



Dt.....

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

Ref :- File No. 58/SEIAA/KL/7586/2012

Sub :- Environment Clearance - Quarry project of M/s Planters aggregates Quarry project is situated at Karukutty Village & Panchayath, Alwaye, Ernakulam District, Kerala. - Compliance Report first half - Reg.

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 4.8033 Ha. by order No. 58/SEIAA/KL/7586/2012 dated 15-13-2013 by State Environmental Impact Assessment Authority, Kerala. The compliance report of first half (April 2016 to September 2016) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

For M/s Planters aggregates

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

Encl: - As Above

Planters Aggregates

Palissery, Angamaly, Ezhattumugham P.O., Ernakulam, Kerala - 683 577. Phone: 0484 2439166, 2439167, Mob: 9562141400. E-mail: plantersgroup@yahoo.com

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

ENVIRONMENTAL CLEARANCE ORDER NO: 58/SEIAA/KL/7586/2012

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA) FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

ΑT

SURVEY NO. 168

Karukutty VILLAGE & PANCHAYATH, ALWAYE,

ERNAKULAM DISTRICT, KERALA.

BY

M/S PLANTERS AGGREGATES, ERNAKULAM DISTRICT, KERALA.

(April - September, 2016)

INDEX

SI. No.	Particulars	Page No.
1.	Introduction	7
2.	Brief of the project	8
3.	Salient features	10
4.	Compliance Report – Specific conditions – Part A	11
5.	Compliance Report – General conditions – Part B	13
6.	Plates	28
7.	Annexure	27
8.	Soft copy (in CD) of the compliance report	55

LIST OF TABLES

SI. No.	Particulars	Page No.
1.	Environmental Monitoring Cell (EMC)	15
2.	Details of the vegetation existing along the road side	16
4.	Details of performed activities under CSR	17
5.	Details of statutory approvals	23

LIST OF PLATES

Plate No.	Particulars Particulars	Page No.
1.	Photographs showing exist of drain from the site	29
2.	Photographs showing rain water collection pond and tank	29
3.	Natural vegetation either side of the tarred road	30
4.	Photograph showing solar street lights	31
5.	Photograph of the sprinklers	31
6.	Photograph of benches made by overburden and cover by coir mat	32
7.	Photograph showing barbed d metal wire fencing	32
8.	Photograph showing the warning alarm and sign board.	33
9.	Photograph showing access road in the project site to the quarry	34
10.	Photograph showing overburden managed within the site	34
11.	Photograph showing bench system with 5 m. height and width	35
12.	Photograph showing the crusher unit in the project site	35
13.	Photograph showing silt traps to prevent quarry waste in the main stream	36
14.	Photograph of metallic board displayed the conditions stipulated in the EC order	36

LIST OF ANNEXURES

Annexure No.	Particulars	Page No.
01	Copy of the receipts of the expenses incurred towards CSR activities	38
02	Copy of the Environment Clearance	40
03	Copy of Explosive License issued by the Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)	42
04	Copy of the "Consent to Operate" from Kerala State Pollution Control Board	43
05	Copy of License for quarry operations from Karukutty Panchayath	44
06	Copy of lease order from Directorate of Mining and Geology	45
07	Copy of the certificate of second class manger	47
08	Copy of the certificate of mining mate	48
09	Copy of advertisement in newspaper	49
10	Copy of the affidavit	50
11	Laboratory result of ambient sound level	51
12	Laboratory result of ambient air	52
13	Laboratory result of water	53
14	CD of Compliance report	55

INTRODUCTION

M/s Planters aggregates Quarry project 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 15.13.2013.

The half yearly compliance report needs to be submitted as part of general condition No.25 of Environmental Clearance order by the project proponent. The compliance report to the specific conditions and general conditions of the Environmental Clearance for the period of April - September, 2016 is being submitted.

Brief of the project

Type of Project	Quarry project (Building stone)
Name of the project	M/s Planters Aggregates
Category of the project	B2
GPS Locations	Latitude (N) 10 ⁰ 16' 31.28" N
	Longitude (E) 76 ⁰ 25' 07.37" E
Address for correspondence	Palissery, Ezhattumugham P.O.,
	Ernakulam District,
	Kerala – 683 577
	Tel. No. 0484-2439166, 2439167
Website and E mail ID of	www.plantersgroup.com.
company	plantersgroup@yahoo.com
Name, Phone Number & e	1. Saji Vadakkekara
- mail id of responsible	Managing Director
persons	0484-2439166
	plantersgroup@yahoo.com
	2. Davis George
	General Manager
	9605040050
	davisgeorgekinattingal@gmail.com
N	Main Features
Total area under Environment Clearance	4.8033 hectare
Minable reserves	45,90,000
Production	2,88,000 TPA
Life of Mine	16 Years
Highest and lowest elevation	145 m MSL and lowest elevation is 95 m MSL.
Crusher unit	Yes within the project site
Enviro	onmental Settings
Nearest house	nearest habitation is at 50 m towards N.
Nearest Water Body	Chalakudi River, 1.5km, N
Nearest town	Palissery, 0.74km, SW
Nearest hospital	Palissery Govt. Dispensary (1.5 km) SW
Nearest School	Palissery Govt. LP School (1.5 km) SW
Seismic zone	Zone-III, Moderate damage risk zone as

	par BMTPC, Vulnerability atlas Seismic
	zone of India IS: 1893-2002.
Air quality	PM ₁₀ , PM _{2.5} , SO ₂ , NO ₂ are under NAAQ standard
Water quality	Under acceptable limit (Bore well)
Ambient noise	Day time :- 48.8 dB(A)
	Night time :- 35.0 dB(A)

SALIENT FEATURES OF THE PROJECT

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 the O.M No. J-13012/12/2013-IA-II (I) dt.24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Geographical location of the project site is in 9°59'21.50 to 9°59' 12.22" Latitude (N) and 76°37'20.43" to 76°37'06.07"(E). The quarry is interlinked with a Crusher / M sand unit located within the complex. The Capacity is 2, 70,000 MTA. There are no litigations against the lease area or applicant in any court of law. Topography is hilly. Highest elevation is 88m MSL and lowest 38m MSL. The approximate daily water demand is 5 KLD and total power requirement is 75 kw. The nearest house is located at 50m North of the proposed quarry.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	The storm water drainage channels and drainage line to the	Complied
	existing pond in the site and its exit from the site should be	
	made fully functional.	

Compliance:

As part of storm water management, the storm water from entire mining area is channeled to the existing pond in the site through well maintained channels and drainage lines. The project has constructed pits at the last point of drainage to prevent sediments from the storm water. The storm water drainage and its exit from the site are fully functional at all the time. The photograph showing the exit of drainage form the site is provided at **Plate No.1.**

02	The depth of the mining should be restricted to the 30m level as	
	agreed in the proposal.	Complied

Compliance:

The project proponent will be scrupulously followed the condition regarding the depth of mine stipulated in the Environmental clearance Order. As plan submitted before EAC (Expert Appraisal Committee), in the conceptual phase of quarry project the exploration of mineral is from 145 – 30m. Therefore the mining depth will maintain as 30 m as agreed in the proposal.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART - B - GENERAL CONDITIONS

0	1	Rain water harvesting to collect and utilize the entire water Complied	
		falling in land area should be provided.	

Compliance:

The garland drains maintained around the project area will help to collect the rain water to the collection pond. The Rain Water Harvesting (RWH) system is implemented and properly used for the industry. Rain water from entire project area has been collecting in the existing pond which is situated in the lowest level of project area through channels and drainages. Rain water is mainly used for gardening, wetting of roads and sprinkler system for contain dust emission. Two concrete tanks are also used for collecting rain water and its efficient utilization. The photograph showing the rain water collection pond and tank in the project area is attached at **Plate No. 2.**

02	Environment monitoring cell as agreed under the affidavit filed	_
	by the proponent should be formed and made functional.	complied

Compliance:

An Environmental Monitoring Cell (EMC) was formed with Mr. Saji Vadakkekara (proprietor of Planters Aggregates) as head and made functional. Meeting of monitoring cell is arranged every month and discussed the status of the compliance of the specific and general conditions contained in the Environmental Clearance (EC) order. As part of monitoring, the sound levels, ambient air and water are monitored through a NABL accredited laboratory. The monitored results are well within the permissible limits. The results are given at **Annexure No. 11, 12, & 13**. The details of monitoring cell are given below.

TABLE 1 ENVIRONMENTAL MONITORING CELL (EMC)

SI. No.	Post	Name
1.		0
	Head of monitoring cell (proprietor)	Saji Vadakkekara
2.		
	Head in charge (Environmental)	Davis George
3.		
	Senior Environmental Officer	Reji K. Paul
4.		
	Asst. officer of Environment, Health	Kamalkanth
	and safety at site	
5.		M/s Environmental Engineers &
	Environmental consultant	Consultants Pvt. Ltd.
		A1-198, Janak Puri, New Delhi
6.		Standards Environmental &
	Address of Environmental Laboratory	Analytical Laboratories, KJ Tower,
	•	Udyogamandal, EKM

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

Avenue trees can perform as dust regulation mechanism therefore the project proponent is intending to plant more saplings along the road side and parking area, where the vegetation is less. There are natural vegetation including trees, shrubs and climbers growing in the sides of the tarred road and open parking areas. The name and family of flora is given below in **Table Number 2.** The photographs showing the natural vegetation is attached at **Plate No. 3.**

TABLE 2 Details of the natural vegetation existing along the road side is as follows

SI. No.	Scientific Name	Common Name	Family	Habit
1.	Tectona grandis	Thekku	Verbenaceae	Tree
2.	Tabernaemontana alternifolia	Kunnanpala	Apocynaceae	Tree
3.	Chromolaena odorata	Communist-pacha	Compositae	Shrub
4.	Mangifera indica	Mavu	Anacardiaceae	Tree
5.	Ziziphus oenopolia	Thodalli	Rhamnaceae	Climber

04	The project	shall	incorporate	devices	for	solar	energy	Complied
	generation ar	nd utiliz	ation whereve	r possible).			

As part of reduce the consumption of energy from conventional sources, energy conservation and to use renewable energy, the project proponent has installed solar street lights in the project site near to the office and magazine area. The photograph of the solar street lights is attached at **Plate No. 4.**

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

Compliance:

To contain dust emissions, the project installed sprinklers in the sides of service road, on the top and nearby areas of crusher building. The sprinklers are water efficient and the same is using effectively. The photograph of the sprinklers is attached at **Plate No. 5.**

06	The eco-restoration plan submitted with the proposal should be	Will	be
	fully implemented.	complied	

The eco- restoration is an integral part of the mining industry and it will be carried out as per the proposal submitted. The project converted a sloppy land in to benches by systematically dumping the overburden and top soil. To prevent soil erosion the benches has covered with a *geotex* coir mat and planted grass. As part of eco - restoration, the project is intending to plant various saplings including herbs on the prepared benches. The photograph of benches covered by coir mat is attached at **Plate No. 6.**

07	Corporate social responsibility agreed upon by the proponent	Being
	should be implemented	complied

Compliance:

The project has carried out many activities under Corporate Social Responsibility (CSR); the main activities are in the sectors like as food provisions to treatment support, promotion of sports and culture, aid for constructing houses and toilets, promotion of environment, etc. The project is providing food provisions to Emmanual orphanage in every month. The details of activities under CSR are given below. The bills and receipts of the same are attached at **Annexure No. 1**.

Table 3 The details of performed activities under CSR

Sectors	Activities	Partners	Beneficiaries	Location	Amount spent in Rs.
Promotion of education	Donation	Educational service society of India	Children from economically backward		3,000
Health care	Provide provisions	Nil	Destitute children of		92,400

	for nutritious		Emmanuel		
	food Treatment	СВО	home A M vijayan	Konnathuk	1,000
	support	ODO	A ivi vijayan	unnu	1,000
Promotion of Arts and culture	Donation for Onanilavu	DYFI	Public	Pallissery	30,000
	Donation for Gramolsava m	Gramolsavam	Public	Monoor palli	4,000
	Donation for festival	SNDP library		Palissery	2,000
	Donation for Festival	St. Maries Church	Public	Pootham kutty	751
	Donation for Festival	Dream makers	Public	Karamatto m	3,000
	Donation for cultural programme	Samanwayam	Public	Nallukettu	1620
	Donation for Cultural programme	Sree narayana temple	Public	Monoorpilly	5,000
	Donation	St. Gerge Church	Public	Karamatto m	3,000
	Donation for Kavadi programme	SNDP library	Public	Paduvapur am	3,000
	Donation for festival	Muthappan temple	Public	Pallissery	2,000
Infrastructure Development	Drinking water project	LSG	Public		17,850
	Crusher products for construction of house		Jorly Jose		2,500
Environment	Donation	Paristhithi bodhavalkara na samithi	Public		500
	Doantion	Pollution control Federation	Public		2,000
Others	Donation	Janahitha samrakshana Ssamithi	Public		500

Don	nation	Janasakthi Charitable society	Public		500
Don	nation	RTI Development Council	Public		10,000
	Total amount in Rs.				

08	Barbed metal wire fencing around the mining area shall be	Complied
	provided with a height of not less than 5 ft so that the falling of	
	animals/human/belongings/dumping of garbage's etc. does not	
	happen.	

To ensure safety and prevent the falling of animals/ human/dumping of garbage's etc, in to the mining area barbed metal wire fencing was installed around the mining area at 5ft height. The photograph of the barbed metal wire fencing is attached at **Plate No.7.**

09	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 provide warning regarding blasting to the nearby community and labours of the project site, a warning alarms has installed in the project area. It is working properly prior to the blasting. The blasting time is fixed between 11.30n 11.00 t AM to 3.30pm to 4:00 PM. A danger board is also installed which gives information about the blasting time. The photograph showing the danger area, sign board etc, is provided at **Plate No. 8.**

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

The project proponent has a crusher unit near to the quarry site in the project land. A well tarred road is maintaining up to crusher unit (2.5 Km) for contain dust emission that may arise during transportation of materials. The access road to the quarry is maintained under sprinkler system to control the dust emission during transportation. This access road is maintaining with granite metals for traveling Hitachi like excavation machines. The photograph is showing the tarred access road, provided at **Plate No. 9**.

11	Overburden material should be managed within the site and the	_
	old quarries, if any, should be reclaimed and restored	complied

Compliance:

The overburden is an inevitable product of a mining industry. At present the overburden excavated from the quarry is dumping in to three abandoned quarries within the site. The project converted a slope area in to benches by systematically dumping the overburden. To prevent soil erosion this has covered with a *geotex* coir mat and planted grass. As part of eco - restoration, the project is intending to plant various saplings and medicinal plant on the prepared benches. The photograph of the overburden is attached as **Plate No. 10.**

1:	2	Height of benches should not exceed 5m and width should not	Being
		be less than 5m.	complied

Compliance:

To ensure safety of labours and living creatures, the project is maintaining the height of the bench not exceed 5 meters and width not less than 5 meter. The minor minerals are exploring under the supervision of qualified persons so that the project can

form the benches systematically. The copy of certificates of second class manager and mines mate are attached at **Annexure No 7 & 8.** The photograph showing the height and width of benches is attached at **Plate No. 11.**

13	Mats to reduce fly rock blast to a maximum of 15 PPV should be	Will be	,
	provided.	complied	

Compliance:

The project is yet to use mats to reduce fly rocks during the time of blasting. The project is using electric delayed detonator for blasting therefore the problem with fly rock in the community is nil. The project can also assure the maximum PPV is under 10 with the controlled blasting operations under the supervision of qualified persons

14	Mining de	pth	shou	ıld not e	хсее	d beyo	nd	40m, unle	ess other	wise	Will	be
	specifies	or	not	below	the	level	of	nearest	stream	bed	complie	d
	whicheve	r is I	ess.									

Compliance:

The exploration of mineral will be maintained as 30 m as agreed in the proposal. To ensure this, the project appointed second class manager and mining mate. The all activities of these qualified persons will be under the supervision and monitoring of Environment Monitoring Cell.

15	Acoustic enclosures should have been provided to reduce	Complied
	sound amplifications in addition to the provisions of greenbelt	
	and hollow brick envelope for crushers so that the noise level	
	is kept within prescribed standards given by CPCB/KSPCB	

The crusher unit is encircled by green belt. The solid brick housing of crusher and green belt is maintaining the noise level as per CPCB standards. The result of NABEL accredited laboratory of ambient sound level is attached at **Annexure No. 11**. The photograph showing the crusher unit is attached at **Plate No. 12**.

16	Assurance in the form of affidavit should be given to SEIAA	Will be	•
	that eco-restoration including the mine closure plan shall be	complied	
	done at the own cost of the project proponent.		

Compliance:

Assurance in the form of affidavit was already submitted to SEIAA Kerala after getting the Environmental Clearance. The copy of the affidavit is attached at **Annexure No. 10.**

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

Compliance:

To prevent quarry waste and channelize storm water to the constructed rain water collection pond, the project proponent has provided garland drains at the lower slopes of project site.

18	Debris/ silt traps to be provided to prevent entry of dust and	Being
	quarry wastes entering the main streams.	complied

Compliance:

Storm water from entire project area is collected through channels and directed to the existing pond in the site. The deposited silt at the bottom of pond can collect in summer season by using excavator. The over flow water from the pond is released only through the top area and the outlet of the outward channel is protecting with steel mesh to trap the floating debris. This arrangement will prevent the quarry waste from the site to the mainstreams. The photograph showing the silt trap arrangement is attached at **Plate No. 13.**

19	All other statutory clearances should have been obtained as complied
	applicable, by the project proponents from the respective
	competent authorities that for blasting and storage of
	explosives.

Compliance:

All statutory approvals required for the quarrying activity is obtained. The copy of the approvals obtained is provided at **Annexure No. 2, 3, 4, 5 & 6**

Table 4 The details of statutory approvals

Name of the Statutory approval	Name of the Statutory authority	Approval Number & Date
Environmental Clearance order	State Environmental Impact Assessment Authority, Kerala	58/SEIAA/KL/7586/2012 Dated: 15/03/2013
"Consent to Operate"	Kerala State Pollution Control Board	File No. PCB/EKM/DO- 1/OA-404/15 Dated : 08/03/2016
Explosive License	Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)	E/SC/KL/22/751(E33224) Dated : 14/3/2016
License for quarry operations	Karukutty Gram Panchayat	38/16-17 Dated:1/04/2016
Lease order	Directorate of Mining and Geology	660/2010- 11/9439/M3/2010 Dated : 3/1/2011

20	In case of any change(s) in the scope of the project, the project	Will be	į
	would require a fresh appraisal by this authority.	complied	

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

21	The authority reserved the right to add additional safeguard	Will	be
	measures subsequently, if found necessary, and to take action	complied	
	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.		

Compliance:

If the authority instructs to add additional safeguard measures subsequently, the project will be complied with.

22	The stipulations by Statutory Authorities under different Acts	Will be
	and notifications should be complied with, including the	complied
	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 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, 1967.
- ➤ Mines Act, 1952
- ➤ Explosive Rules, 2008
- ➤ Kerala Panchayat Raj Act, 1994
- Central Ground Water Authority
- ➤ 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.

23	The project proponent should advertise in at least two local C
	newspapers widely circulated in the region. One of which shall
	be in the vernacular language informing that the project has
	been accorded environmental clearance and copies of
	clearance letters area 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 a copy of the same
	should be forwarded to the office of this authority as
	confirmation.

Complied

Compliance:

An advertisement in two news paper regarding the accordance of environmental clearance to the quarrying activity was given within stipulated period and the copy of the

same was submitted to SEIAA. The copy of newspaper advertisement is provided at **Annexure No. 09.**

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

Compliance:

A copy of the environmental clearance letter was submitted to Karukutty Grama Panchayat office on 26/11/2013. Its inward no. is 7405/13. There were no suggestions/representations received while processing the proposal. The environmental clearance order is uploaded in the website of the company and it can be seen in the website www.plantersgroup.com.

The proponent shall submit six monthly reports on the status of	Being
compliance of the stipulated EC conditions including results of	complied
monitored data (both in hand 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	
the Directorate of Environment and Climate Change, Govt. of	
Kerala.	
	compliance of the stipulated EC conditions including results of monitored data (both in hand 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 the Directorate of Environment and Climate Change, Govt. of

The compliance report is being submitted to the Directorate of Environment and Climate Change, Govt. of Kerala and also to the Regional Office of MoEF&CC, Govt. of India both in hard copy as well as mail. The result of monitored data is provided in **Annexure No. 11, 12 &13.**

26	The conditions of the environmental clearance should be	Complied
	prominently displayed in a metallic board of 3 ft x 3 ft with	
	green background and yellow letters of Times New Roman fond	
	size of not less than 40.	

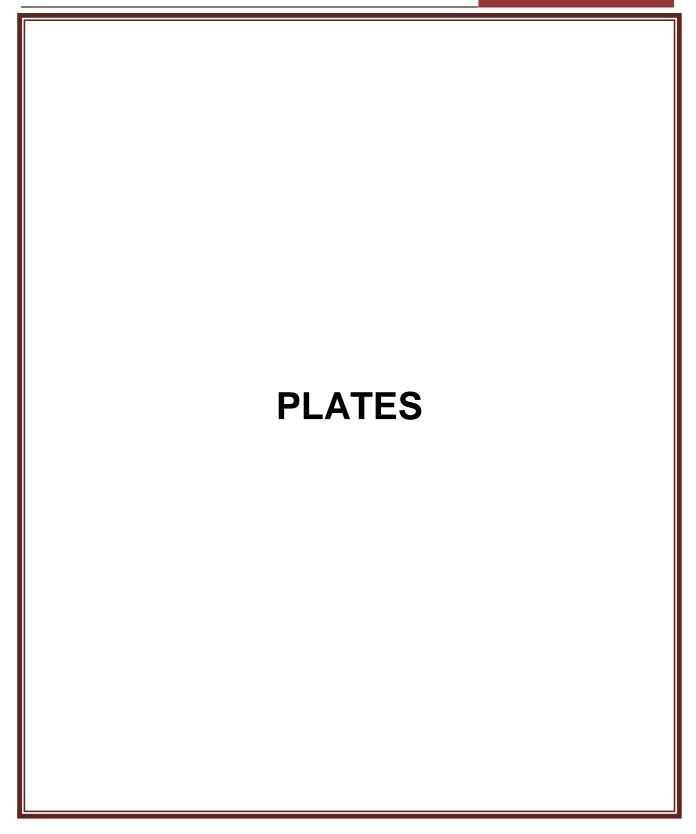
Compliance:

The specific conditions of the environmental clearance prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman fond was installed. The photograph showing the sign board containing specific conditions is provided at **Plate No. 14.**

27	The proponent shall provide affidavit that all the conditions	Complied
	stipulated in the EC shall be scrupulously followed.	

Compliance:

An affidavit stating that all the conditions stipulated in the Environmental clearance will be scrupulously followed was submitted to State Environmental Impact Assessment Authority. The copy of affidavit submitted at SEIAA is attached at **Annexure No. 10.**





Drainage in the project site

Plate No.2



Rain water collection pond exist in the project site



Rain water collection tank





The natural vegetation maintained along the roadside



Solar street lights installed near to the magazine PLATE No. 5



Sprinklers Installed in the project area



Benches made by over burden and covered by coir mat PLATE No. 7



Barbed metal wire fencing with a height of 5 meter



Device for alarm prior to the blasting



Sign board mentioned danger and time of blasting



Tarred road to the crusher unit
PLATE No. 10



Over burden managed within the site



Minerals explored with bench system of 5 m width and height PLATE No.12



Crusher unit existing in the project site

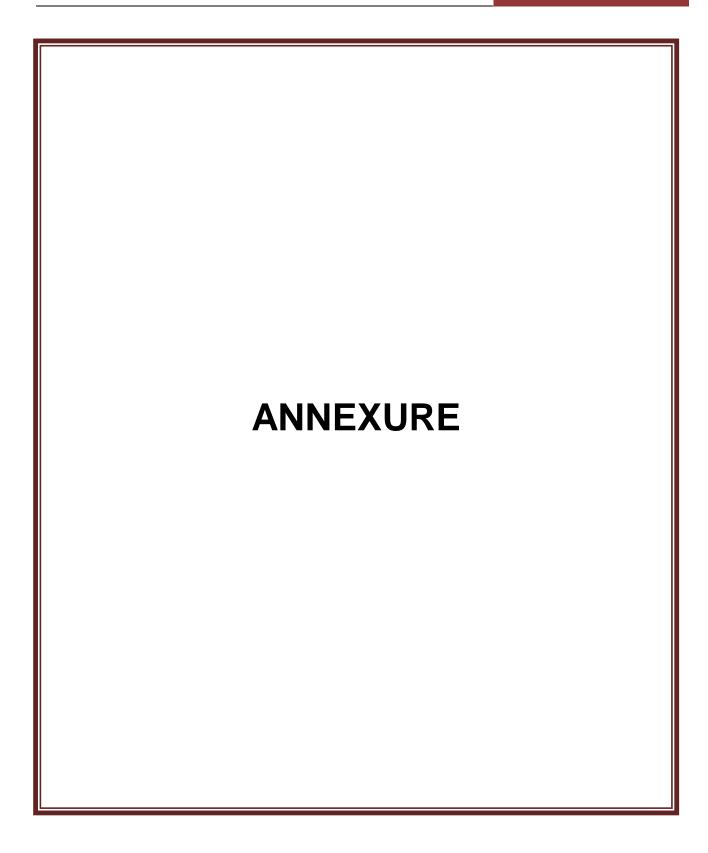


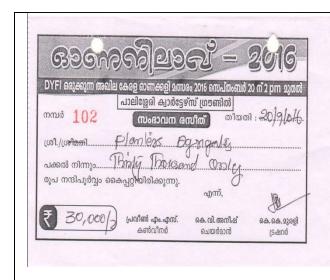
Slit trap to prevent quarry wastes entering in to the main stream

PLATE No. 14



Metallic board described the details of EC

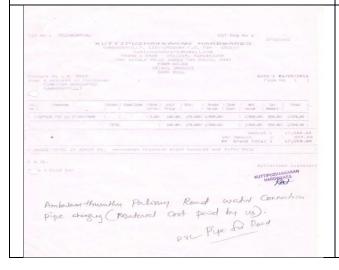
















Receipts of activates under CSR



Proceedings of the State Environment Impact Assessment Authority Kerala Present: Dr. A.E. Muthunayagam, Chairman; Prof. (Dr.) K.P. Joy, Member; Sri. James Varghese IAS, Member Secretary

Sub: SEIAA Kerala - Proposed quarry project in Survey No. 168 at Karukutty Village, Karukutty Panchayath, Alwaye Taluk, Ernakulam District, Kerala by M/s Planters Aggregates – Environmental Clearance under EIA Notification 2006 accorded – Orders issued

Environmental Clearance

No. 58/SEIAA/KL/7586/2012

dated, Thiruvananthapuram 15-03-2013

ORDER

The Proprietor of M/s Planters Aggregates, vide their application received on 14-11-2012, has sought environmental clearance under the EIA Notification, 2006 for the quarry project at Karukutty Village, Karukutty Panchayath, Alwaye Taluk, Ernakulam District, Kerala. The proposal has been appraised by the State Level Expert Appraisal Committee Kerala constituted by the competent authority, as per prescribed procedure in the lights of provisions under the EIA Notification 2006 and subsequent amendments, in its 10th meeting held on 26th and 27th November 2012 and also in the 12th meeting held on 2nd February, 2013 AND on the basis of the supporting documents enclosed with the application viz., the Form – 1, questionnaire for mining projects, pre-feasibility report, Environment Management Plan and the additional clarifications furnished in response to the observations, the SEAC Kerala recommended environmental clearance to the project.

It is interalia, noted that the project comes under the Category B, Activity 1(a) of Schedule of EIA Notification 2006. The proposed project site falls within 10°16'N and 76°25' E. The proposed project is for quarrying of 2,88,000 TPA of building granite stone from an area of 4.8033 hectare of land. The expected life of mine will be 16 years. The proposed activity involves about 75 % of the pit area for exploring granite building stone. At the end of life of mine, the reclaimed area will be suitably planted and the remaining void at lower levels of excavated pit will be utilized as water storage/ground water recharge and will be utilized for domestic/agricultural purposes. The proposed project does not involve any underground mining activities. The mining will be done by open cast semi mechanised method of mining. The bench height and width proposed is 5 m. The exploitation of mineral is being done from 145-30 m RL in conceptual phase. A total quantity of 24,000 m3 of top soil from two pits will be removed during the mining operations. The top soil excavated from the quarry shall be dumped separately at predetermined place and subsequently will be utilized in spreading over reclaimed areas for plantation. The top soil will be utilized for green belt development/plantation and will also be utilized for filling the low lying areas or adjacent quarry site. The sewage of 0.8 KLD generated from the mine office will be diverted to the septic tank followed by soak pit. The daily water requirement of 5 KLD will be met from storm water / bore well. There will be fugitive emissions generated during material handling, transportation, loading, unloading, etc. that are proposed to be managed by regular water sprinkling on haul road, green belt development, avoiding overloading of vehicles and limiting the speed of the vehicles. Excavated material is transported to the crusher located at a distance of 0.15 km from the quarry site for further processing.

The SEIAA considered the proposal in its 13th meeting held on 13th December 2012 and 15th meeting held on 22nd February 2013. The SEIAA, after due consideration of the relevant documents and additional clarifications submitted by the project proponent, and in view of the recommendations of SEAC, approved for issuance of Environmental Clearance for the project mentioned above at its 15th meeting held on 22nd February 2013. Accordingly, the State Level Environment Impact Assessment Authority (SEIAA) Kerala constituted by Govt. of India vide Notification No. S.O. 2484(E) dt.3-11-

Page 1 of 4

2011 of Ministry of Environment and Forests, Govt. of India, published as Gazette extraordinary No. 2074 on 3-11-2011, hereby accord necessary Environmental Clearance for the above project as per powers vested with it under the provisions of Environment Impact Assessment Notification - 2006 and subsequent amendments and also under the provisions made in the O.M. No. L-11011/47/2011-IA.II(M) dated 18th May 2012 of the Ministry of Environment and Forests, Government of India, and further subject to strict compliance of the following specific conditions, and the general conditions contained in the Annexure, which shall also form a part of this document.

- 1. Storm water drainage channels and drainage line to the existing pond in the site and its exit from the site should be made fully functional.
- 2. The depth of mining should be restricted to the 30 m level as agreed in the proposal.

Compliance of the above conditions will be monitored by the Directorate of the Department of Environment and Climate Change, Government of Kerala or its agencies and also by the Regional Office of the Ministry of Environment and Forests, Government of India located at Bangalore. Necessary support for entry and inspection should be provided by the project proponent to the staff of the Directorate and Ministry for monitoring purposes.

The given address of correspondence of the Authorized Signatory of the project is:- Mr. Saji Vadakkekara, Proprietor, M/s Planters Aggregates, Palissery, Ezhattumugham P.O., Ernakulam, Kerala - 683577; Telephone No: 0484-2439166, 2439167; E-mail: plantersgroup@yahoo.com

Agency with NABET accreditation for EIA is:- M/s Enkay Enviro Services, 24-B, Basement, Dadu Marg, Gopal Bari, Jaipur-302001; Tel. No. 0141-2363996/4023996; Fax No: 0141-5118996; E-mail: info@enkayenviro.com

> 10/10 James Warghese IAS Member Secretary, SEIAA and Principal Secretary to Government **Environment Department**

To

Mr. Saji Vadakkekara Proprietor M/s Planters Aggregates Palissery, Ezhattumugham P.O. Ernakulam, Kerala – 683577.

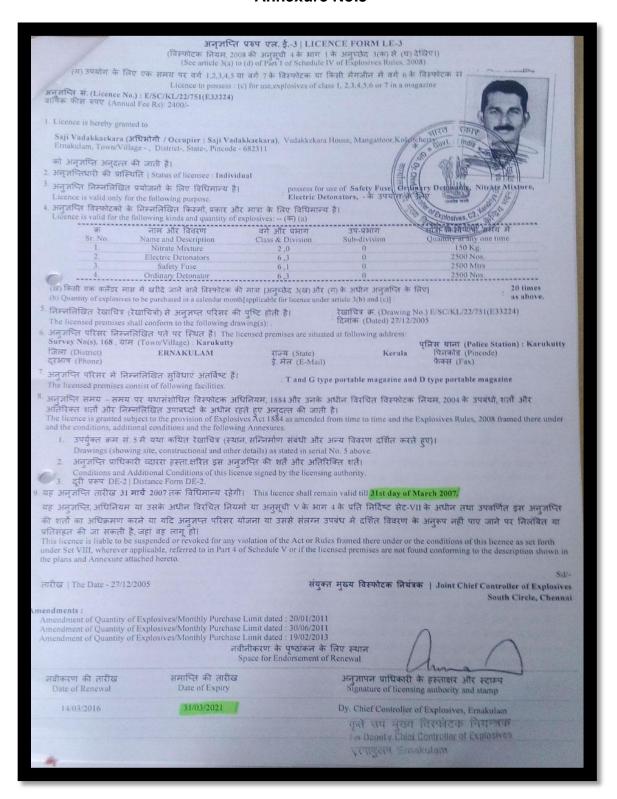
Copy to:

- The Principal Secretary, Environment Dept., Government of Kerala, Secretariat
- The Director, Dept. of Environment and Climate Change, Govt. o.f Kerala, Tvm 24.
- IA-Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi - 110003
- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034
- Chairman and Members of SEIAA Kerala
- Chairman, SEAC Kerala
- Website uploading
 - Stock file

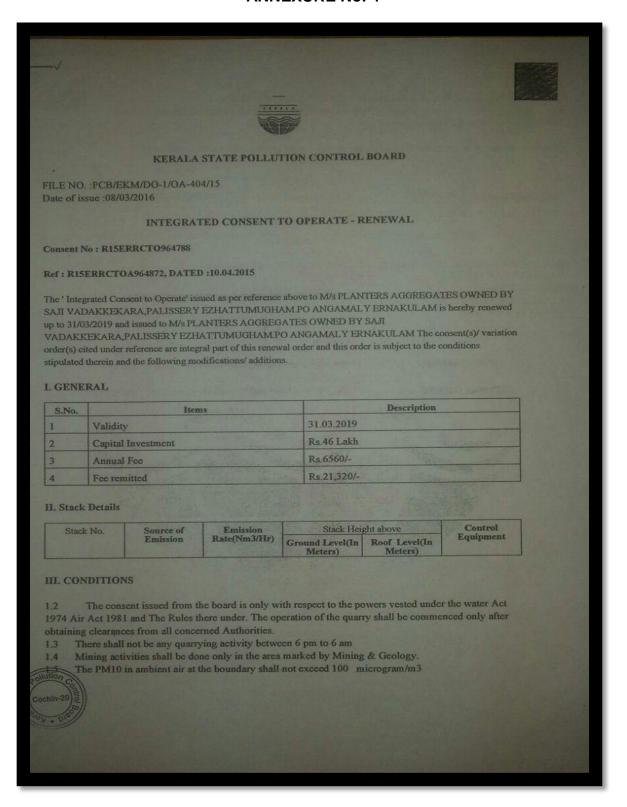
Page 2 of 4

EC order

Annexure No.3



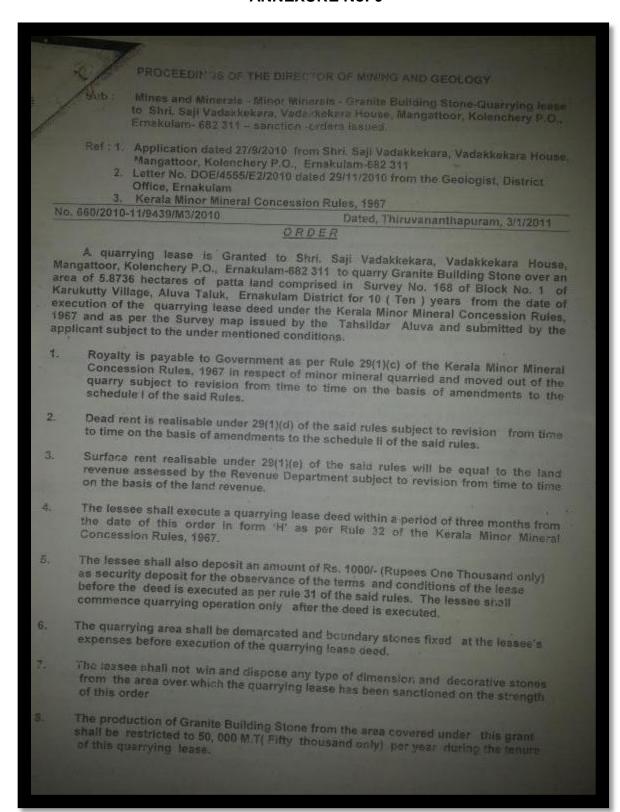
License to possess and use of Explosives

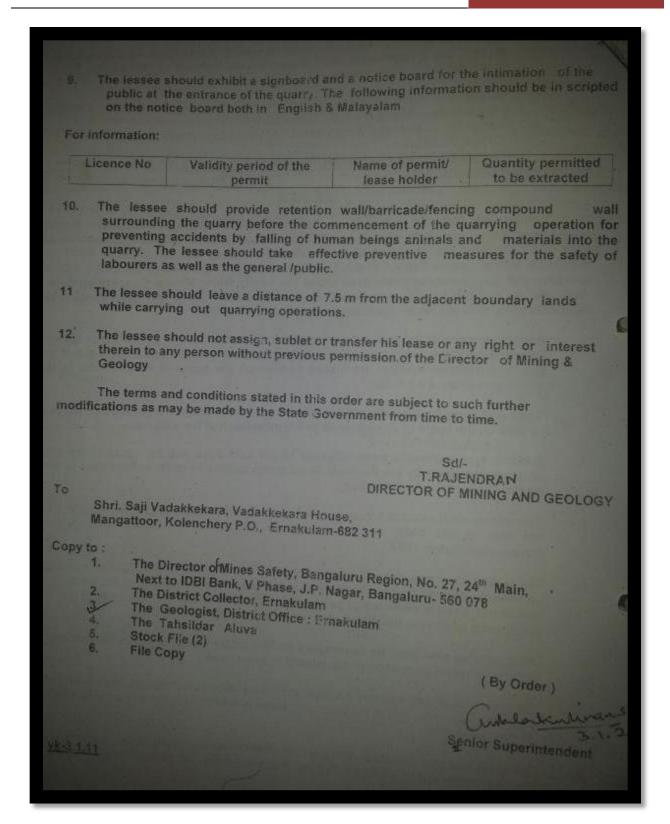


Concent to Operate from Kerala Pollution Control Board

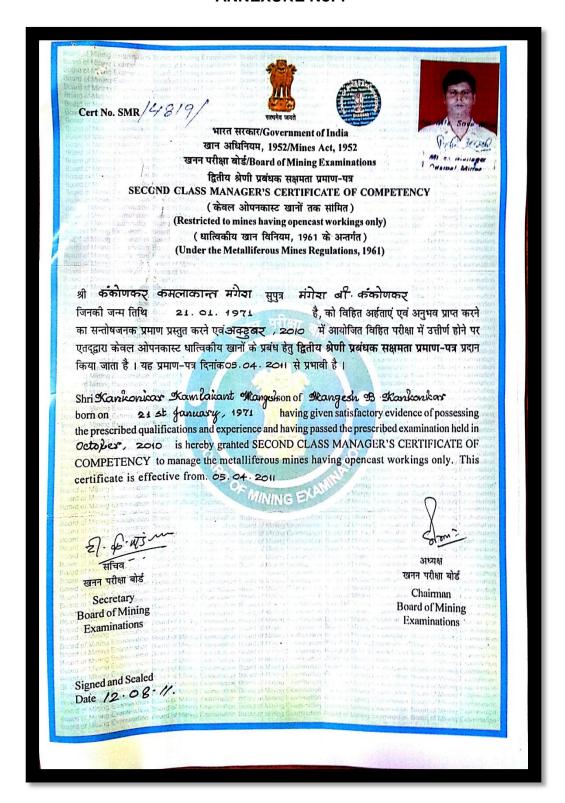
คยยางเห็กว่า กามส์ 38	BEELING MINING 38 15:13					
	നാമ പഞ്ചായത്തിൽ നിന്നും 1994 ലെ കേരളാ പഞ്ചായത്ത് മാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ വകുപ്പുകളും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു നൽകുന്ന					
	ഡി & ഒ ലൈസൻസ്					
ലൈസൻസിയുടെ പേരും മേൽവിലാസവും	2000) 2000 2000 2000 2000 2000 2000 200					
സ്ഥാപനത്തിന്റെ പേടും, സ്ഥലനാമവും	munamment one, some some some					
ലൈസൻ്സ് നൽകിയിട്ടുളള പ്രവർത്തനങ്ങൾ						
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡു നമ്പരും	WORK VIII					
ലൈസൻസ് കാലയളവ്	1.A.16 0,000 31.3.17 and					
ഈടാക്കിയ ലൈസൻസ്	Accel- on	മസീത് നമ്പർ				
ഫീസ്		4293 22,2,16				
ലൈസൻസ് അനുവദിക്കു ന്നതിനായി ഹാജമാക്കിയ നിരാക്ഷേപ പത്രങ്ങളുടെ വിശദാംശങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽ കിയ അധികാരസ്ഥാനം)		ficrlé				

License from Gram Panchayat

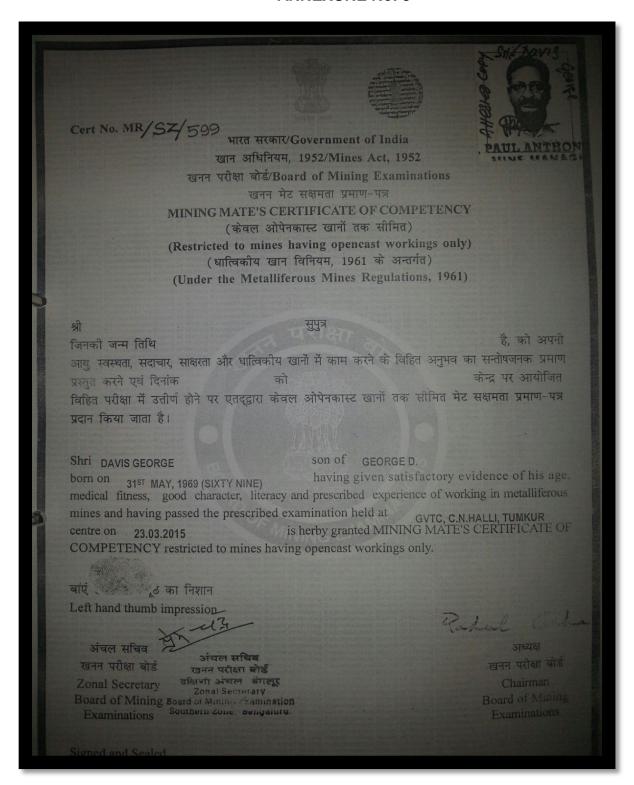




Lease order from Directrotre of Mining and Geology

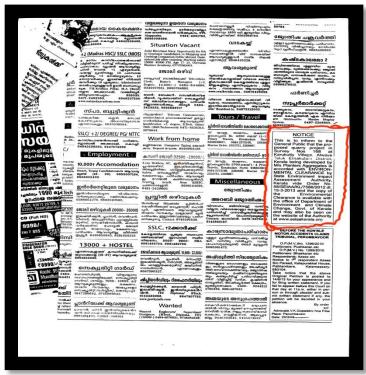


Certificate of second class manager

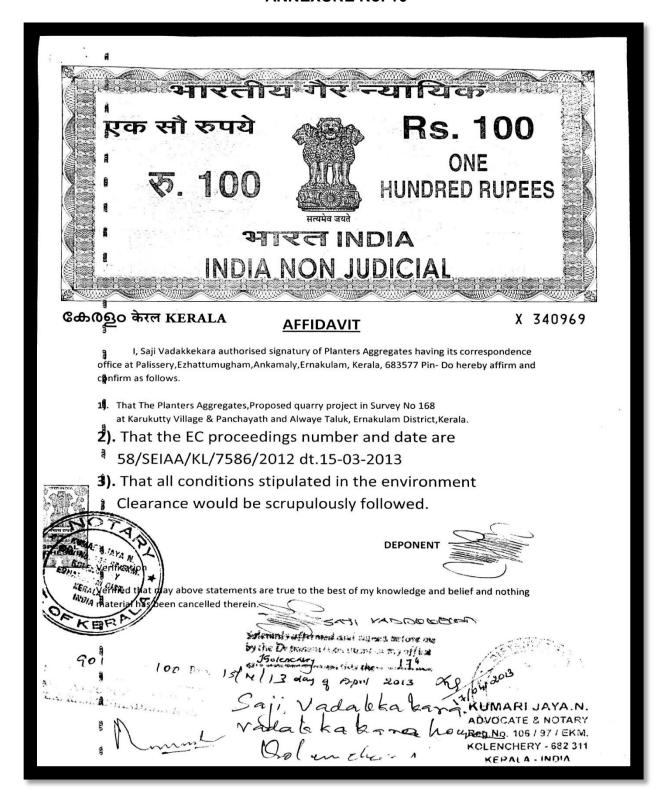


Certificate of Mining mate

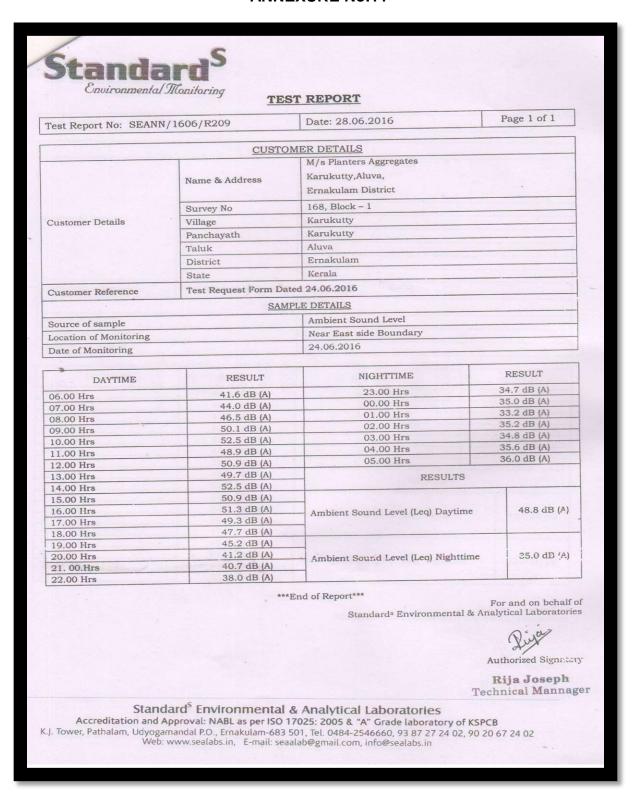




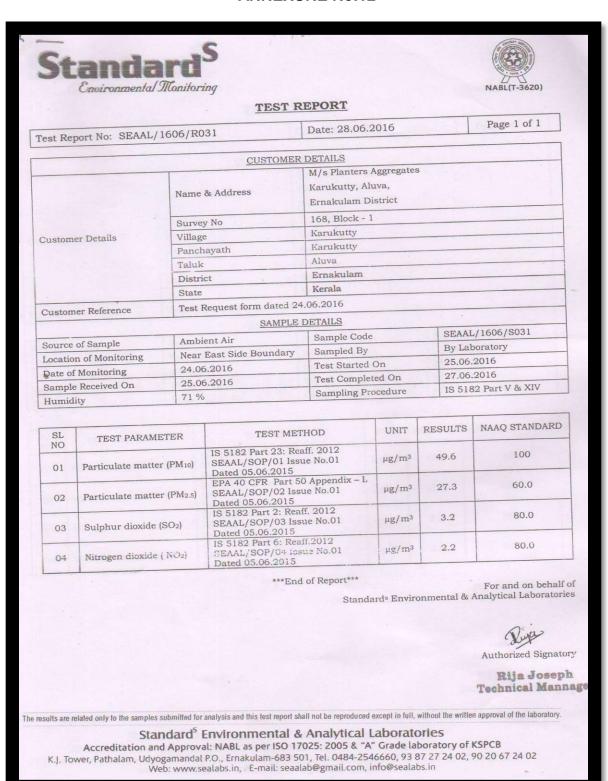
Advertisement in two news paper



Affidavit



Result of ambient sound level



Result of ambient air





TEST REPORT

Test Report No: SEAAL/1606/R033 Date: 28.06.2016 Page 1 of 2

	CUSTOM	ER DETAILS		
lettenens	Name & Address	M/s Planters Agggregates Karukutty, Aluva, Ernakulam District		
Customer Details	Survey No	168, Block - 1		
	Village	Karukutty		
	Panchayath	Karukutty		
	Taluk	Aluva		
	District	Ernakulam		
	State	Kerala		
Customer Reference	eference Test Request Form dated 24.06.2016			
	SAMPLI	E DETAILS		
Sample Code	SEAAL/1606/S033	Sample Received On	25.06.2016	
Sample Name	Water	Sampling Procedure	SEAAL/MSP/24	
Sample Description	Quarry Water	Sampling Location		
Identification By Customer		Sample Condition	Good	
Sampled on	24.06.2016	Test Started On	25.06.2016	
Sampled By	By Laboratory	Test Completed On	28.06.2016	

SL NO	TEST PARAMETER	TEST METHOD	UNITS	RESULTS	ACCEPTABLE LIMIT (IS 10500 - 2012)
01	Colour	IS 3025 Part 4: Reaff. 2012	Hazen	5.0	5.0 (Max)
02	Odour	IS 3025 Part 5: Reaff. 2012		Unobjectionable	Unobjectionable
03	Turbidity	IS 3025 Part 5: Reaff. 2012	NTU	10.30	1.0 (Max)
04	pH @ 25 °C	IS 3025 Part 11: Reaff. 2012		6.84	6.5 - 8.5
05	Total Dissolved Solids	IS 3025 Part 16: Reaff. 2012	mg/L	136	500 (Max)
06	Total Hardness (as CaCO ₃)	IS 3025 Part 21: 2009	mg/L	70.70	200 (Max)
07	Calcium (as Ca)	IS 3025 Part 4: Reaff. 2009	mg/L	24.20	75.0 (Max)
08	Magnesium (as Mg)	IS 3025Part46: Reaff. 2009	mg/L	2.46	30.0 (Max)
09	Chloride (as Cl)	IS 3025 Part32: Reaff. 2009	mg/L	12.6	250 (Max)
10	Total Alkalinity (as CaCO ₃)	IS 3025 Part 23 : Reaff. 2009	mg/L	27.7	200 (Max)
11	Iron (as Fe)	IS 3025Part 53: Reaff. 2009	mg/L	0.21	0.30 (Max)
12	Sulphate (SO ₄)	IS 3025Part 24: Reaff. 2009	mg/L	24.40	200 (Max)

End of Report

For and on behalf of Standards Environmental & Analytical Laboratories

Authorized Signatory Rija Joseph

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

Standard^S Environmental & Analytical Laboratories
Accreditation and Approval: NABL as per ISO 17025: 2005 & "A" Grade laboratory of KSPCB
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 20 67 24 02



Test Report No: SEAAL/1606/R032

Date: 28.06.2016

Page 2 of 2

SL No	PARAMETERS TESTED	TEST METHOD	UNIT	RESULT	ACCEPTABLE LIMIT (IS 10500 - 2012)
13	Fluoride (as F)	IS 3025 (Part 60)	mg/L	< 0.10	1.0 (Max)
14	Arsenic (as As)	APHA 3111B	mg/L	< 0.002	0.01 (Max)
15	Copper (as Cu)	APHA 3111B	mg/L	< 0.005	0.05 (Max)
16	Manganese (as Mn)	APHA 3111B	mg/'	< 0.01	0.1 (Max)
17	Cudmium (as Cd)	APHA 3111B	mg/L	< 0.002	0.003 (Max)
18	Chromium (as Cr)	APHA 3111B	mg/L	< 0.025	0.05 (Max)
19	Zinc (as Zn)	APHA 3111B	mg/L	< 0.002	5.0 (Max)
20	Mercury (as Hg)	APHA 3111B	mg/I,	< 0.0005	0.001 (Max)
21	Cyanide (as CN)	APHA 3111B	mg/L	< 0.01	0.05 (Max)
22	Lead (as Pb)	APHA 3111B	mg/L	< 0.005	0.01 (Max)
23	Aluminium (as Al)	APHA 3111B	mg/L	< 0.005	0.03 (Max)
24	Tc al coliform bacteria	IS 1622 - 1981	MPN/100ml	15.0	2.0 (Max)
25	E – Coli	IS 1622 - 1981		Absent	Absent/100ml

End of Report

For and on behalf of Standards Environmental & Analytical Laboratories

Authorized Signatory

Rija Joseph Technical Mannager

Standard^S Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2005 & "A" Grade laboratory of KSPCB
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 20 67 24 02
Web: www.sealabs.in, E-mail: seaalab@gmail.com, info@sealabs.in

Result of drinking water