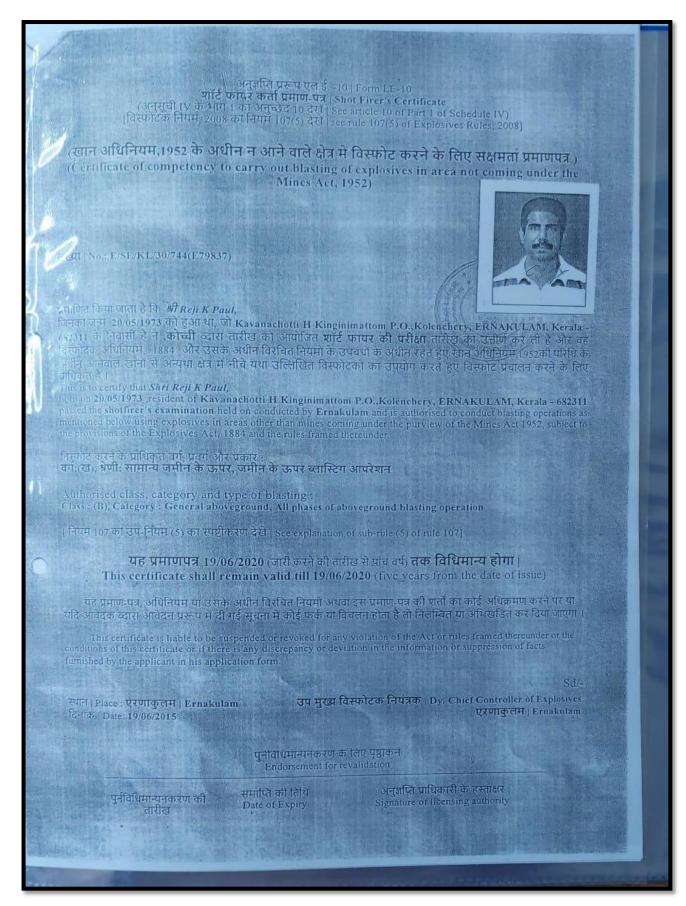


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	COVERNMENT	
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	approved under Regulations 18 of MMR 1961, and of prescribed experiences	Mine Surveying
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Copy of certificates of licensed persons





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 Height above		Control
	Emission Rate(Nm3/)	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
- 3.4 Mining activities shall be done only in the area marked by Mining & Geology.
- 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, Ezhaftumugham 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 73^{rd} meeting of SEAC held on 30^{th} & 31^{st} May 2017
 - 4. Minutes of the 71st meeting of SEIAA field 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

		I. Project details
1.	File No.	1065 / EC3 / 2016 / SEIAA
-	Name /Title of the	Environment Clearance for Building Stone Quarry (Minor Mineral)
2.	project	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 submission of Application	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 targeted

Page 2 of 15

_		
		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.
1	Details of Authorized O Signatory and	Mr. SAJI VADAKKEKARA (Applicant & Proprietor), M/s PLANTERS AGGREGATES,
	address for correspondence	Palissery, Ezhattumugham P.O., Angamaly, Ernakulam, Kerala-683577
		Land Details
1	C)Extent of area	The state of the s
L	in hectares	4.1885 hectares
1:	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	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
1.4	f)Latitude and	plantation. Latitude (N) 10°16'27.60" to 10°16'35.21"
14	Longitude	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	k)Will there be any adverse impact on the aesthetics of 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	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 of mining. The bench height and width will be maintained 5 m. Excavated material is transported to the crusher unit existing within the complex for further processing. The exploitation of mineral is being done from 115 m to 55m MSL in conceptual phase
		I. Details of Project cost
35		Rs. 8 Crores (All inclusive)
36	Machinery	Rs. 8 Crores (All inclusive)
37		Rs. 8 Crores (All inclusive)
38	V. Financial Statement including funding sourceand details of insurance etc.	Rs. 8 Crores (All inclusive) Insurance = Insurance to the quarry workers would provide through insurance company. Funding = Own source & bank loan
9	Vanagoment Plan	Air Pollution Mining activities will generate certain 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 periphery of the lease area. Periodical monitoring of ambient air quality in and around the lease area.

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			The extracted mineral will be transported
			from the quarry to the end user by adopting
			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.
	1		• Trucks will not be over loaded and will be
			maintained to the body level
		Water	Provision of storm water collection pond with an
		Pollution	appropriate capacity. The water requirement for
		Pollution	sprinkling on sources of dust emission, on roads,
			landscaping etc. Can be met from the stored
			rainwater in the pond.
		Noise	The major noise generating source from the
		110100	proposed activity is working machinery,
			drilling blasting and plying of vehicles. The
			following control measures are to be
			undertaken to bring down the noise levels:-
	-	. 100	 Proper maintenance of machinery,
		4.0	equipments and improvement on design
		1000	of machines.
			• Use of personal protective devices i.e.,
			earmuffs and earplugs by workers, who are
34			working in high noise generating areas.
			• Creation of wide green belt of dense
		J. P. G.	foldage between mine areas and residential 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.
		Solid Waste	Topsoil Management
	**	Management	The topsoil excavated from the quarry
		Management	will be dumped / stacked separately at
			pre-determined place and
	9.		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
			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

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			grass and leguminous plants during temporary storage.			
			Overburden Management 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.			
		Eco- restoration	The year wise programme of eco-restoration for the life of mine will be made and about 2,250 trees will be planted in an area of			
-			2.2427 ha.			
40	VI. Whether Environment Management Plan or Eco restoration Plan satisfactory?	Yes.				
41	vII. Does it suggest mitigation measures for each activity	Detailed Environ E.C. Application	nment Management Plan is already submitted with			
42	VIII. If Pre- Feasibility Report (PFR) satisfactory	Detailed Pre-Feasibility Report (PFR) is already submitted with E.C. Application.				
43	IX. Does it need public hearing	Not Applicable				
44	X. Details of litigation and Court verdict if any	No litigation pending.				
45	XI: Details of None public complaint, if any					
	XII. Details of	The following Go	vt. Orders / Policies are to be followed:-			
46.	statutory sanction	Permission from	Kerala State Pollution Control Board. n Mining & Geology Department.			
	required	 Permission from Permission from 	n Explosive Department n Panchayat Office.			
47	XIII.If CRZ recommendation	Not Applicable	in Famonayar Office.			
7/.	applicable?					
	Envison		PART B			
	Environment Impact Assessment and Mitigation Measures Impact on water					
48	a) Details of water requirement per	The total water re domestic which w	quirement is about 15 KLD in which 1 KLD is for rould be sourced from open well, 12 KLD for dust			
40	day in KLD	plantation will be	n in mine as well as ancillary units and 2 KLD for sourced from storm water pond.			
49.	b) Water source	1 KLD for domest	ic requirement would be sourced from open well, 12			

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		11
	/sources.	KLD for dust suppression system in mine as well as ancillary units
		and 2 KLD for plantation will be sourced from storm water polic.
	c) Expected water	1 KLD for domestic requirement, 12 KLD for dust suppression system
50	use per day in	in mine as well as ancillary units and 2 KLD for plantation
	KLD.	all as ancillant units
	d) Details of water	12 KLD for dust suppression system in mine as well as ancillary units
51	requirements	and 2 KLD for plantation will be sourced from storm water pond.
31	met from water	
:×:	harvesting.	and a second vector due to the mining
İ	What are the	No significant impact envisaged on ground water due to the mining
52	impact of the	project.
22	proposal on the	
	ground water?	
	How much of	Nil
l	the water	
	requirement can	
	be met from the	
53	recycling of	
	treated waste	
1	water? (Facilities for	
	liquid waste	
	treatment)	
	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	
	from waste	
54	water generated	
	from the	
	proposed	
	activities?	
		Shorm water drains with silt traps will be suitably constructed all
10000		along the periphery of the pit area to collect the run-off from the
		lease area and divert into the storm water pond/tanks proposed
	How is the	within the complex.
	storm water	All measures will be taken not to disturb the existing drainage
55	from within the	pattern adjacent to the other property. De-siltation traps and storm water collection pond proposed for
	site managed?	
		silt removal. The storm water collected from the lease area will be utilized for
		The Storm water concered from the rease
		dust suppression on haul roads, plantation within the premises
ĺ		dust suppression on haul roads, plantation within the premises
	Imna	dust suppression on haul roads, plantation within the premises etc.
		dust suppression on haul roads, plantation within the premises etc. ct on Biodiversity and Eco restoration Programmes Due to the mining activities, there will be loss of some native species
	Will the	dust suppression on haul roads, plantation within the premises etc. ct on Biodiversity and Eco restoration Programmes Due to the mining activities, there will be loss of some native species
	Will the project involve	dust suppression on haul roads, plantation within the premises etc. ct on Biodiversity and Eco restoration Programmes Due to the mining activities, there will be loss of some native species and vegetation. However, some of these species will be planted at the
56	Will the project involve	dust suppression on haul roads, plantation within the premises etc. ct on Biodiversity and Eco restoration Programmes Due to the mining activities, there will be loss of some native species
56	Will the project involve	dust suppression on haul roads, plantation within the premises etc. ct on Biodiversity and Eco restoration Programmes Due to the mining activities, there will be loss of some native species and vegetation. However, some of these species will be planted at the

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	of vegetation	
	(Provide	
	details)	
57	(details of	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
	proposal for tree plantation/ landscaping)	Selection of species is based on High Dust Capturing, Soil Holding Capacity, ground water recharge capacity etc. More focus is given for medicinal plants.
	Is there any displacement of fauna –	
	both terrestrial and aquatic. – If so what are	Not applicable
50	the mitigation	
58	measures?	No endangered species found at site
	Presence of	
	any	
	endangered	
	species or red	
	listed category	
	(in detail)	
		Impact on Air Environment
	What are the	Details already provided at EMP section at Sr. No. 39 above.
	mitigation	
50	measures on	
59	generation of dust	
Ì	or dust,	
	air quality	
-	Details of	Designated space will be provided for parking of truck / tipper within
	internal	the site. For the purposes of mining activities, existing roads are
60	traffic	sufficient. However, haul road will be suitably developed within the
00	management	proposed area. Speed of the vehicles will be maintained within the
	of the site.	prescribed limits (Speed Governor fitted).
	Details of	
	noise from	Details already provided at EMP section at Sr. No. 39 above.
i	traffic,	*
61	machines	
OI.	and vibrator	×
	and	
	mitigation	
	measures	T T

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		s .
62.	••	Details provided at EMP section at Sr. No. 39 above and air, noise and water sampling reports were already submitted with EC Application.
	quality around the project site and mitigation measures	
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.
	D . 11 C	Energy Conservation The total power requirement will be 75 kW, which will be drawn from
64.	Details of power requirement and source of supply.	diesel engine. Fuel Quantity – 16 to 20 lt/hr.
65	Details of renewable energy (non –	We will promote renewable energy resources
	conventional) used.	
		Risk Management
	Are there sufficient measures proposed for risk hazards in	Detailed Environment Management Plan is already submitted with
66	case of emergency such as accident at the site?	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.
\vdash	-	Socio Economic Impacts
	Will the project cause adverse effects on local	No No
68.	communities disturbance to sacred sites or other cultural values.	
	What are the safe guards proposed?	
69	Will the proposal	The mining project will directly / indirectly develop the area by

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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.
Are the CSR proposals 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.
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	
Details of NABET approved EIA Consultant engaged-Their name, address and accreditation details	M/c Fryironmontal F
It is predicted that socio-economic impact due to this project will	
Overall justification for implementation of the project.	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.
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.

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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

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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.
- 6. 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.

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- 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

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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, SELAA.
- 9. Website.
- 10. S/f
- 11. O/c

Forwarded/By Order

Administrator, SEIAA

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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.
- 3. 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.
- 5. 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.
- 8. 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.
- 12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
- 13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- 14. A licensed person should supervise/ control the blasting operations.
- 15. 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°.
- 21. Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
- 22. 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.
- 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.
- 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.

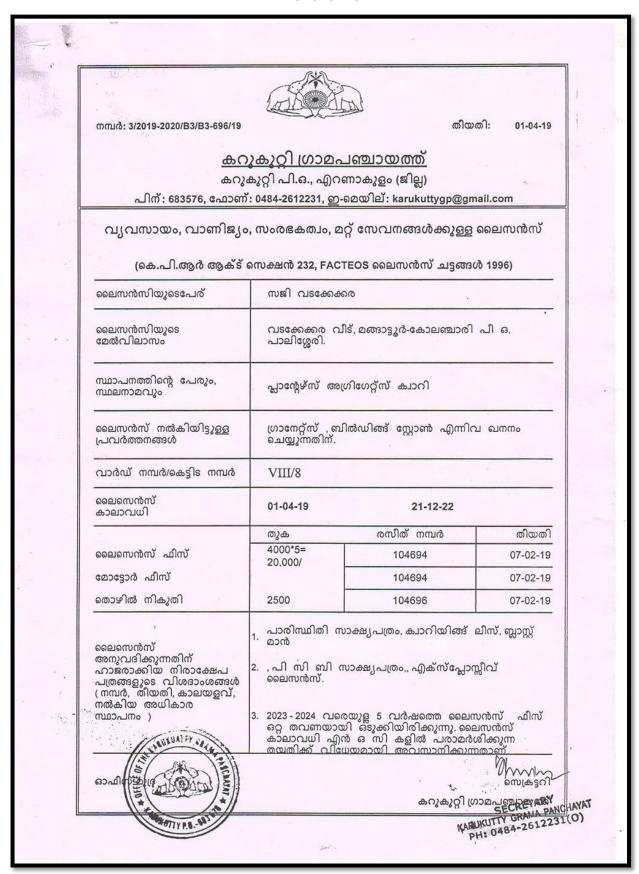
- 44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly 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.
- 51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 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 this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 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.
- 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.
- 61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

For Member Secretary, SEIAA Kerala

Copy of Environmental Clearance Order

	(विस्फोटक नियम 2008	रुप एल. ई3 LICE! की अनुसूची 4 के भाग 1 व l) of Part 1 of Schedule IV	के अनच्छेद 3(क) से (घ) देखिए।) 008)	
(ग) उपयोग के लिए	एक समय पर वर्ग 1,2,3,4,5 या	वर्ग 7 के विस्फोटक या वि	हसी मैगजीन में वर्ग 6 व	के विस्फोटक रर	
अनुज्ञप्ति सं. (Licence No.) वार्षिक फीस रुपए (Annual	: E/SC/KL/22/751(E33224)	for use, explosives of clas	s 1, 2,3,4,3,0 or 7 in a m	agazine	
Licence is hereby granted					16)
Saji Vadakkaekara (311	धेओगी / Occupier : Saji Vadakl e - , District-, State-, Pincode - 6	kaekara), Vadakkekara I 82311	House, Mangattoor, Kole	mcherp Gov L. India	
को अनुज्ञप्ति अनुदत्त की			1 1 1 1 1 1 1 1 1		
3. अनु राष्ट्रित निम्नलिखित प्र	योजनों के लिए विधिमान्य है।	possess for u	se of Safety Fuse Ord	inary Detonator, Nitr	ate Mixture,
	the following purpose. निम्नलिखित किस्मों, प्रकार और bllowing kinds and quantity of ex	मात्रा के लिए विधिमान्य	se of Safety Fuse Ortonators, - के उपयोग्ध	Traine was	
क्र	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	महिन कि मियलि क	य में
Sr. No.	Name and Description	. Class & Division	Sub-division	Quantity at any one	time
1.	Nitrate Mixture Electric Detonators	2,0 6,3	0	150 Kg. 2500 Nos.	
3.	Safety Fuse	6,1	0	2500 Mtrs	
4.	Ordinary Detonator	- 6,3	0	2500 Nos.	
	में खरीदे जाने वाले विस्फोटक की to be purchased in a calendar month[तिए]	20 times as above.
	खाचित्रों) से अनुज्ञप्त परिसर की all conform to the following draw	पुष्टि होती है। ring(s): .	रेखाचित्र क्र. (Drawing दिनांक (Dated) 27/12	No.) E/SC/KL/22/751(I /2005	233224)
6. अन्ज्ञप्ति परिसर निम्नि	तेखित पते पर स्थित हैं। The lice (Town/Village) : Karukutty			पुलिस थाना (Police S	Station): Karukutty
जिला (District) दूरभाष (Phone)	ERNAKULAM	राज्य (State) ई. मेल (E-Mail)	Kerala	पिनकोड (Pincode फैक्स (Fax))
	नलिखित सुविधाएं अंतर्विष्ट हैं। insist of following facilities.	: T and G type	e portable magazine an	d D type portable mag	azine
अतिरिक्त शर्तों और निम् The licence is granted sul	पर यथासंशोधित विस्फोटक अधि नित्रित उपाबध्दों के अधीन रहा bject to the provision of Explosiv ional conditions and the following	ते हुए अनुदत्त की जाती es Act 1884 as amended f	है।		
1. उपर्युक्त क्रम सं.	5 में यथा कथित रेखाचित्र (स्थान ing site, constructional and other	, सन्निर्माण संबंधी और :	भन्य विवरण दर्शित कर	ते हुए)।	
	ing site, constructional and other o गरी व्दाररा हस्ता.क्षरित इस अन्३				
Conditions and A	Additional Conditions of this licer Distance Form DE-2.				
9. यह अन्त्रिन तारीख 31	मार्च 2007 तक विधिमान्य रहेगी				
यह अनुज्ञप्ति, अधिनियम	या उसके अधीन विरचित नियम	ों या अनुसूची V के भाग	4 के प्रति निर्दिष्ट सेट-1	VII के अधीन तथा उपवी	र्णेत इस अनुज्ञिष्त
प्रतिसंहत की जा सकती	करने या यदि अनुज्ञप्त परिसर यं है, जहां वंह लागू हो।				
This licence is liable to b under Set VIII, wherever the plans and Annexure a	e suspended or revoked for any v applicable, referred to in Part 4 o attached hereto.	f Schedule V or if the lice	es tramed there under or ensed premises are not fo	ound conforming to the	escription shown in
the plans and Almerate a					Sd/-
तारीख. The Date - 27/1	2/2005	संयुक्त	मुख्य विस्फोटक नियं		roller of Explosives uth Circle, Chennai
 Amendment of Quantity 	of Explosives/Monthly Purchase of Explosives/Monthly Purchase of Explosives/Monthly Purchase	Limit dated: 30/06/2011	लिए स्थान		
		ppace for Endorsement of		Ima	
नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry		अनुजापन प्राधिकारी Signature of licens	के हस्ताक्षर और स्टाम्प ing authority and stamp	
14/03/2016	31/03/2021		Dy. Chief Controller	of Explosives, Ernakula विस्फोटक नियन्त्र	m
			For Deouty-Chief	Controller of Explosiv	65
			प्रामाकुलम Ecni	akulam	- 1

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

То

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

- 1. 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

The Tahsildar, Aluva Taluk Office, Ernakulam District.

For kind attention of statutory authorities

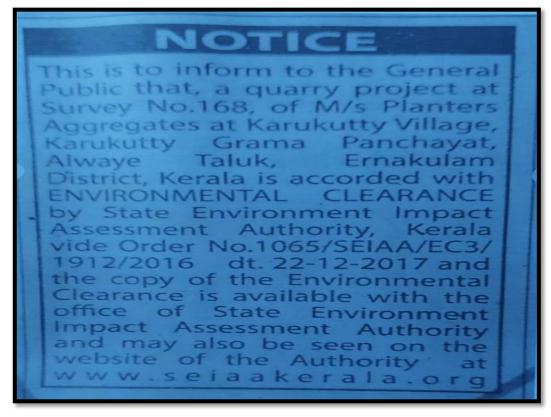
[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent/ clearance /NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity 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.]

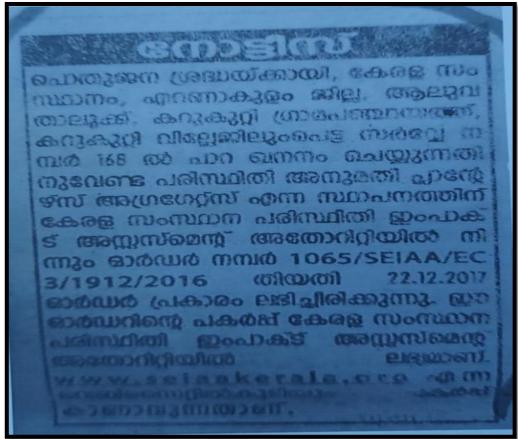
7. The Geologist, District Office, Ernakulam (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).



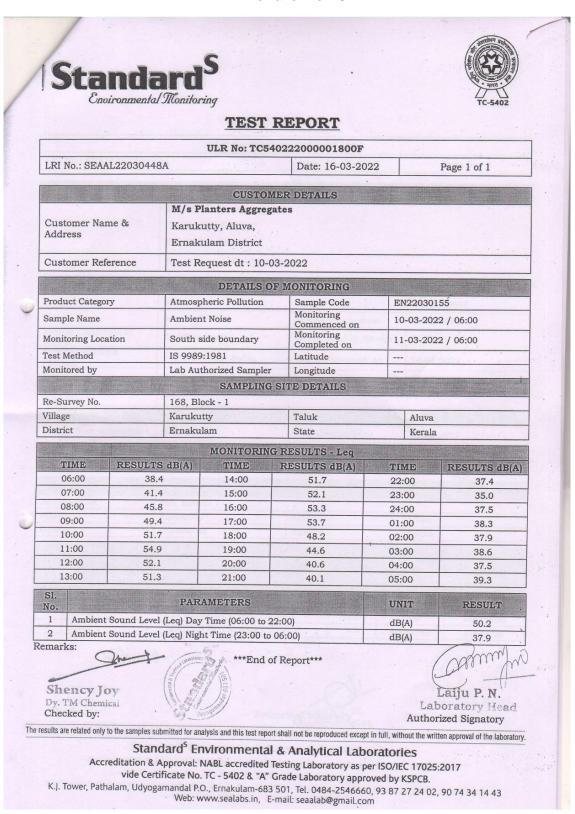


Lease order



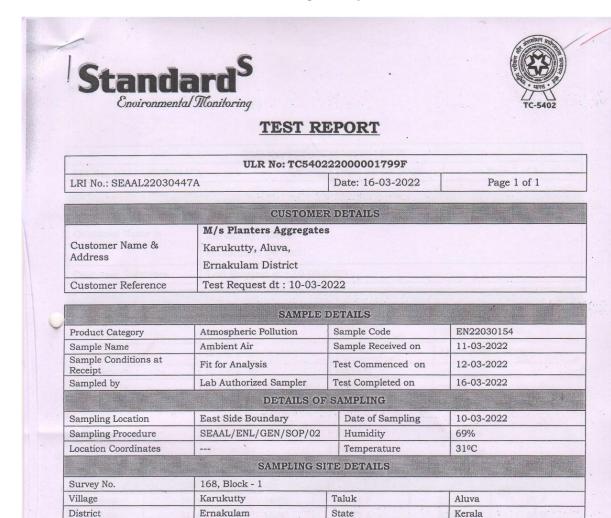


Newspaper Advertisement



Result of noise

ANNEXURE No.11



	TEST RESULTS - CHEMICAL PARAMETERS						
SI. No	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ STANDARDS		
1	Particulate matter (PM ₁₀)	IS 5182 Part 23: 2006	μg/m³	53.8	100 (Max)		
2	Particulate matter (PM _{2.5})	IS 5182 Part 24: 2019	μg/m³	27.2	60.0 (Max)		
3	Sulphur dioxide (SO ₂)	IS 5182 Part 2: 2001	μg/m³	< 2.00	80.0 (Max)		
4	Nitrogen dioxide (NO2)	IS 5182 Part 6: 2006	μg/m³	< 2.00	80.0 (Max)		

Remarks:

Shency Joy Dy. TM Chemical

A Hardward Park

End of Report

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 ambient air

ANNEXURE No.12





TEST REPORT

ULR No: TC540222000001802F					
LRI No.: SEAAL22030450A	Date: 16-03-2022	Page 1 of 3			

	CUSTOMER DETAILS	
Customer Name & Address	M/s Planters Aggregates Karukutty, Aluva, Ernakulam District	
Customer Reference	Test Request dt : 10-03-2022	- 175

	SAMPLE I	DETAILS	The state of the s
Product Category	Water	Sample Code	WT22030068
Sample Name	Quarry Water	Sample Received on	10-03-2022
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity& Packing	2 litre & Plastic Bottle	Test Commenced on	12-03-2022
Sampled by	Not Drawn By Laboratory	Test Completed on	16-03-2022
Information Provided by Customer		Aug Tell mg/L	
	DETAILS OF	SAMPLING	
Sample Source/Location	Inside the quarry	Date of Sampling	10-03-2022
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C
Latitude	ID 1993 West 100 MICS AN	Longitude	
	SAMPLING SIT	TE DETAILS	120

TEST RESULTS- CHEMICAL PARAMETERS					
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012
1	Colour	IS 3025 Part 4:1983 RA 2017	Hazen	1.00	5.00 (Max)
2	Odour	IS 3025 Part 5: 2018		Agreeable	Agreeable

Taluk

State

Shency Joy Dy. TM Chemical

Re-Survey No.

Village

District

Salini T. S. Microbiologist

Saifu P. N.

Aluva

Kerala

Checked by:
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Standard^S Environmental & Analytical Laboratories

168, Block - 1

Karukutty

Ernakulam

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



LRI No.: SEAAL22030450A



TEST REPORT

ULR No: TC540222000001802F Date: 16-03-2022 Page 2 of 3

		TEST RESULTS- CHEMICAL I	PARAMETE	RS	
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500; 2012
3	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	0.10	1.00 (Max)
04	pH	IS 3025 Part 11:1983 RA 2017		6.89	6.50 - 8.50
05	Conductivity	IS 3025 Part 14:1984 RA 2019	μS/cm	132	
06	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	85.0	500 (Max)
07	Total Hardness (as CaCO ₃)	IS 3025 Part 21:2009 RA 2019	mg/L	46.0	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40:1991 RA 2019	mg/L	9.60	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46:1994 RA 2019	mg/L	5.36	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2019	mg/L	9.89	250 (Max)
11	Total Alkalinity (as CaCO ₃)	IS 3025 Part 23:1986 RA 2019	mg/L	27.9	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53:2003 RA 2019	mg/L	0.14	1.00 (Max)
13	Sulphate (SO ₄)	IS 3025 Part 24:1986 RA 2019	mg/L	2.62	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 23 rd 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

Shency Joy Dy. TM Chemical

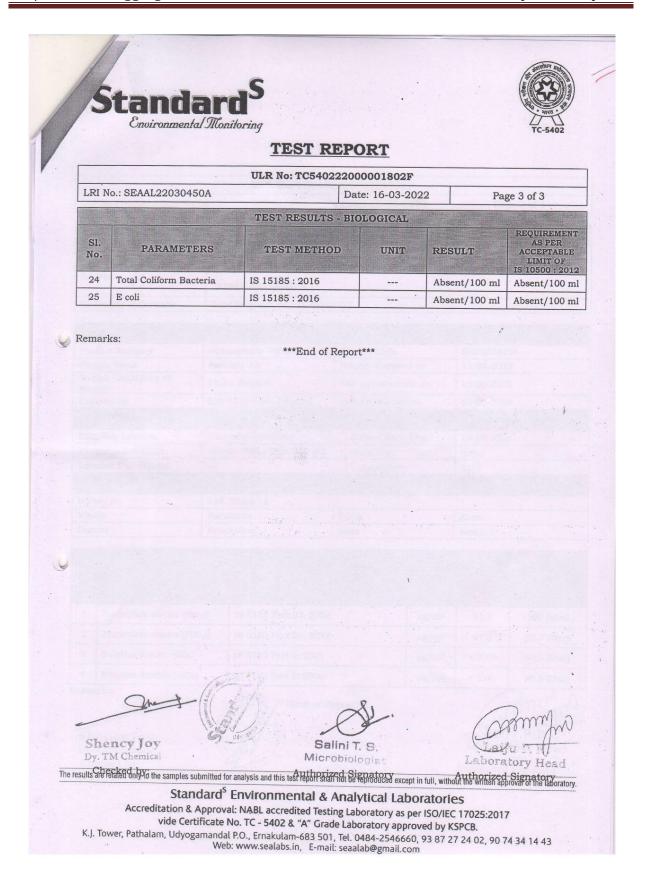
Salini T. S Microbiológist

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Result of Quarry water





TEST REPORT

ULR No: TC54022200000F1801				
LRI'No.: SEAAL22030449A	Date: 16-03-2022	Page 1 of 3		

	CUSTOMER DETAILS	
Customer Name & Address	M/s Planters Aggregates Karukutty, Aluva, Ernakulam District	
Customer Reference	Test Request dt : 10-03-2022	6.78 6.80 - 6.80

	SAMPLE I	DETAILS	The second of th
Product Category	Water	Sample Code	WT22030067
Sample Name	Bore Well	Sample Received on	11-03-2022
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity& Packing	2 litre & Plastic Bottle	Test Commenced on	12-03-2022
Sampled by	Not Drawn By Laboratory	Test Completed on	16-03-2022
Information Provided by Customer			2.0 000
Bester Grand Control of the Control	DETAILS OF	SAMPLING	
Sample Source/Location	Bore Well	Date of Sampling	10-03-2022
Sampling Procedure	SEAAL/ENL/GEN/SOP/01& SEAAL/MBL/SOP/06	Sample Temperature	32 °C
Latitude	- B 92 941 9 - 24 5 9 5	Longitude	
The second of th	SAMPLING SI	TE DETAILS	
Re-Survey No.	168, Block - 1		
Village	Karukutty	Taluk	Aluva
District	Ernakulam	State	Kerala

110000	TEST RESULTS- CHEMICAL PARAMETERS				
Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012;
1	Colour	IS 3025 Part 4:1983 RA 2017	Hazen	1.00	5.00 (Max)
2	Odour	IS 3025 Part 5: 2018		Agreeable	Agreeable

Shency Joy

Dy. TM Chemica. Checked by: Authorized Williams.

Authorized Signatory Microbiologist Laboratory Head

Authorized Signatory

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TEST REPORT

ULR No: TC54022200000F1801					
LRI No.: SEAAL22030449A	Date: 16-03-2022	Page 2 of 3			

		TEST RESULTS- CHEMICAL I	ARAMETER	RS	
Sl. No	PARAMETERS	TEST METHOD	UNIT	RESULT	REQUIREMENT AS PER ACCEPTABLE LIMIT OF IS 10500: 2012
3	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	0.70	1.00 (Max)
04	pH	IS 3025 Part 11:1983 RA 2017		6.78	6.50 - 8.50
05	Conductivity	IS 3025 Part 14:1984 RA 2019	μS/cm	198	
06	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	128	500 (Max)
07	Total Hardness (as CaCO ₃)	IS 3025 Part 21:2009 RA 2019	mg/L	54.0	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40:1991 RA 2019	mg/L	16.0	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46:1994 RA 2019	mg/L	3.41	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2019	mg/L	39.6	250 (Max)
11	Total Alkalinity (as CaCO ₃)	IS 3025 Part 23:1986 RA 2019	mg/L	29.8	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53:2003 RA 2019	mg/L	0.32	1.00 (Max)
13	Sulphate (SO ₄)	IS 3025 Part 24:1986 RA 2019	mg/L	6.20	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 23 rd 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 23 rd Edition 3111D:2017	mg/L	BDL (LOD- 0.03)	Max 0.03

Shency Joy Dy. TM Chemic Checked by:

Microbiologist

Authorized Signatory

Daiju Laboratory he

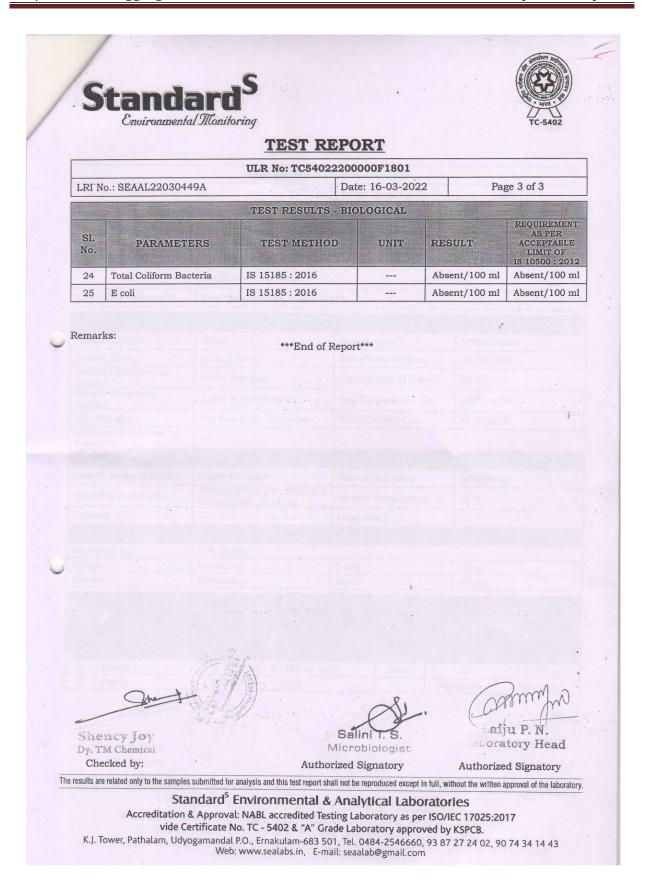
Authorized Signatory

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

2/17/22, 10:35 AM

Gmail - HYCR- M/S PLANTERS AGGREGATES -April 2021 to September 2021



P Z Thomas EEC <eeccochin@gmail.com>

HYCR- M/S PLANTERS AGGREGATES -April 2021 to September 2021

1 message

P Z Thomas EEC <eeccochin@gmail.com>
To: Regional Office Bangalore <rosz.bng-mefcc@gov.in>
Cc: seiaa kerala <seacseiaakerala@gmail.com>
Bcc: plantersgroup@yahoo.com

Thu, Feb 17, 2022 at 10:35 AM

Respected sir,

SUB:- Half Yearly Compliance Report for the period of April 2021 to September 2021 for the quarry project of M/S PLANTERS AGGREGATES, Ernakulam District, Kerala.

Ref:-: EC No. 1065/SEIAA/EC3/1912/2016 Dated: 22.12.2017

Attached herewith is the half yearly compliance Report for the above mentioned quarry project. Kindly acknowledge the receipt of the same.

If you need any further clarification/documentation with regard to the compliance report, please contact the General Manager Mr. Davis 9605040050, E mail Id:plantersgroup@yahoo.com or the undersigned Mr. Jomon M C9447769899 – E mail Id:eeccochin@gmail.com

We forwarding this compliance report on behalf of the project Proponent

Thanking you

Jomon M C

Environmental Engineers and Consultants Pvt. Ltd

Cochin - 682025. PH: 0484 4034320

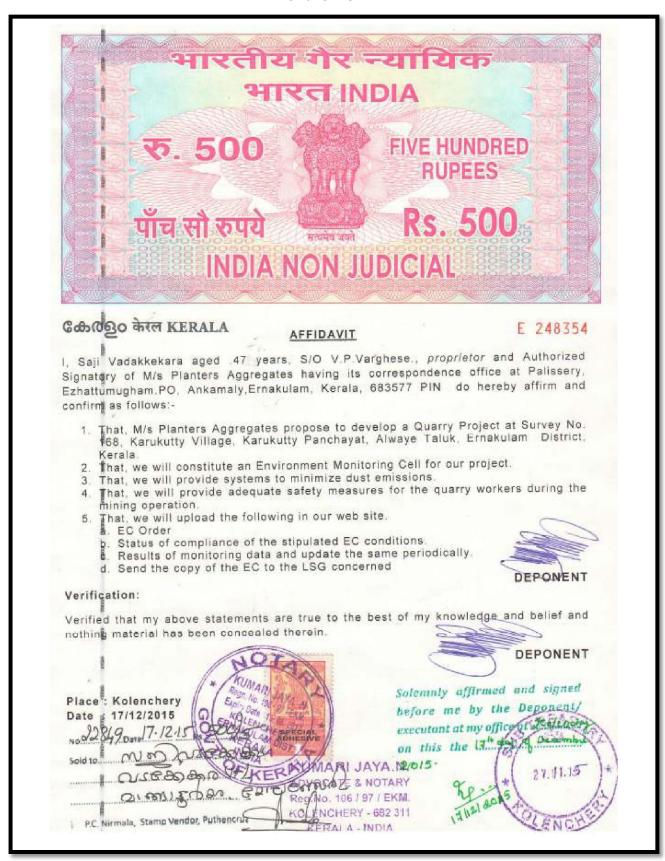
NABET, QCI accredited, MoEF Approved An ISO 9001:2008 Company

"SAVE OUR GOOD GREEN EARTH"

Compliance Report Ms Planters Aggregates April Sep 2021 Site_compressed.pdf 11203K

https://mail.google.com/mail/u/1/?ik=3352d48ce1&view=pt&search=all&permthid=thread-a%3Ar7453719264679222405&simpl=msg-a%3Ar35158848... 1/1 and the search of the search

Proof of compliance report submitted



Affidavit

Form 59

[See rules 115 (2)]

Pollution Under Control Certificate

Authorised By:

Government of Kerala

Date Time

17/08/2021 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 Valid Mobile Number

February-2010

Emission Norms

*****6485 BHARAT STAGE III

Fuel

DIESEL

7 Code

KL0630007

ΠN

MIL observation

Rs.110.0(GST as applicable)

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
F-1-1	Carbon Monoxide (CO)	percentage (%)		
ng Emissions	Hydrocarbon, (THC/HC)	ppm		
	со	percentage (%)		
High idling emissions	RPM	RPM	2500 ± 200	
	Lambda	-	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



Measured

Value

0.38534

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

Certificate SI. No.:

KL06300050003379

Registration No.:

KL63D0926

DIESEL DRIVEN VEHICLES

Chassis No.:

MEC2412BCGP0*****

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

Light Absorption Coefficient (Permissible

Limit)

Engine No.:

400951D00*****

Class of Vehicle.

Goods Carrier

Make: .

DAIMLER INDIA COMMERCIA VEHICLES PVT. LTD

Model .

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 വകുപ്പി

MOTOR VEHICLES DEPARTMENT

DIESEL

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 Code: KL0630005

Testing Centre Name: HI-TECH POLLUTION TESTING CENTRE

Centre Address: IX/178 VENGOOR KIDANGOOR ,ANGAMALY,683573

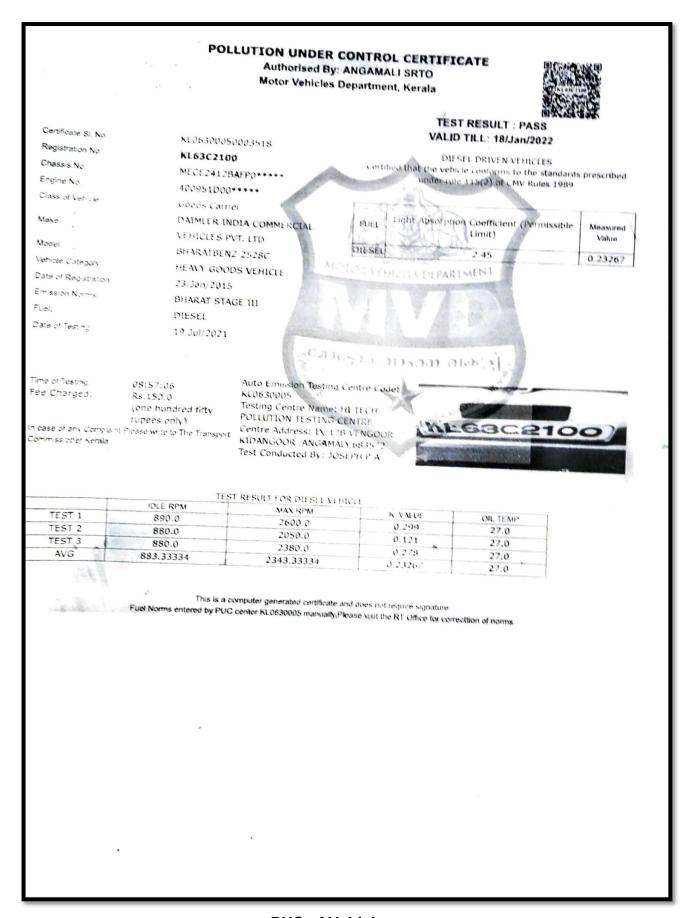
Test Conducted By: JOSEPH P A



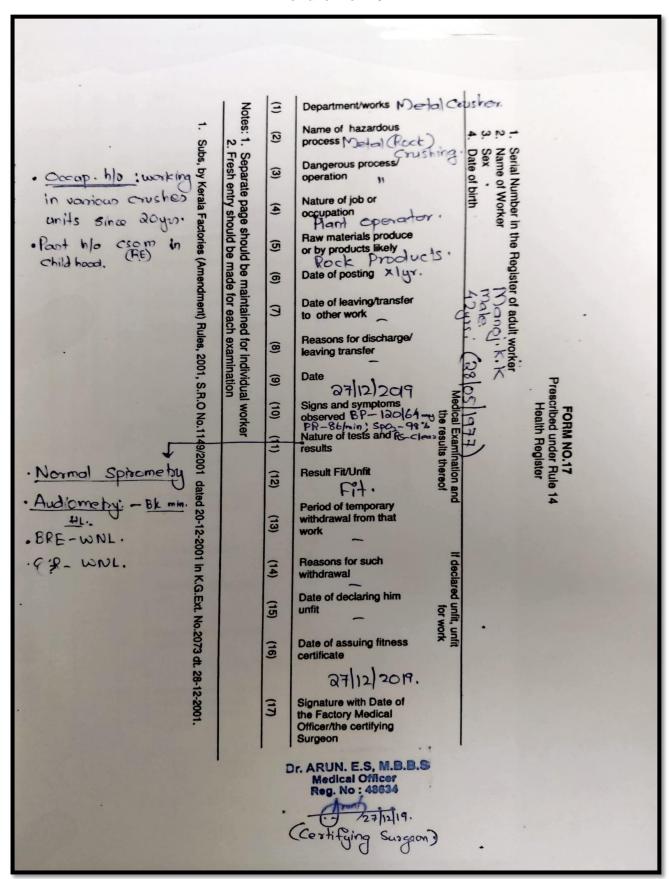
TEST RESULT FOR DIESEL VEHICLE

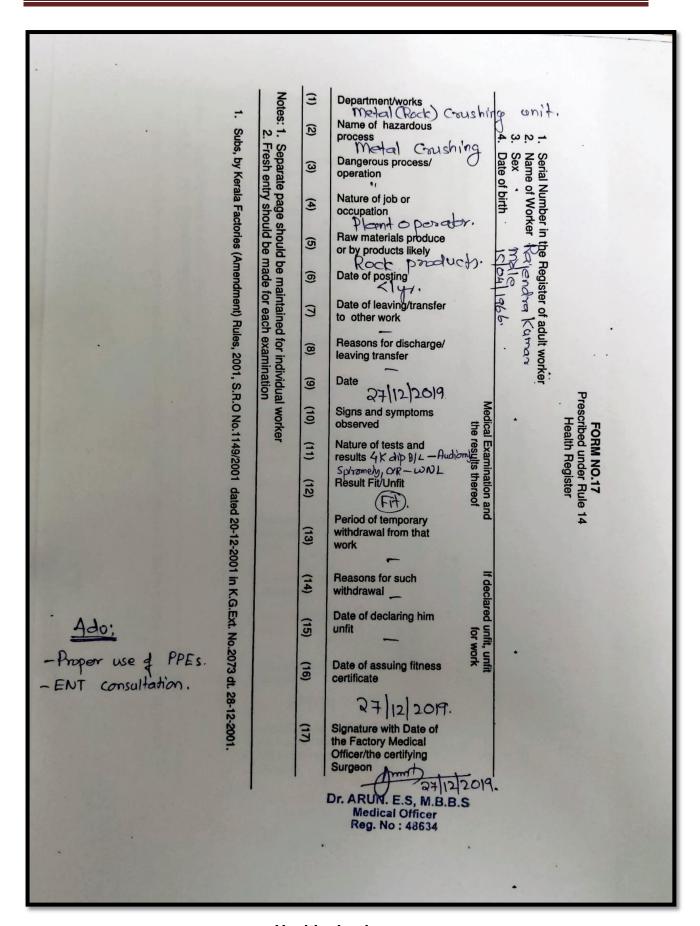
5.76562	IDLE RPM	MAX RPM	K_VALUE	OIL TEMP
TEST 1	640.0	2600.0	0.421	27.0
TEST 2	630.0	2380.0	0.359	27.0
TEST 3	780.0	2530.0	0.379	27.0
AVG	683.33334	2503.33334	0.38634	27.0

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

BLASTING MATS			Tax Invoice)			(ORIG	GINAL FOR	REC	IPIENT)
S.NO.2108.211. IDA BOLLANAM REAR AP MET WEIGH BRIDGS SANDAREDOY, TEAPHPT39721.125 SANDAREDOY, TEAPHPT39	11 1	GLOBAL MINERAL WORKS						ted	1	
SANGAREDY, TELARARY AND ALCONO STANGAR AND ALCO	5 / Z	S.NO.210&211, IDA BOLLARAM				1/13 4310 0334	Mo	Mode/Terms of Payment		ment
Buyer's Order No. Dated	人	SANGAREDDY, TELANGANA - 502325			s Ref.		Oti	her Refere	nce(s)	
ANTERS AGGREGATES -16/7 ANKAMALY, RUKUTTY PANCHAYATH RANKULAM KERELA -19 Vadakkekara		State Name: Telangana, Code: 30 E-Mail: accounts@globalmineral.in					Da	Dated		
Despatched through BY ROAD ERNAKULAM ERNAKULAM KERELA	onsig	nee		Despato	h Doc	ument No.	De	elivery Note	e Date	
	9-16/	7 ANKAMALY, KUTTY PANCHAYATH				rough			AM	
### STIN/UIN : 32AEGPV9147K1ZY ate Name : Kerala, Code : 32 Very (if other than consignee)	RNA aii V	KULAM KERELA adakkekara				LR-RR No.	M	otor Vehic	le No.	
Description of Goods	STIN	I/UIN : 32AEGPV914/K1ZY						3000730		
P-16/7 ANKAMALY, ARRUKUTTY PANCHAYATH RNAKULAM KERELA STIN/UIN	uver	if other than consignee)		_ Terms o	of Deli	very				
RNAKULAM KERELA \$\frac{1}{2}\$ 22AEGPV9147K1ZY \$\text{tate Name} : Kerala, Code : 32 Description of Goods	LAN	TERS AGGREGATES 7 ANKAMALY.	4							
Description of Goods	ARL	KUTTY PANCHAYATH KULAM KERELA		1 100						
Description of Goods										
Description of Goods						-	1	Dieg %	Δ	mount
BLASTING MATS	SI No.	Description of Goods	HSN/SAC	Quantil	ty	Rate	per	DISC. 76		- I
Total 5 NOS ₹ 2,54,880.00	-	ASTING MATS	40040000	5 NO		43,200.0	NOS		2	16,000.00
Amount Chargeable (in words) INR Two Lakh Fifty Four Thousand Eight Hundred Eighty Only HSN/SAC Taxable Value Rate Amount Tax Amount Tax Amount Tax Amount 2,16,000.00 18% 38,880.00 38,880.00 38,880.00										38,880.00
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Company's Bank Details Bank Name : AXIS BANK LIMITED(CA)	400	unt Chargeable (in words) Two Lakh Fifty Four Thousand Eight Hund HSN/SAC 40000	nd Eight Hun	Total idred Eig	2,10 2,10 hty C	/alue 6,000.00 6,000.00 Only	Rate 18%	Amour 38,88 38,88	0.00	38,880.00
Bank Name : AXIS BANK LIMITEDICA) A/c No. : 912020017515207 Branch & IFS Code : NIZAMPET & UTIB0002960	400	ant Chargeable (in words) Two Lakh Fifty Four Thousand Eight Hund HSN/SAC 40000 Amount (in words): INR Thirty Eight Thousan	nd Eight Hun	Total Idred Eig Company Bank Nam	2,10 2,10 hty C	/alue 6,000.00 6,000.00 Dnly	BANK I 001751	Amour 38.88 38,88 28,88 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000	0.00 0.00 0.00	38,880.00 38,880.00
Bank Name : AXIS BANK LIMITED(CA)	400 Tax	Int Chargeable (in words) Two Lakh Fifty Four Thousand Eight Hund HSN/SAC 40000 Amount (in words): INR Thirty Eight Thousan Inpany's PAN: APHPT3972L	nd Eight Hun	Total Idred Eig Company Bank Nam	2,10 2,10 hty C	/alue 6,000.00 6,000.00 Dnly	BANK I 001751	Amour 38.88 38,88 28,88 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000 20,000	0.00 0.00 0.00	38,880.00 38,880.00

Bill Copy of Blasting Mat