# COMPLIANCE REPORT TO THE CONDITIONS OF ENVIRONMENTAL CLEARANCE

( Order No. 57/SEIAA/KL/7585/2012 Dt. 15-03-2013)

# FOR QUARRY PROJECT AT MARADY VILLAGE, MARADY PANCHAYATH, MUVATTUPUZHA TALUK, ERNAKULAM DISTRICT, KERALA

Ву

M/s St. GEORGE GRANITES
Palachmarattom, Kinginimattom P.O.,
Kolenchery, Kerala – 682311

(July, 2014)

# INTRODUCTION

M/s St.George Granites is a stone quarry situated at Survey Nos. 1094/1-A,1094/1-A1, 1094/1-A6,1097/7-A,1097/6-B2,1101/3,1097/7-B,1097/6-A2,1094/1-A27,1097/6-B3 ,1097/7C2 at Marady Village, Marady Panchayath, Muvattupuzha Taluk, Ernakulum District, Kerala. The quarry project was accorded with environmental clearance by State Environmental Impact Assessment Authority. The compliance report to the specific conditions and general conditions of the environmental clearance for the period of 15 July 2013 to 14 January 2014 is being submitted here with.

# PART - A - SPECIFIC CONDITIONS

# Condition 1)

The storm water should be channelized to a pit that has to be retained in the central area of the proposed mine.

# Compliance

Storm water from entire project area is channelized in to abandon excavated pit (pond) and hence the storm water is stored. During this process of storage all the Debris/ silt in the storm water are settled in to the bottom of the pit. Overflow from the pond is channelized in to Garland drains which entering to the main stream. In addition to this temporary canals are formed during the rainy season on the project area so that the water easily flows through and reaches the pond. The photograph showing the rain water collection pond in the project area is attached at Annexure No. 1.

# ➤ □Condition 2)

Indigenous varieties of horticultural crops having edible fruits should also be cultivated as part of eco-restoration

# Compliance

As a part of Eco-restoration we tried our best to keep our project area enriched with edible fruits bearing trees which has a significant role in providing natural vegetation. Indigenous varieties of crops such as Jackfruit tree, Papaya tree, Mango tree, Guava tree, Bell fruit tree. Banana tree, etc are planted on the project area. All preventive measures are being taken to preserve the plants on their growing period. The photographs showing the plantation of local fruit trees carried out at site is attached at Annexure No. 2.

## PART - B - GENERAL CONDITIONS

# ➤ □Condition 1)

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

# Compliance

Rainwater harvesting system is smoothly implemented in the project area. An excavated pit can store large volumes of rain water. Entire water falling in the project area was channelized in to these excavated pits. Rain water is mainly used for irrigation purposes and agricultural needs. Water is effectively utilized for the functioning of sprinkler system in the project area. Moreover water is used systematically for aqua culture farming. The photograph showing the rain water collection pond in the project area is attached at Annexure No. 1, Annexure No.A1

# Condition 2)

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

# Compliance

An environmental monitoring cell was formed with Mr. Kuriakose I Mathai (proprietor of St. George Granites as head of the monitoring cell and made functional. The name of the members as follows.

SL NO.	NAME	POST
1	Kuriakose I Mathai	Head of monitoring cell(proprietor
2	Antu Kuriakose	Head in charge(Environmental)
3	Thomas KJ	Senior Environmental Officer
4	Eljo George	Name of the Asst. officer of Environment, Health and safety at site

5	M/s Environmental Engineers & Consultants Pvt. Ltd. A1-198, Janak Puri, New Delhi	Name of the Environmenta consultant
6	Poluchem Laboratory Pvt. Ltd. Pallath Building, North Kalamassery, Ernakulam, Kerala	Address of Environmental Laboratory

# ➤ □Condition 3)

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

# Compliance

Our project area is planted with shrubs and trees on the sides of the tarred roads and open parking areas which provides natural vegetation.

SL NO.	COMMON NAME	SCIENTIFIC NAME	FAMILY
1	Banana tree	Musa acuminata	Musaceae
2	Bell Fruit tree	Syzygium samarangense	Myrtaceae
3	Papaya tree	Carica papaya	Caricaceae
4	Jackfruit tree	Artocarpus heterophyllus	Moraceae
5	Guava tree	Psidium guajava	Myrtaceae
6	Mango tree	Mangifera	Anacardiaceous

The photographs showing the plantation of local fruit trees carried out at site is attached at Annexure No. 2.

# Condition 4)

The project shall incorporate devices for solar energy generation and utilization wherever possible.

# Compliance

Solar energy devices will be installed in the project area shortly.

Condition 5)

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

# Compliance

Fixed water sprinkling system is installed which enables the smooth functioning on the road side and on the project area. The photographs showing the sprinkler system installed in the project site is attached at Annexure No. 3.

➤ □Condition 6)

The eco-restoration plan submitted with the proposal should be fully implemented

# Compliance

After the closure of mine, the remaining portion will be suitably planted with green belt and indigenous plant species. The remaining void at lower levels of excavated pit. The reclaimed area will be left as water storage and used for irrigation and agricultural purposes. The photographs showing the plantation of local fruit trees carried out at site is attached at Annexure No. 2.

Condition 7)

Corporate social responsibility agreed upon by the proponent should be implemented

# Compliance

Our project actively indulged in local developmental and other social needs promotional activities. It is proposed to spend Rs 1.5 Lakhs/Annum for certain welfare activities. The documentary evidence showing the Corporate Social Responsibility expenditure incurred in the financial year 2013 to 2014 is attached at Annexure No. 4.

# ➤ □Condition 8)

Barbed metal wire fencing around the mining area shall be 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.

# Compliance

Barbed metal wire fencing was successfully installed around the mining area at 5ft height. Fixed GI hand rails with 50 mm diameter top rail and 2 Numbers of Barbed metal wire horizontals, c/c fixed in cement concrete.

# ➤ □Condition 9)

Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of explosive department.

# Compliance

Warning alarms are installed in the project area and it is working smoothly and properly. The time is fixed and is between 6am and 6.00 pm. A danger board is also installed which gives information about the blast time. The photograph showing the danger area sign board is provided at Annexure No. 5.

# ➤ □Condition 10)

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

# Compliance

The road formation is over and waiting for the seasonal consolidation. Provided cement concrete hydraulic pressed high density interlocking tile for flooring the road. The dust emission which occurs during the transportation of the materials is periodically cleared by sprinkler system. The photograph showing the tarred access road to the quarry is provided at Annexure No. 6.

# Condition 11)

Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored

# Compliance

The top soil and overburden is excavated from the quarry dumped in the old quarry and will be utilized in spreading over reclaimed areas for shrubs and trees plantation. The photographs showing the plantation of local fruit trees carried out at site is attached at Annexure No. 2.

➤ □Condition 12)

Height of benches should not exceed 5m and width should not be less than 5m.

# Compliance

The height of benches of the quarry project is of 5m and width of 5m.

Condition 13)

Mats to reduce fly rock blast to a maximum of 15 PPV should be provided.

# Compliance

In our quarry, we are using mats to reduce the fly rock blast.

□Condition 14)

Mining depth should not exceed beyond 40m, unless otherwise specified or not below the level of nearest stream bed whichever is less.

# Compliance

Would be complied

□Condition 15)

Acoustic enclosures should have been provided to reduce 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.

# Compliance

Acoustic enclosure is provided to reduce sound amplification. The crusher unit is surrounded by green belt. The hollow brick covering in the unit aid to maintain the noise level kept within the prescribed standards.

# □Condition 16)

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

# Compliance

Assurance in the form of affidavit is being submitted to SEIAA Kerala that ecorestoration including the mine closure plan shall be done at our expenses. The copy of the affidavit submit is attached at Annexure No. 7.

# □Condition 17)

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

# Compliance

Rainwater harvesting system is smoothly implemented in the project area. An excavated pit can store large volumes of rain water. Entire water falling in the project area was channelized in to these excavated pits. Rain water is mainly used for irrigation purposes and agricultural needs. Water is effectively utilized for the functioning of sprinkler system in the project area. Moreover water is used systematically for aqua culture farming. The photograph showing the rain water collection pond in the project area is attached at Annexure No. 1.

# □Condition 18)

Debris/ slit traps to be provided to prevent entry of dust and quarry wastes entering the main streams.

# Compliance

Storm water from entire project area is channelized in to abandon excavated pit and stored the storm water in it. During this storage all the Debris/slit in the storm water are sediment in to the bottom of the pit. Flooded water from the pit is released only from the top area and the opening is covered by steel mesh to trap floating waste. Sediment from the pit is removed and disposed twice in a year. Overflow from the storm water collected

pit is opened in to Garland drains which entering to the main stream. The photograph showing the rain water collection pond in the project area is attached at Annexure No. 1.
□Condition 19)
All statutory clearances should have been obtained, as applicable, by the project proponents from the respective competent authorities including that for blasting and storage of explosives.
Compliance
All statutory approvals required for the quarrying activity is obtained for the project. The copy of the approvals obtained is provided at Annexure No. 8
□Condition 20)
In case of any change(s) in the scope of the project, the project would require a fresh appraisal by this authority
Compliance
Would be complied.
□Condition 21)
The authority reserves the right to add additional safe guard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
Compliance
Would be complied.
□Condition 22)
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,

Compliance

Would be Complied.

the public liability (Insurance) Act, 1991 and EIA notification, 2006.

# Condition 23)

The project proponent should advertise in at least two local 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.

# Compliance

Regarding the accordance of environmental clearance to the quarrying activity was advertised in two local newspapers and the copy of the same was submitted to SEIAA. The copy of newspaper advertisement is provided at Annexure No. 9.

# Condition 24)

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 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 Marady Panchayat office. . There is no suggestion/representation received so far from anybody. The environmental clearance order is uploaded in the website of the company and it can be seen in the website:www.st.georgegranites.in. The copy of the acknowledgment received from the Panchayath Office is attached as Annexure No. 10.

# □Condition 25 )

The proponent shall submit six monthly reports on the status of 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 can 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

Would be complied.

# Condition 26)

The conditions of the 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 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 Annexure No. 11.

# Condition 27)

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.

# Compliance

An affidavit stating that all the conditions stipulated in the Environmental clearance will be scrupulously followed was submitted to Department of Environment and climate change. The copy of affidavit submitted at SEIAA is attached at Annexure No. 7.

\*\*\*\*\*\*\*\*



Photograph showing Garland drains with silt trap through the project area

















Photograph Showing Avenue trees planted and existing vegetation along the road sides and project area



Photographs showing the rainwater harvesting system in the project area









Photographs showing the Fixed Water sprinkling system installed on the road sides and project area

723	SUKHADA BALAGRAM HOLENCHERY - 882 311. Phone: 0484-3	
to 1173	GASH RECEIPT	DW DI (08/14
70	Spontership Donation	24 (24)
S.No.		7s. 7s.
100	Partichose I Northai	
	[Hoonteal	5000-00
	10 0 Day 10	
	(ctings of mathematical and	-
	lentancians was	
	709	2000
Service Spr	- Five thousand only)	J. Gillian
named to a second	WINNIANCAD WELFADE CO.	1000
19	WIKALANGAR WELFARE SOC	
190	Reg. No. ( - 78258	77770
12/		
1100	THE REST OF THE PARTY OF THE PA	
1186	THE REST OF THE PARTY OF THE PA	ा कर्मिय
1166	HONATION BECEIPT	no sufflu
1166	HONAHON BECAUTE	of least of the parties of the
Times out they	HONAHON BECAUTE	Des 20 दिया

To power &	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		21.00	0)	mμ
	wols	P, am Con	)9) 15mg)	8600	*
				8600	
mya o A (	Malgan	anna	00016	00	
- 01	00/		റ്റി ബോധ്യേ ട്ര	616	anj













Description and the second of	
The record markets structure and	

SUPABLIS OF THE PARTY OF THE PA	MISSION OF	CONTRACTOR CONTRACTOR
St.PAUL'S M	ISSION	
	HERIET Hallyskov Paleskovos	two relatives I Hastivas Albert
Rs. 100-	ed like	ofest













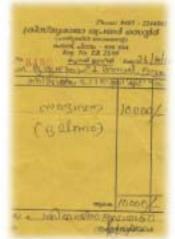












9	
	TO THE REAL PROPERTY OF THE PARTY OF THE PAR
,	ROHILLIAND CHARLANT TRUBE
116	
	month [E
Г	CHARLES AN COPPERT
1	To the same of the
1	Marie See A. Adopt
15	Street Street



I. II. CHARTES F	OR RICHTALLY & FRE Reg No. 65 / RS II	
407	HER CARE BOHABLIANO	DE CONTRACTOR
74.5	ers P.C. Supplementant Falls and Artificial S. Phon. (80) Techni	Committee Sangarana
A10	RECEIPT	
named with the last	mountanial	ale T. Makar
I-Monice.	P. Moure, Kings	Limentering Palationes
contract Ch	1. Then and	only
ing townson		A STATE OF THE PARK OF
		HELLAND MEDICAL LANGE AND A

Corporate social responsibility

#### Annexure.5







Photographs showing tarred access road to the quarry.



#### LICENCE FORM LE-3

(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

Licence to possess: (e) for use, explosives of class 1, 3,3,4,5,6 or 7 in a magazine

Licence No. 1 E/SC/KL/22/998(E41979) Annual Fee Hz 2000/-

Licence is bereby granted to: Shri Kuriakose I. Mathai (Occupier: Kuriakose I. Mathai) D
 Ithunickal House, Kinglaimatton P.O. 682311, Kelescher Luties, District: Ernakulam (Kerala).

Town/Village -

District-, State-, Pincode - 682311

Status of licensee: Individual
 Licensee is valid only for the following purpose: possess for use of Nitrate Mixture, Safety Proc. Ordinary Detanator, Electric Detanators.

4. (a) Licence is valid for the following kinds and quantity of explosives:

St. No.	Name and Description	Class & Division	Sub-division (If are)	Quantity at any one time
12	Nitrate Mixture	2,0	0	100 Kg
2	Safety Fuse	fi,1	0	3000 Mirs
1.	Ordinary Detenator	0.3	0	2500 Nas.
4.	Electric Detonators	6,3	0	1000 Nes.

(b) Quantity of explosives to be purchased in a calendar month/applicable for licence under article 3(b) and (c)]: 10 times as above.

5. The licensed prunises shall conform to the following drawing(s):

Drawing No : E/SC/KL/22/998(E41970) dated : 19/13/2887

The licensed premises are situated at following address:

Survey No(s). 1094/LA , Turno Village : Marady Village, Mavattupusha Talak, District:

Police Station : Ramangalam PinCode

Microso -

District: ERNAKULAM

State : Kerala.

 The licensed premises consist of following facilities: A set of G(Sr.No.765) & G (Sr.No.766) type Partable Magazines (Mfd by mis Nobel Engg&Fub.Unit,Cochin) & one no of D type magazine mfd by thekkans engg and fabrication works

- The fixener is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Agnesiaes.
  - (1) Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
  - (2) Conditions and Additional Conditions of this Econce signed by the licensing authority.
  - (3) Distance Form DE-2
- 9. This licence shall remain valid till 31st day of March 2009

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed those under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annesare attached borato.

The Date: 19/11/2007

Sdi-Joint Chief Controller of Explosives South Circle, Chessal

#### Amendments:

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 12/93/2011
- Amendment of Quantity of Explosives/Monthly Porchase Limit dated: 30:12/2011

Endersoment for renewal of Segmen

Date of Reserval Date of Expris Signature of Licenseg authoraty

04/96/2014 31/03/2019 Dy Chief Disserter of Licenseg authoraty

04/96/2014 पुरुष पुरुष विजयोग्दरक विजयभाग

Stateture Warning: Michaeding and minute of explosives staff constitute series evision offence under the law.

Date: 19.12.2012



# KERALA STATE POLLUTION CONTROL BOARD

DISTRICT OFFICE II, GANDHI NAGAR, ERNAKULAM - 682 020

www.keralapcb.org

File No.PCB/EKM/DO-EKM/IQR-90/R/09

# CONSENT TO OPERATE - RENEWAL

# Consent No. PCB/EKM/DO2/ICO-QR-R2/14/2012

Ref: 1 Your application dated 26.09,2012.

Consent No PCB/DO-EKM/ICO-QR-91/R1/2010 dated 25,09.2010.

3. Consent Variation Order dated 24.01.2012.

The 'Consent to Operate' issued vide ref.2 and 3 to M/s.Quarry Owned by Kuriakose I Mathai, (Marady), Ithoonickal House, Kinginimattom P.O., Palackamattom, Kolenchery - 682 311 is hereby renewed up to 30.06.2015. The Consent condition is cited under ref 2 is attached herewith is part of this renewal order and this order is subject to the conditions stipulated therein with the following modifications/deletions/ additions

#### Condition No.1.12:

Fee Remitted

- Rs.48,420/- (Excess fee Rs.3,420/-)

#### Condition No.2.1:

This consent is granted subject to the power of the Board to review and make variation in all or any of the conditions and based on the affidavito submitted by the occupier in Rs. 100/- stamp paper dated 31.08.2011.

# Condition No.2.8:

This consent, unless withdrawn earlier is valid upto 30.06.2015 or upto the validity of permit/lease issued by the Department of Mining and Geology which ever is earlier. In case the operation of the quarry is to be continued thereafter application for the renewal of the consent is to be made in the prescribed form in the third month before the date of expiry of the consent.

#### Condition No.4.6:

On expiry of the Mining Permit/Lease the same may be got renewed.

#### Condition No.4.7:

The applicant shall obtain necessary environmental clearance as directed by Hon'ble Supreme Court in I.A. No.12-13 of 2011 in SLP (C) No.19628-19629 of 2009.

#### Condition No.4.8:

This consent will be cancelled if any of the points stated in the affidavits submitted by the occupier in Rs.100/- stamp paper dated 31.08.2011 is found to be false.



For and on behalf of the KERALA STATE POLLUTION CONTROL BOARD

DESIGNATION OF ISSUING AUTHORITY

Environmental Hagineer

To

Sri. Kuriakose I Mathai Proprietor M/s.Quarry Owned by Kuriakose I Mathai Ithoonickal House, Kinginimattom P.O. Palackamattom, Kolenchery – 682 311

Copy to: 1. The Member Secretary, Head Office, Thiruvananthapuram

2. The Chief Environmental Engineer, Regional Office, Ernakulam

3. Stock File

most 15/2014-15

Don's

Linco managements

1994 ലവ കേരളാ പഞ്ചായത്ത് രാത് ആക്ട് (1994 ലെ 13 )232, 233, 234, 254 എന്നീ വകുപ്പുകൾ പ്രകാരവും അനേ തുടർസുള്ള ചട്ടങ്ങളും അനുസരിച്ചു കൊടുത്ത

## ലൈസൻസ്

മലങ്ങൾസുടമസ്ഥന്റെ പേരും മേൽവിലാസവും	1991. കുറ്റു ഒക്കാസ് മാന മത്താരി മാന്ത്യൂണിര്ക്കാൽന് , കിൽിൽി മറ്റം മ ഒരു ഭരണ്കിരി
and supplement spirit and supplement spirits.	കരിക്കൽ ചാറി നടത്തുന്നതിന്
കെട്ടിടങ്ങില്റെ തമ്പരും വാർഡു തമ്പരും	VIII / Serrey No: 1094/14, 1094/141
foscerca obelmburisca	1-4-2014 15 31-03-2015
ดอยสามาใหม่ หลาใหม่	1500 mi - manimi
a library and a	Renewal.
	Rd-No: 2637 28-02-2014

21029

денествите послу ...

anual CI-04. 2014.

M.N.MOFONUN
Secretary
Marady Grants Psinchlyal

District Medical Office of Health, Ernakulam, Dated 26,03.2014.

From

The District Medical Officer of Health, Ernakulam.

To

The Secretary. Marady Grama Panchayath.

Sir.

Sub: D & O Trade - Approval of site for Granite Quarring Unit in PH point of view - reg.

Ref: 1. Application of Sri. Kuriakose I. Mathai dated 10.03.2014.

2. Inspection Report from the Technical Assistant Grade I.

......

The site in Survey No. 1094/1A1, 1094/1A of Marady Village in Muvattupuzha Taluk for running Quarrying Unit by Sri. Kuriakose I. Mathai, Ithoonikkal House, Kinginimattom, Kolenchery was inspected.

On public health point of view, there is no possibility for health hazards due to the site proposed for Quarrying Unit and therefore there is no objection to issue the licence for the above industry if the following conditions are fulfilled. The copy of the site plan duly approved is herewith enclosed.

# CONDITIONS:

- 1. Machineries should be installed as per plan approved and protective devices should be provided around the machineries.
- 2. First aid Kit with sufficient medicines should be kept in the unit.
- 3. Sanitary facilities should be arranged in the unit .
- 4. Safe and dependable source of drinking water should be ensured in the unit.
- 5. Resting room should be provided for workers.
- 6. Safety measures such as heavy gloves mask, work dress, Gum boot, Goggles etc. should be provided for workers and strictly used.
- 7. Periodical medical examination of workers should be done once in 6 months and certificates for the same should be kept in the unit.
- 8. Workers from other states should be screened for mularia whenever they return from their native state and every worker should be screened for malaria while there is fever.
- 9. A register for workers should be maintained in the unit.
- 10. Daily cleaning of the unit should be ensured and its premises should be kept clean and tidy.
- 11. Pucca arrangements should be made for proper reception, collection and sanitary management of wastes if any from the unit,
- 12. Dust containment system including sprinkling of water should be ensured in the unit.
- 13. NOC from Pollution control board, explosive department and mining & Geology.
- 14. No additional machineries should be installed without prior permission from authorities concerned.
- This NOC will be withdrawn if any of the condition is violated.
- 16. A completion certificate should be obtained from this office before commissioning of the unit. ADICAL OFFICER

Yours faithfully,

MEDICAL OFFICER OF HEALTH ERNAKULAM.

Kuriakose I. Mathai,

Hroonikkal House, Kinginimattom, Kolenchery



ANALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS PALLATH BUILDING, N. HALAMASSERY P.O., ERNAKULAM - 6/83 104 PHINE: 0484 - 3261174, 2544030, E-mail: poluchem@gmail.com

'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

#### TEST REPORT

Ref.No. PL/RT/DW/4152/2013

Name & address of customer

Project Site.

Sample description Location of sampling Date of sample collected Date of analysis started Date of completion of analysis Date of Issue: 27/11/2013

: M/s. St. George Granites, Propriator Kuriakose I Mathai, Ethoonickal(H), KinginimuttomP.O, Kolenchery

: M/s. St. George Granites, Propriator Kuriakose I Mathui, Ethoonickal(H), KinginimattomP.O. Kolenchery

Survey No. 1094/1A, 1094/1A1, 1094/1A6, 1097/7A, 1097/6B2, 1101/3,1097/7B,1097/6A2,1094/LA27,1097/6B3,1097/7C2 Maradi Village, Maradi, Panchayath, Muvattapuzha Tahik, Ernakulam District, Kerala...

: Drinking water : Borewell water : 22/11/2013 : 22/11/2013 : 27/11/2013

Parameters tested	Test method	Results	As Per 15 10500-2012
Color	IS 3025 (P) 04 - 1983	3 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 - 1983	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10-1984	JUB	LNTU
pH	IS 3025 (P) 11 - 1983	6.72	6.5 - 8.5
Total Dissolved Solids	IS 3025 (P) 15 - 1984	151 mg/l	500 mg/t
Total Hardness as CaCO <sub>1</sub>	IS 3025 (P) 21 - 1983	72.31 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	15 3025 (P) 23 - 1986	45 mg/l	200 mg/l
Residual Free Chlorine	IS 3025 (P) 26 - 1986	BDL	Min 0.2 mg/l
Chloride as Cl	15 3025 (P) 32 - 1988	16.33 mg/l	250 mg/l
Calcium as Ca	15 3025 (P) 40 - 1991	8.33 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 - 1994	5,44 mg/l	30 mg/1
Iron as Fe	IS 3025 (P) 53 - 2003	BDL	
Sulphote as SO <sub>4</sub>	15 3025 (P) 31 - 1988	20.8 mg/l	0.3 mg/l
Fluoride as F	15 3025 (P) 60 - 2008	BDL	200 mg/l

Note: BDL - Below Detection Level

For Poluchem Laboratories (P) Ltd.

Quality Manager man Laminstonies (P) Lin

Page 01 of 02

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soil Tea, Spices, Oll, Fertilisers, Basic Chemicals etc; Festicide Residue, Heavy Metals, Microbiology



ANALYTICAL CHEMISTS, ETP CONSULTANTS IN CHEMICAL ENGINEERS PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM - 68.3 10.4 PHONE: 5484 - 3261174, 2544030. E-mail: poluchemi@gmail.com

'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

Page 02 of 02

Continuation of Test Certificate No:

4152/2013

Parameters tested	Test method	Résults	Acceptable limit As Per 1S 10500-2012
Selenium as Se	APHA 3111B	BDL	0.01 mg/l
Arsenic as As	APHA 3111B	BDL	0.01 mg/l
Copperas Cu	APHA 3111B	BDI.	0.05 mg/1
Manganese as Mn	APHA 3111B	BDL.	0.1 mg/l
Cadmium as Cd	APHA 3111B	BDL	0.003 mg/l
Chromium as Cr	APHA 3111B	BDL.	0.05 mg/l
Zinc as Zn	APHA 3111B	BDL.	5 mg/l
Mercury as Hg	APHA 3111B	BDL.	0.001 mg/l
Cyunide asCN	APHA 4500 E	BDL.	0.05 mg/l
Lead as Pb	APHA 3111 B	BDL.	0.01 mg/l
Aluminum as AI	APHA3500 D	BDL	0.03 mg/l
Boron as B	APHA 4500 B	BDL	0.5 mg/l

Note: BDL - Helow Detection Level

#### MICROBIOLOGICAL TESTS

Parameters	Unit	Results	Acceptable Limit As per 1S - 10500-2012
Coliforms/100ml	Index/100ml	Present	Shall not detectable in any 100 ml sample
E coli	Index/100mi	Absent	Shall not detectable in any 100 ml sample

For Poluchem Laboratories (P) Ltd.

SHEEJA EAMERS: Quality Manager Polochem Laboraturies (P) Ltd

Authorized signatory

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soil Tea, Spices, Oil, Fertilisers, Basic Chemicals etc; Pesticide Residue, Heavy Metals, Microbiology



ANALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS. PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAH - 683 104 PHONE: 0484 - 3261174, 2544030, E-mail: potachem@gmail.com

'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

#### TEST REPORT

Ref.No. PL/RT/DW/4152/2013

Name & address of customer

Project Site

Sample description Location of sampling Date of sample collected Date of analysis started Date of completion of analysis Date of Issue: 27/11/2013

Page 01 of 02

: M/s. St.George Granites, Proprietor Kuriakuse I Mathai, Ethoonickal(H), KinginimuttomP.O, Kolenchery

: M/s. St.George Granites, Propriator Kuriakose I Mathai, Ethonnickal (H), KinginimattomP.O, Kolenchery

SurveyNo.1094/1A,1094/1A1,1094/1A6,1097/7A,1097/6B2. 1101/3,1097/7B,1097/6A2,1094/1A27,1097/6B3,1097/7C2 Maradi Village, Maradi, Panchoyath, Muvattupuzha Taluk, Emakulam District, Kerala...

: Drinking water : Borewell water : 22/11/2013 : 22/11/2013

: 27/11/2013

Parameters tested	Test method	Results	Acceptable limit As Per 15 10500-2012
Color	IS 3025 (P) 04 - 1983	3 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 - 1983	Agrecable	Agreeable
Turbidity	15 3025 (P) 10 - 1984	BDL	INTU
pH	IS 3025 (P) 11 - 1983	6.72	6.5 - 8.5
Total Dissolved Solids	IS 3025 (P) 15-1984	151 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 - 1983	72.31 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	1S 3025 (P) 23 - 1986	45 mg/l	200 mg/l
Residual Free Chlorine	1S 3025 (P) 26 - 1986	BDL	Min 0.2 mg/l
Chloride as CI	IS 3025 (P) 32 - 1988	16.33 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 - 1991	8.33 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 - 1994	5.44 mg/l	30 mg/l
lmn as Fe	IS 3025 (P) 53 - 2003	BDL	0.3 mg/l
Sulphate as SO <sub>4</sub>	1S 3025 (P) 31 - 1988	20.8 mg/l	200 mg/l
Fluoride as F	15 3025 (P) 60 - 2008	BDL	1 mg/l

Note: BDL - Below Detection Level

For Poluchem Laboratories (P) Ltd.

Quality Manager Pulsishers Laboratories [7] for

ed signatory

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soil Tea, Spices, Oil, Fertilisers, Basic Chemicals etc. Pesticide Residue, Heavy Metals, Microbiology



ANALYTICAL CHEMISTS, ETP CONSULTANTS IS CHEMICAL ENGINEERS PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM - 683 104 PHONE: 0484 - 3251174, 2544030, E-mail: poluchemiligmail.com

'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

Page 02 of 02

Continuation of Test Certificate No.

4152/2013

Parameters tested	Test method	Results	Acceptable limit As Per IS 10500-2012
Selenium as Se	APRA 3111B	BDL	0.01 mg/l
Arsenic as As	APHA 3111B	BDL	0.01 mg/l
Copperas Cu	APHA 3111B	BDL	0.05 mg/l
Manganese as Mn	APHA 3111B	BDL	0.1 mg/l
Cadmium as Cd	APHA 3111B	BDL	0.003 mg/l
Chromium as Cr	APHA 3111B	BDL	0.05 mg/l
Zinc as Zn	APHA 3111B	BDL	5 mg/l
Mercury as Hg	APHA 3111B	BDL	Figm 100.0
Cyanide asCN	APHA 4500 E	BDL	0.05 mg/l
Lead as Pb	APHA 3111 B	BDL	0.01 mg/l
Aluminum as Al	APHA3500 D	BDL	0.03 mg/l
Boron as B	APHA 4500 B	BDL	0.5 mg/l

Note: BDL - Below Detection Level

#### MICROBIOLOGICAL TESTS

Parameters	Unit	Results	Acceptable Limit As per IS - 10500-2012
Coliforms/100ml	Index/100ml	Present	Shall not detectable in any 100 ml sample
E coli	Index/100ml	Absent	Shall not detectable in any 100 ml sample

For Poluchem Laboratories (P) Ltd.

UNICADA RESERVAT Quality Manager Felections Laboratories (P) Ltd.

Authorized signatory

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soil Tea, Spices, Oil, Fertilisers, Basic Chemicals etc. Pesticide Residue, Heavy Metals, Microbiology



POLUCHEM LABORATORIES (P) LTD. AMALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAN - 683 104 PHONE: 0484 - 3261174, 2544030, E-mail: patuchem@gmail.com

W GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

#### TEST REPORT

Client Name & Address	Certificate No:	PL/EW/RT/4150/2013
M/s. St.George	Date of issue:	27/11/2013
Granites, Propriator	Date of monitoring	21/11/2013 12:30 Hrs to 22/11/2013 12:30 Hrs
KuriakoselMathai, Ethoonickal(H),	Date of sample received:	23/11/2013
KinginimattomP.O, Kolenchery	Date of analysis	24/11/2013
	Monitoring Location	M/s. St. George Granites, Propriater Kuriakosel Mathai, Ethoonickal (H), Kinginimatiom P.O., Kolenchery Survey No. 1094/1A, 1094/1A1, 1094/1A6, 1097/ 7A, 1097/6B2, 1101/3, 1097/7B, 1097/6A2, 1094/ 1A27, 1097/6B3, 1097/7C2 Maradi Village, Maradi, Panchayath, Muvuttupuzha Taluk, Ernakulam District, Kerala.
	Sample description	Ambient air - Near east side boundary
	Sample code given by client	Nil

SL	PARAMETERS	TEST METHOD	RESULTS	LIMITS
01	Particulate Matter (PM <sub>10</sub> )	1 S 5182 Part 4 1999	47.9 µg/M <sup>3</sup>	100 μg/M <sup>3</sup>
02	Particulate Matter (PM <sub>2.5</sub> )	CPCB	23.3 µg/M <sup>5</sup>	60 μg/M <sup>3</sup>
03	Sulphur dioxide	LS 5182 Part 2 2001	2.8 µg/M <sup>3</sup>	80 µg/M <sup>3</sup>
04	Nitrogen dioxide	1S 5182 Part 06 1975	3.5 µg/M <sup>3</sup>	80 µg/M <sup>3</sup>

The results are related only to the sample collected for analysis. This certificate shall not be reproduced except in full and without the written permission with authorized signatory

For and on behalf of POLUCHEM LABORATORIES (P) LTD.

AUTHORIZED SIGNATORY

Quality Manager colone Laboratories (P) Ltd.



ANALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS PALLATH BUILDING, N. KALAMASSERY PO., ERNAKULAM - 683 104 PHONE: 0484 - 3251174, 2544030, E-mail: pubucherviligmail.com

#### 'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

#### TEST REPORT

Certificate No.	PL/SD/RT/4151/2013
Date of inner	27/11/2013
Date of monitoring	21/11/2013 12:30 Hrs to 22/11/2013 12:30 Hrs
Monitoring Location	M/s. St.George Granites, Propriator Kuriakose I Mathai, Ethoonickal(H), KinginimattomP.O, Kolenchery. SurveyNo. 1094/1A, 1094/1A3, 1094/1A6, 1097/7A 1097/6B2, 1101/3, 1097/7B, 1097/6A2, 1094/1A27, 1097/6B3, 1097/7C2. Mandi Village, Manali, Panchayoth, Muvatrupuzha Taluk, Ernakulam District, Kerala.
Sample Description	Ambient Sound Level (Leq)
	Date of monitoring  Monitoring Location  Sample

Monitoring Location	Time	Results
	12.30 Hrs	46.8 dB (A)
	13.30 Hrs	46.3 dB (A)
	14.30 Hrs	45.7 dB (A)
	15.30 Hm	45.0 dB (A)
	16.30 Hm	44.8 dB (A)
	17.30 Hrs	44.6 dB (A)
	18.30 Hrs	44.9 dB (A)
	19.30 Hrs	43.2 dB (A)
	20.30 Hrs	42.6 dB (A)
	21.30 Hrs	40.9 dB (A)
	22.30 Hes	39.8 dB (A)
and the second second second	23.30 Hrs	39.7 dB (A)
Near east side boundary	00.30 Hrs	38.9 dB (A)
The state of the s	01.30 Hrs	37.6 dB (A)
	02.30 Hrs	37.1 dB (A)
	03.30 Hrs	36.6.dB (A)
	04.30 Hrs	35.8 dB (A)
	05.30 Hrs	35.7 dB (A)
	06.30 Hrs	37.8 dB (A)
	07.30 Hrs	39.3 dB (A)
	06.30 Hrs	40.4 dB (A)
	09.30 Hrs	42.1 dB (A)
	10.30 Hrs	43.8 dB (A)
	11.30 Hrs	44.6 dB (A)
Leq (Day time)	1,	43.6 dB (A)
Leq (Night time)		36.6 dB (A)

For Poluchem Laboratories (P) Ltd.

SHREAM RAMEAN

N. Sant

Authorized Signatory

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soit. Tea, Spices, Oil, Fertilisers, Basic Chemicals etc. Pesticide Residue, Heavy Metals, Microbiology



# POLUCHEM LABORATORIES (P) LTD. AMALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS

ANALYTICAL CHEMISTS, ETP CONSULTANTS & CHEMICAL ENGINEERS PALLATH BUILDING, N. KALAMASSERY P.D., ERNAKULAM - 68/3 10/4 PHONE: 0484 - 3261374, 2544030, E-mail poluchem/Byrnal.com

# 'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD

#### TEST REPORT

ACCORDING TO A SECURITION OF THE PARTY OF TH	4 E-31	KELOKI
Client Name & Address	Certificate No:	PL/SD/RT/4151/2013
- Allen and a service of the service	Date of issue:	27/11/2013
M/s. St.George Granites, Propriator Kuriakose I	Date of monitoring	21/11/2013 12:30 Hrs to 22/11/2013 12:30 Hrs
Mathai,Ethoonickal(H), KinginimattomP.O, Kolenchery.	Monitoring Location	M/s. St.George Granites, Propriator Kuriakose I Mathai, Ethoonickal (H), KinginimaetomP.O, Kolenzhery. SurveyNo.1094/1A,1094/1A1,1094/1A6,1097/7A, 1097/6B2,1101/3,1097/7B,1097/6A2,1094/1A27, 1097/6B3,1097/7C2. Maradi Village, Maradi, Panchayath, Muvattupuzha Taluk, Emakulam District, Kerala
	Sample Description	Ambient Sound Level (Leq)

Monitoring Location	Time	Results
	12.30 Hrs	46.8 dB (A)
	13.30 Hrs	46.3 dB (A)
	14.30 Hm	45.7 dB (A)
-	15.30 Hrs.	45.0 dB (A)
	16.30 Hrs	44.8 dB (A)
	17.30 Hrs	44.6 dB (A)
	18.30 Hrs	44.9 dB (A)
	19.30 Hrs	43.2 dB (A)
	20.30 Hrs	42.6 dB (A)
	21.30 Hrs	40.9 dB (A)
	22.30 Hes	39.8 dB (A)
	23.30 Hrs	39.7 dB (A)
Vear east side boundary	00.38 Hrs	38.9 dB (A)
	01.30 Hrs	37.6 dB (A)
	02.30 Hrs	37.1 dli (A)
	03.30 Hrs	36.6 dB (A)
	04.30 Hrs	35.8 dB (A)
	05.30 Hrs	35.7 dB (A)
	06.30 Hrs	37.8 dB (A)
	07.30 Hrs	39.3 dH (A)
	06.30 Hrs	40.4 dB (A)
	09.30 Hrs	42.1 dB (A)
	10.30 Hrs	43.8 (B) (A)
	11,30 Hrs	44.6 dB (A)
eq (Day time)		43.6 dB (A)
Leq (Night time)		36.6 dB (A)

For Poluchem Laboratories (P) Ltd.

Authorital Signator

SHEELA RANGER Quality Manager Palasters Laboratories (P) Ltd

Analysis of Ambient air, Stack emission, Noise, Light, Water, Waste water / Effluent, Soil Tea, Spices, Oil, Fertilisers, Basic Chemicals etc; Pesticide Residue, Heavy Metals, Microbiology



#### खान व्यधिनियम 1952 THE MINES ACT 1952

प्रथम भेगी प्रथंशक सक्षमता प्रमाण-यन बातुत्रत्यादक खान के प्रबंध तेतु R'S FIRST CLASS CERTIFICATE OF COMPETENCY TO MANAGE, A METALLIFEROUS MINE

(क्षाप्रकारक काम विशिष्टम, 1961 के अन्तर्वत) (Under the Mendiferous Mines Regulations 1967)

विवक्त जन्म विकि 27-11 × 1942 है, विकास 18 वे कल्लेड अनुमोदित सक्तु बवियांत्रियों में डिओमा प्राप्त काले वर एवं दिलांच अवस्थर , 1907 को बारोजिस जिहित परेचा में बलोचे होने पर एतद्वारा पायुक्ताधार बाब के अबर हेतु. प्रथम क्षेत्री प्रवंधक सहस्ता प्रमाण-यन प्रथम किया बात है। ते प्रभावी तमका बाएसा।

op, Mandian

27 th Movember, 1962 /

possessing a Diploma

in Micing Engineering approved under Regulation 18 and having passed the prescribed examination. held on thousands, 1997 is beenly granted MANAGER'S FIRST CLASS CERTIFICATE OF COMPETENCY to mutage

a metalliferous mire. This Certificate is effective from 09 - 06 ~ 1996

CERTIFIED THAT THIS IS THE TRUE COPY OF THE ORIGINAL

सदस्य कार एतेता क्षेत्रे Monhos of the Board of

KUMAR! JAYA.N. ADVOCATE & NOTARY Weg tio. 135 / 37 / EKM KOLENCHERY - BEZ 311 HERALA-INDIA

तमन् परीक्षा नोतं Chimas of the Board of Mining Employtess

Signed and Steled

# ിമാലയ യാത്ര

யர் 20 வுள்ள் யகை வண்டுக், வைஞி, மாவை கி, கோசர்மை! அரசு 18மலிக் கல்விக்கரார். ஓச கூட மைசிக்கை இது பாக்கிச்சர், அரசு மாவக் 1, பான்கபுல் 28.

# ാ അഡ്വാൻസില്ലാതെ ാലിയുമൂൾപ്പെടെ

സാബുദ്ധാസ്.

ത്ഥാടനം

# ත්තාවක ක්රේකතන්න

നൽ 5-11-2013 വരെ പ്രാർ. തിർത്ഥയാത്ര ൽ 16/2/2014 വരെ) പ്രാർ. കോർനാഥ്

# NOTICE

This is to inform to the General Public that the proposed quarry project in Survey Nos. 1094/1-A, 1094/1-A1, 1094/1-A6, 1097/7-A, 1097/6-B2, 1101/3, 1097/7-B, 1097/6-A2, 1004/1-A27, 1007/6-B3, 1097/7-C2 at Marady Village & Panchayat Taluk. Muvattupuzha Ernakulam District, Kerala being developed by M/s St. George Granites is accorded with ENVIRONMENTAL CLEARANCE by State Environment Impact Assessment Authority, Kerala vide Order, No. 57/SEIAA/KL/7585/ 2012 dt. 15-03-2013 and the copy of the Environmental Clearance is available with the office of Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.sciaakerala.org

# CORPORATION LTD.

394MS, Karimpata Road, Near Polanuska, PB, No 2455, Kochi-662 016 TELEPHONE/FAX: 0464 - 2353737, 2382900 Final komdon/Suprohamet in

# ക്വട്ടേഷ

ബവഹർ നാവാദയ വിവാ ഗലം, എറണാകുളം, താരം പുരട്ടവൻ ക്ഷണിച്ചുകൊട്ട I. യൂണികോം തുണികാം ഡിഷീറ്റ് 3. ഷൂസ് , ചപ്പത് மாமன் 4 அறு மாற்ற സ്തൂരം ബാഗ് 6.ടെക്ക് സ്വൂട്ട 8. ജീൻ 0. കോഴി ഇറച്ചി 16. 11. Igual 12 gazalslen 1 യനങ്ങരം 13. സ്വോർട്സ് ന ബിച്ചർ 15. പ്രിൻഡ് ടേ a-9-1717 migrifuscours anco, impresi amergini நிரை எழுர<sub>்</sub>னர் 26. எim op ge de begann ages am alamaning, कवरियक भागतातु वरिकाली क्ष olumbaca. ninperi c Literature mount.

(an

BEFORE THE HIGH COURT OF AT ERNAK A.S. No. 157 O.S. No. 182/11

## Appellant:

V.J. George, aged Joseph, residing at Mamangalam, Cochin-25 Respondent:

No	
From	
	Secretary / President
100	Andrews & T. Lines and C.



MARADY GRAMA PANCHAYAT OFFICE 5. Moradly PO., Muvothupusho (Fio)

Emakulam (Dist), Pin-686 673 Phone: 8485-2832219

Date 06-06-2013

Sit

Subi-

Ref:-

onlog

Magis and one amous, amount of seeking of the secretion of set as a sea secretion of secretion



MN MOHAMAN

Secretary

Maredy Grama Penchayer
Pht. 9496045889

