



POABS GRANITES PVT. LTD.

Kuthirakulam P.O, Vellanad, Trivandrum District, Kerala - 695543
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TIN : 32011054222
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The Director, DoECC & Secretary SEAC Kerala,
Devi Kripa, Pallimukku, Pettah P.O,
Thiruvananthapuram,
Kerala – 695024.

18/02/2016

Sub: Environmental Clearance – Proposed quarry project Sy. Nos.459/2, 460/10, 460/12,
446/8, 462/5, 461/2, 461/3, 446/7, 460/2-2, 460/2-1 at Peroorkada Village,
Thiruvananthapuram Taluk, Thiruvananthapuram Dist, Kerala – Compliance report – Reg.

Ref: File No. 37/SEIAA/KL/6092/2012 dt. 14-11-12

Respected sir,

Our quarry project was accorded with environmental clearance vide order No. 37/SEIAA/KL/6092/2012 dt. 14-11-12. Sixth compliance report to the specific and general conditions of the Environmental Clearance (hard copy as well as softcopy (CD)) for the period of July- December, 2015 is enclosed.

Thanking you

Yours respectfully,
M/s POABS Granites Pvt. Ltd.

Jabu K. Abraham
(Director)

Copy to:

The Regional Director, MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F
Wing, II Block, Koramangala, Bangalore – 560034.

**COMPLIANCE REPORT TO THE CONDITIONS
OF**

ENVIRONMENTAL CLEARANCE ORDER

NO: 37/SEIAA/KL/6092/2012 DT. 14/11/2012

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

FOR PROPOSED QUARRY PROJECT

AT

**Sy. Nos. 459/2, 460/10, 460/12, 446/8, 462/5, 461/2, 461/3, 446/7,
460/2-2 and 460/2-1,**

**PEROORKADA VILLAGE, THIRUVANANTHAPURAM TALUK,
THIRUVANANTHAPURAM DISTRICT, KERALA**

BY

POABS GRANITES PRIVATE LIMITED

KUTHIRAKALAM P.O., TRIVANDRUM, KERALA - 695 543

(July - December, 2015)

INTRODUCTION

M/s Poabs Granites Pvt. Ltd. is a stone quarry placed at Sy. Nos. 459/2, 460/10, 460/12, 446/8, 462/5, 461/2, 461/3, 446/7, 460/2-2 and 460/2-1, Peroorkada village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala. The quarry project is running according to the environmental clearance order by state Environmental Impact Assessment Authority on 14/11/2012. Six month compliance reports to the conditions of the environmental clearance are to be submitted as part of compliance. The compliance report to the specific and general conditions of the environmental clearance for the period of July-December, 2015 (Sixth report) is being submitted.

PART - A – SPECIFIC CONDITIONS

➤ Condition 1)

Assurance in the form of affidavit should be given to SEIAA Kerala that eco-restoration including the mine closure plan shall be done at the expenses of the project proponent on completion of mining.

Compliance:

Affidavit declared that eco-restoration including the mine closure plan will be done at our expenses was submitted to SEIAA Kerala on 22.03.2014. It is intended to build up a green belt in the mined area with indigenous plant species after reclaimed with stacked dumping and overburden. Ten percent of the mined pit will be preserved as rainwater harvesting pit. Xerox of the affidavit stated that eco-restoration including the mine closure plan will be done at our expenses is enclosed as Annexure No.1.

➤ Condition 2)

Quantity of overburden and their storage shall be provided to SEIAA Kerala before initiating activities.

Compliance:

Quantity of overburden and their storage settings were provided to SEIAA. Quantity of topsoil is expected to be 33,900m³. The top soil is stored separately in an earmarked place and the photographs showing top soil storage area are provided at Annexure No.2.

➤ **Condition 3)**

Plan clearly showing the internal road system within the project site to be submitted to SEIAA Kerala before initiating activities.

Compliance:

There is about 0.3km of roads having 7.0m width is present within the project area. Road system inside the project area is maintained well. Sides of the road systems not having natural vegetation are planted with indigenous plant species. Details of the plant species planted along the road sides are as follows.

Sl. No	Botanical Name	Common Name	Family	Distribution	Status
1	<i>Mangifera indica</i> L.	Mavu	Anacardiaceae	Evergreen and semi-evergreen forests and also widely cultivated	Indo-Malaysia
2	<i>Cassia fistula</i> L.	Indian Laburnum/ Kanikkonna	Fabaceae		Indo-Malesia
3	<i>Artocarpus heterophyllus</i> Lam.	Plavu	Moraceae	Evergreen and semi-evergreen forests, also widely cultivated	Widely cultivated in the tropics, origin is probably South India
4	<i>Acacia auriculiformis</i> Benth.	Acacia	Leguminosae	Native of Tropical Australia	Exotic
5	<i>Cinnamomum malabatum</i>	Idana	Lauraceae	Southern Western	Endemic to

	(Burm.f.) J.Presl.			Ghats	Southern Western Ghats
6	<i>Polyalthia longifolia</i> (Sonn.) Thwaites	Arnanamaram	Annonaceae	Native of Sri Lanka: introduced to many tropical countries	<i>Exotic</i>
7	<i>Casuarina equisetifolia</i> L.	Choolamaram	Casuarinaceae	Native of Malaysian Region	Exotic

The map showing the internal roads within the project site is enclosed as Annexure No. 3.

➤ **Condition 4)**

Specific methodology adopted for drilling and blasting and also the geometry of drill holes to be given to SEIAA Kerala before initiating activities.

Compliance:

Specific methodology adopted for drilling and blasting and also the geometry of drill holes were given to SEIAA Kerala. Mineral is excavated using excavators. The mineral is fractured and simply exploit by rock breakers and excavators. The hard strata are excavated after drilling and blasting. The specific methodology adopted for drilling, blasting and the geometry of drill holes is attached at Annexure No.4.

➤ **Condition 5)**

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

Garland drains to channelize the storm water are provided in the lower slope of the core area and the photographs showing the same is provided at Annexure No.5. Storm water channels are provided with De-siltation traps which will grab the passage of debris and silt from the mining area to the main streams.

➤ **Condition 6)**

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

De-siltation traps (check dam like) are provided in the storm water channels, which will arrest the passage of debris and slit from quarry site to the main streams. Debris and slit from the trap were removed and disposed periodically. The photographs of the same are provided at Annexure No.6.

➤ **Condition 7)**

Dust and sound level should be as per the prescribed standards applicable to the area.

Compliance:

Dust and sound levels are monitored periodically through an NABL accredited laboratory (Polluchem Laboratories (P) LTD) during the quarry in operation and the monitored results are well within the standards applicable. Average Ambient Sound Level in day and night time are 51.8dB and 34.3dB respectively. Value of Particulate matters PM₁₀ and PM_{2.5} are 65.3µg/M³ and 32.4µg/M³ correspondingly. Sulphur dioxide and Nitrogen dioxide values in the air are 5.1µg/M³ and 4.5µg/M³ respectively. Drinking water quality parameters are well within the standards. The copy of the ambient sound monitoring report, ambient air quality monitoring report, and drinking water quality reports are provided at Annexure No. 7, 8 and 9 respectively.

• **Condition 8)**

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.

Compliance:

The specific conditions of environmental clearance are prominently displayed in a metallic board of 3 ft x 3 ft as per the specifications instructed by SEIAA Kerala. The photographs of the display board are provided at Annexure No. 10.

PART - B - GENERAL CONDITIONS

➤ **Condition i)**

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

Compliance:

Rainwater harvesting systems are maintaining in the project area. Harvesting system consists of two tanks constructed with stone masonry wall having the capacity of 190000 and 144000 liters. Two tanks are separated by a check dam. Photographs of the rainwater harvesting system are enclosed as Annexure A. Details of the rainwater harvesting system are as follows.

Sl. No.	Type	Length (m)	Width (m)	Height (m)	Capacity (L)
1	Tank constructed with stone masonry wall 1	20	6	2	190000
2	Tank constructed with stone masonry wall 2	12	6	2	144000

➤ **Condition ii)**

Environment monitoring cell should be formed and made functional.

Compliance:

An environmental monitoring cell was formed with Mr. Jabu K. Abraham (Director) as head of the monitoring cell and made functional. Meeting of monitoring cell is arranged monthly and discuss the status of the compliance of the specific and general conditions contained in the

Environmental clearance order. The details of the monitoring cell members are given below

Sl. No.	Post	Name
1	Head of the monitoring cell (Director)	Mr. Jabu K. Abraham
2	Head in charge (Environment)	Mr. VT Thomas
3	Senior Environmental Officer	Mr. Rino Varghese
4	Environmental Officer	Mr. Navin Xavier
5	Name of the environmental officer in charge	Mr. Anil kumar. M.
6	Name of the officer Environment, Health and safety	Mr. Vijayakumar V.R.
7	Name of the Asst. officer of Environment, Health and safety	Mr. Jayaraj. T.
8	Name of the environmental consultant	M/s Enkay Enviro Services Pvt. Ltd. & M/s Environmental Engineers & Consultants Pvt. Ltd
9	Address of Environmental laboratory	M/s Poluchem Laboratory Pvt. Ltd.

➤ **Condition iii)**

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

Compliance:

Natural vegetations including trees, shrub and herbs are present in the sides of tarred road and parking areas. The area with low vegetation planted with trees and a nursery is maintaining for further plantations. Photographs showing the same is provided at Annexure No. B. Plant saplings maintained in the nursery for roadsides and parking areas as follows.

Sl. No	Botanical Name	Common Name	Family	Distribution	Status
1	<i>Mangifera indica L.</i>	Mavu	Anacardiaceae	Evergreen and semi-evergreen forests and also widely cultivated	Indo-Malaysia

2	<i>Cassia fistula</i> L.	Indian Laburnum/ Kanikkonna	Fabaceae		Indo- Malesia
3	<i>Artocarpus heterophyllus</i> Lam.	Plavu	Moraceae	Evergreen and semi- evergreen forests, also widely cultivated	Widely cultivated in the tropics, origin is probably South India
4	<i>Acacia auriculiformis</i> Benth.	Acacia	Leguminosae	Native of Tropical Australia	Exotic

➤ **Condition IV)**

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

Compliance:

Solar Energy device such as solar lights and water heater were installed in the project area. Solar water heater is associated with canteen for Kitchen purposes. Nine solar lights were installed in the different regions of the project area. Photographs showing the same are attached as Annexure B1.

➤ **Condition v)**

In the 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 VI)**

The authority reserves the right to add additional safe guard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the environmental (protection)

Act 1986, to ensure effective implementation of the suggested safe guard measures in a time bound and satisfactory manner.

Compliance:

Would be complied

➤ **Condition vii)**

All other statutory clearances shall be obtained, as applicable, by project proponents from the respective competent authorities.

Compliance:

All other statutory approvals required for the quarrying activity is obtained for the project. The details regarding the same along with the copy of the statutory approvals is provided at Annexure C1, C2 & C3.

Sl. No.	Annexure	Name of the statutory approvals
1	C1	License from Panchayat
2	C2	Integrated consent to operate issued under Air act, 1981 and Environment act 1986.
3	C3	License to possess: (c) for use, explosives of class1, 2, 3, 4, 5, 6 or 7.

➤ **Condition viii)**

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:

Would be complied

➤ **Condition ix)**

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 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 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 process was advertised in two local newspapers and the copy of the same was submitted to SEIAA Kerala. The copy of the advertisement is provided at Annexure D1 & D2. Details of the news paper advertisements are given below.

SI. No.	Annexure	Name of the News paper and edition	Dated
1	D1	Times of India (Thiruvananthapuram, Kollam)	23/12/2012
2	D2	Mathrubhumi	23/12/2012

➤ **Condition x)**

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:

Environmental clearance order was submitted to Thiruvananthapuram Corporation Office on 14/12/2012. The acknowledgement received is

provided at Annexure E. The environmental clearance order is uploaded in the website of the company and can be seen in the website www.msand.in

➤ Condition xi)

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:

Sixth compliance report (July – December, 2015) is being submitted to Department of Environment and Climate change, Govt. of India both in hard copy as well as soft copy (CD).

Condition xii)

The proponent should provide affidavit 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 on 23.12.2012 and the copy of the same is provided at Annexure F.



കേരളം KERALA

AF 880882

AFFIDAVIT

I, Jabu K. Abraham, Director & authorized signatory of M/s POABS Granite Pvt. Ltd. having its correspondence office at Peroorkada Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala Pin-695543 do hereby affirm and confirm as follows:-

1. That, M/s. POABS Granite Pvt. Ltd. running a Quarry Project at Survey Nos. 459/2, 460/10, 460/12, 446/8, 462/5, 461/2, 461/3, 446/7, 460/2-2, 460/2-1 at Peroorkada Village, Thiruvananthapuram Taluk, Thiruvananthapuram Dist, Kerala.
2. That, the eco-restoration including the mine closure plan will be done at our expenses.

J.K.A.
DEPONENT

Verification:

Verified that my above statements are true to the best of my knowledge and belief and nothing material has been concealed therein.

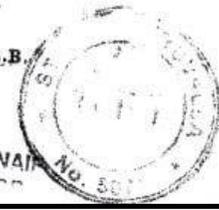
Place: Tiruvalla
Date: 22.03.2014

Solemnly affirmed and signed before me by the deponent who is personally known to me in my office at Tiruvalla on this the 22nd day of March, 2014.

J.K.A.
DEPONENT



A. P. Gokula Chandran, B.A; LL.B.
Advocate & Notary
Tiruvalla.



054952 / 100 / Jabu K. Abraham
Director
M/s Poabs Granite Pvt Ltd

P. KRISHNAN KUTTY NAIK
No. 58

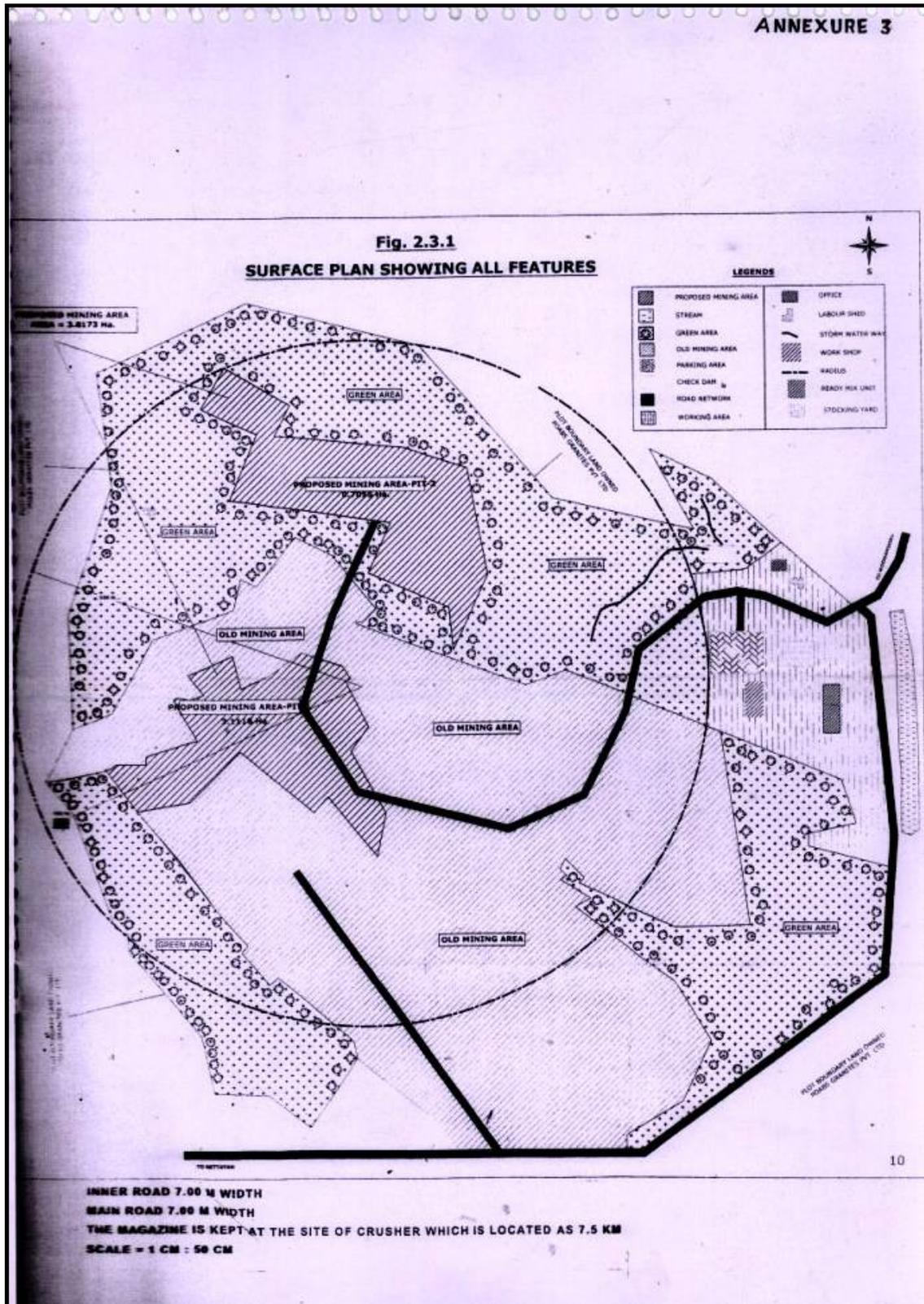
ANNEXURE 2



Photographs showing top soil storage area

ANNEXURE 3

ANNEXURE 3

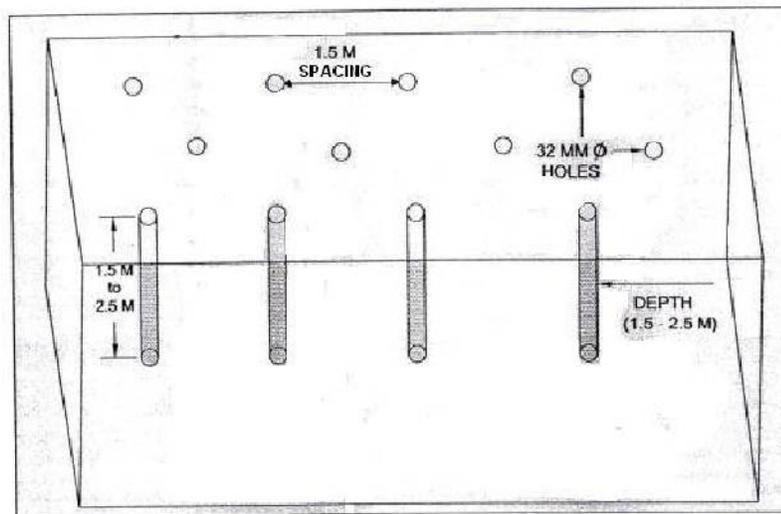


ANNEXURE 4

PRE-FEASIBILITY, BASELINE DATA AND ENVIRONMENTAL MANAGEMENT PLAN – M/s POABS ROCK PRODUCTS PVT. LTD.

2.6.5 Drilling

The excavation of mineral is proposed by excavators. The mineral is fractured and easily exploitable by rock breakers and excavators. The hard strata are proposed to excavate after drilling and blasting. The cross-sectional view of drilling operations is shown below:-



Salient features of drilling

- About 30 to 50 holes per blast of 32 mm dia and to a depth of 2 to 2.5 m will be adopted
- It is estimated about 2 to 3 T production per hole
- Number of blasts per day depends upon the workable area and production to be achieved
- The spacing of 1.0 to 1.5m between the holes will be adopted
- About 250 g per hole of explosive will be used. However, 10 kg/blast will be adopted at any point of time
- Millisecond electric blasting will be adopted to limit the PPV and Noise levels within the stipulated standards.

2.6.6 Blasting

The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS.

In this area for fragmentation of granite the blasting will be conducted. Multiple blast holes of 1.0 to 1.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity.

It is estimated about 250 g of explosives per hole is required. About 30 – 50 holes per blast are proposed. Therefore, the requirement of explosives will be about 10 kg/ blast.

2.6.6.1 BLASTING SAFEGUARD

- Blasting in the open cast pits will be done only during day time at designated hours.
- Only competent blasters will be appointed to handle explosives.
- Explosives will be stored in approved and licensed magazine as per Explosive Act/ Rules.
- Explosives will be brought from magazine to blasting site in licensed Explosive Van under the care of blaster.
- Sufficient warning signals will be given before blasting the holes.
- Guards will be posted on all roads and paths at least 250 m distance to stop entrance to the danger zone during blasting hour.
- Controlled blasting will be practiced to control vibrations and flying fragments.
- Optimum charge will be used, while blasting near office complex/ infrastructure site.
- Maximum charge per delay will always be less than 10kg to limit the PPV levels within the DGMS standards of 15 mm/sec.

ANNEXURE 5



Photographs showing garland drains within the project sites to channelize storm water

ANNEXURE 6



Photographs showing de-siltation trap (Check dam like)

ANNEXURE 7



POLUCHEM LABORATORIES [P] LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY
PALLATH BUILDING, N.KALAMASSERY.P.O., ERNAKULAM-683104
PHONE:0484-3261174, 2544030, E-mail: poluchem@gmail.com

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'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD AND ACCREDITED BY NABL

TEST REPORT

Page 01 of 02

Ref.No. PL/RT/PW/35/2015 Name & address of customer Project Site Sample drawn by Sample description Sample Code Location of sampling Date of sample collected Date of analysis started Date of completion of analysis	Date of Issue: 28/09/2015 : M/s.Poabs Granites Pvt Ltd, Peeroorkada, Trivandrum : M/s Poabs Products Pvt Ltd, Sy.No. 459/1-1pt, 461/4,461/1, 462/1pt, 448/3pt,2,1pt, 452/4,6,7,8 Village - Peeroorkada, Taluk-Trivandrum, District- Trivandrum, Kerala : Self : Water sample : I/35/2015 : Open Well Water-East Side : 22/09/2015 : 24/09/2015 : 26/09/2015
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Parameters tested	Test method	Results	Desirable limit as per IS 10500
Color	IS 3025 (P) 04 - 1983	2 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 - 1983	Unobjectionable	Unobjectionable
Turbidity	IS 3025 (P) 10 - 1984	2 NTU	5 NTU
pH	IS 3025 (P) 11 - 1983	6.07	6.5 - 8.5
Total Dissolved Solids	IS 3025 (P) 15 - 1984	43 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 - 1983	23.76 mg/l	300 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 - 1986	6 mg/l	200 mg/l
Residual Free Chlorine	IS 3025 (P) 26 - 1986	BDL	Min 0.2 mg/l
Chloride as Cl	IS 3025 (P) 32 - 1988	12.81 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 - 1991	7.93 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 - 1994	< 1 mg/l	30 mg/l
Iron as Fe	IS 3025 (P) 53 - 2003	0.32 mg/l	0.3 mg/l
Sulphate	IS 3025 (P) 31 - 1988	14.30 mg/l	200 mg/l
Fluoride	IS 3025 (P) 60 - 2008	0.12 mg/l	1 mg/l

Note: BDL - Below Detection Level

For Poluchem Laboratories (P) Ltd.

Authorized Signatory
SREEJA RAMESH
 Quality Manager

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



POLUCHEM LABORATORIES [P] LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY
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PHONE: 0484-3761174, 2544030, E-mail: poluchem@gmail.com

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

Continuation of Test Certificate No: 35/2015

Page 02 of 02

Parameters tested	Test method	Results	Desirable limit as per IS 10500
Selenium	APHA 3111B	BDL	0.01 mg/l
Arsenic	APHA 3111B	BDL	0.05 mg/l
Copper	APHA 3111B	BDL	0.05 mg/l
Manganese	APHA 3111B	BDL	0.1 mg/l
Cadmium	APHA 3111B	BDL	0.01 mg/l
Chromium	APHA 3111B	BDL	0.05 mg/l
Zinc	APHA 3111B	BDL	5 mg/l
Mercury	APHA 3111B	DDL	0.001 mg/l
Cyanide	APHA 4500 E	BDL	0.05 mg/l
Lead	APHA 3111 B	BDL	0.05 mg/l
Aluminum	APHA 3500 D	BDL	0.03 mg/l
Boron	APHA 4500 B	BDL	1 mg/l

Note: BDL - Below Detection Level

MICROBIOLOGICAL TESTS

Parameters	Unit	Results	Desirable limit as per IS 10500
MPN Coliform Count	MPN/100ml	130	1
Coliform bacteria	/100ml	Present	Absent
E - Coli	/100ml	Absent	Absent



For PoluChem Laboratories (P) Ltd.

Authorized Laboratory

SKEEJA RAMESH
Quality Manager

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

ANNEXURE 8



POLUCHEM LABORATORIES [P] LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY
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**'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD
TEST REPORT**

Client Name & Address	Certificate No:	PL/RT/SD/6150/2015
M/s Poabs Granites Pvt. Ltd Peeroorkada, Trivandrum.	Date of issue:	28/09/2015
	Date of monitoring	21/09/2015 11.00 Hrs to 22/09/2015 11.00 Hrs
	Monitoring Location	M/s. Poabs Granites Pvt Ltd. Peeroorkada, Trivandrum. Sy.No. 459/1-1pt, 461/4, 461/1, 462/1pt, 448/3pt, 2, 1pt, 452/4, 6, 7, 8 Village - Peeroorkada, Taluk - Trivandrum, District - Trivandrum, Kerala.
	Sample Description	Ambient Sound Level (Leq)

Monitoring Location	Monitoring Time	Results
 Near east side boundary	11.00 Hrs	53.5 dB (A)
	12.00 Hrs	53.6 dB (A)
	13.00 Hrs	54.1 dB (A)
	14.00 Hrs	55.1 dB (A)
	15.00 Hrs	54.6 dB (A)
	16.00 Hrs	54.5 dB (A)
	17.00 Hrs	54.1 dB (A)
	18.00 Hrs	50.0 dB (A)
	19.00 Hrs	43.6 dB (A)
	20.00 Hrs	36.6 dB (A)
	21.00 Hrs	35.8 dB (A)
	22.00 Hrs	35.1 dB (A)
	23.00 Hrs	34.9 dB (A)
	00.00 Hrs	34.8 dB (A)
	01.00 Hrs	34.9 dB (A)
	02.00 Hrs	35.1 dB (A)
	03.00 Hrs	34.6 dB (A)
	04.00 Hrs	34.3 dB (A)
	05.00 Hrs	35.5 dB (A)
	06.00 Hrs	39.9 dB (A)
07.00 Hrs	47.8 dB (A)	
08.00 Hrs	53.2 dB (A)	
09.00 Hrs	54.1 dB (A)	
10.00 Hrs	53.9 dB (A)	
Leq (Day time)		51.8 dB (A)
Leq (Night time)		34.3 dB (A)

For PoluChem Laboratories (P) Ltd.

SREEJA RAMESH 
Authorized Signatory
Quality Manager

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

ANNEXURE 9

ANNEXURE No. 6



NABL ACCREDITED
Certificate No. 1-1956

POLUCHEM LABORATORIES [P] LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY
PALLATH BUILDING, N.KALAMASSERY P.O., ERNAKULAM-683104
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'A' GRADE LABORATORY APPROVED BY KERALA STATE POLLUTION CONTROL BOARD AND ACCREDITED BY NABL

TEST REPORT

<div style="text-align: center;"> </div> <p>M/s Poabs Granites Pvt. Ltd Peeroorkada, Trivandrum.</p>	Certificate No	PI/AMB/RT/31/2015
	Date of issue	28/09/2015
	Date of monitoring	21/09/2015 11.00 Hrs to 22/09/2015 11.00 Hrs
	Date of sample received	23/09/2015
	Date of analysis started	24/09/2015
	Monitoring location	M/s. Poabs Granites Pvt Ltd, Peeroorkada, Trivandrum, Sy.No.459/1-1pt, 461/4,461/1, 462/1pt, 448/3pt,2,1pt,452/4,6,7,8 Village - Peeroorkada, Taluk- Trivandrum, District - Trivandrum, Kerala.
	Sample description	Ambient air - Near east side boundary
	Sample code given by the client	Nil
Sample identification No:	G/1/31/15	

PARAMETERS	TEST METHOD	RESULT	LIMITS
Particulate Matter (PM ₁₀)	IS 5182 Part 4 1999	65.3 µg/M ³	100 µg/M ³
Particulate Matter (PM _{2.5})	CPCB	32.4 µg/M ³	60 µg/M ³
Sulphur dioxide	IS 5182 Part 2 2001	5.1 µg/M ³	80 µg/M ³
Nitrogen dioxide	IS 5182 Part 06 1975	4.5 µg/M ³	80 µg/M ³

<p>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.</p>	<p>For and on behalf of POLUCHEM LABORATORIES (P) LTD.</p> <p>AUTHORIZED SIGNATORY</p>
---	---

SREEJA RAMESH
Quality Manager

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

ANNEXURE 10



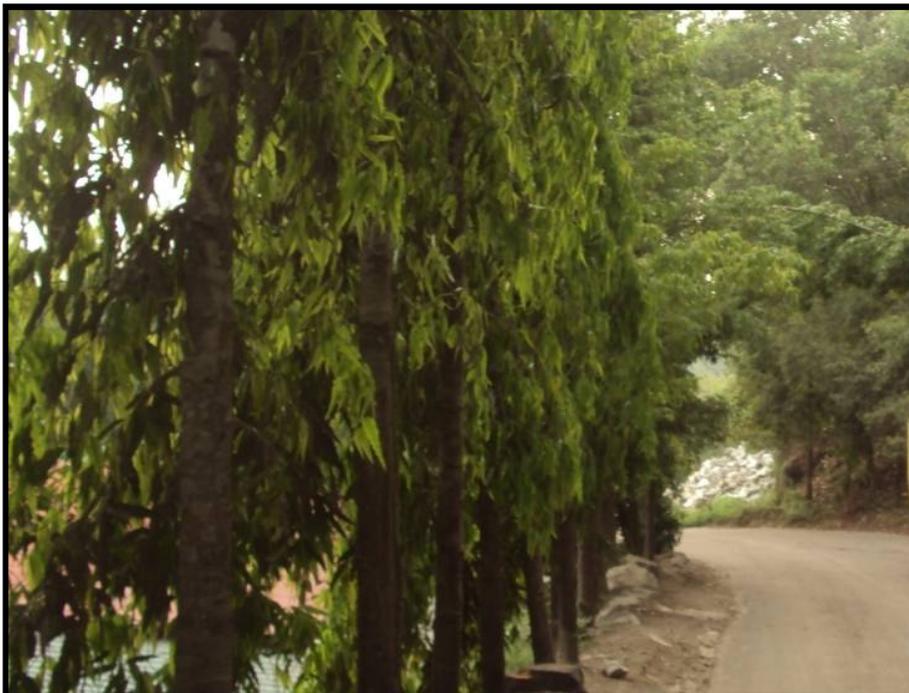
Photographs showing specific conditions of the environmental clearance prominently displayed in a metallic board

ANNEXURE A



Photographs showing the rainwater harvesting system in the project area

ANNEXURE B



Photographs showing Road side plantation and plant nursery

ANNEXURE B1



Photographs showing the Solar Energy devices within the project area

ANNEXURE C2

File No. PCB/TVM-DO/CO/6424/2007

Date: 04-08-2011



KERALA STATE POLLUTION CONTROL BOARD
District office, Plamoodu Jn., Thiruvananthapuram

INTEGRATED CONSENT TO OPERATE

ISSUED UNDER

The Air (Prevention & Control of Pollution) Act, 1981
The Water (Prevention & Control of Pollution) Act, 1974
&
The Environment (Protection) Act, 1986

TO

✓ Shri. K.A Abraham,
Poabs Granites (P) Ltd.,
Malamugal, Vattiyoorkavu,
Thiruvananthapuram.

(for Quarrying at Malamugal,
Peroorkada, Thiruvananthapuram)

Consent No. PCB/TVM-DO/ICO/QRY/1495/2011



☎0471-2303844

e.mail: kspcbdotvpm@gmail.com

kspcbdotvm@yahoo.com

KERALA STATE POLLUTION CONTROL BOARD
കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

DISTRICT OFFICE, THIRUVANANTHAPURAM

ബില്ലാ ഓഫീസ്, തിരുവനന്തപുരം

T. C. 12/96 (4,5), PLAMOODU JN., PATTOM P.O, THIRUVANANTHAPURAM - 695 004

മി.മി. 12/96 (4,5), പ്ലാമൂടു് ജം.പാ.പട്ടം പി.ഒ. തിരുവനന്തപുരം - 695 004

No. PCB/TVM-DO/CO/6424/2007

Date: 29-04-2015

VARIATION ORDER

- Ref: - 1. Request received from the Director on 16-04-2015.
 2. Consent no. PCB/TVM-DO/ICO(R)/QRY/1217/2014 dated 19-05-2014.

The 'Consent to Operate-Renewal' issued vide reference (2), to Poabs Granites Pvt Ltd., Malamugal, Vattiyookavu, Thiruvananthapuram is hereby **renewed up to 31-01-2017**. The copy of consent cited under reference (2) attached herewith is part of this renewal order and this order is subject to the conditions stipulated therein and subject to the following conditions;

- 1) Quarrying area having valid lease in survey nos. 459/2, 460/10, 460/12, 446/8 (part), 462/5, 461/2, 461/3, 446/7 (part), 460/2-2 and 460/2-1.
- 2) Any order passed by the Hon'ble Supreme Court, Hon'ble High Court, Hon'ble National Green Tribunal in the matter of quarrying, this order will become invalid immediately on the basis of the above mentioned order/judgment.
- 3) Any Government Order passed in the matter of quarrying by the Central Government, State Government & Pollution Control Board, this order will become invalid immediately.
- 4) This Consent to Operate is issued only in accordance with norms and parameters of the Board as per the Air (Prevention & Control of Pollution) Act, 1981 and is not a permit/license to carry out mining



operations/quarrying operation. Permit/license for mining/quarrying operation shall be obtained from competent authorities.

- 5) Regular wetting of the roads in the premises of the quarry and approach roads near the quarry shall be done for avoiding dust emission within and outside the boundary.
- 6) This order is issued based on pollution control purpose and necessary orders/licenses/clearances shall be obtained for quarrying from appropriate authorities.
- 7) Fencing shall be maintained around the quarrying area.
- 8) Occupier shall ensure that quarrying area is restricted to a distance more than 100 m from residences and public roads having vehicular traffic.



For and on behalf of the
Kerala State Pollution Control Board

A handwritten signature in black ink, appearing to read 'M. Dileep Kumar'.

ENVIRONMENTAL ENGINEER
(Designation of issuing authority)
M. DILEEP KUMAR
ENVIRONMENTAL ENGINEER



Encl: Previous Consent

To
✓ Poabs Granites Pvt Ltd.,
Malamugal,
Vattiyookavu,
Thiruvananthapuram.
Ph: 0471-2366622

Copy to:
The Chief Environmental Engineer,
Regional Office.

ANNEXURE C3

GOVERNMENT OF INDIA
 MINISTRY OF COMMERCE & INDUSTRY
 PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO)
 (Formerly Department of Explosives)
 No.140, Rukmini Laxmipati Road,
 Marshalls Road, Egmore, Chennai 600008
 Tele: 28514848 Fax: 28514848
 Email: jtccechennai@explosives.gov.in

No.: E/SC/KL/22/1452(E68709)

Dated:04/10/2012

Yp
 Sri ABY MATHEW, Managing Director,
 M/s. POABS GRANITES PVT. LTD. Kuttoor PO, Tiruvalla, Town/Village - Kuttoor
 District-PATHANAMTHITTA, State-Kerala, Pincode - 689551

Subject: Possession for Use of Explosives from magazine situated at Survey No.:194/6,Block No.39,
 Vellanadu,Nedumangadu,Taluk, Dist. THIRUVANANTHAPURAM, Kerala -Licence No.: E/SC/KL/22/1452
 (E68709) granted in Form I.E-3 of Explosives Rules, 2008 -
 Amendment of Quantity of Explosives/Monthly Purchase Limit .

Sir(s),

Please refer to your letter No. x dated 03/10/2012 on the subject cited above.

The Licence No.: E/SC/KL/22/1452(E:68709) is duly amended in respect of :

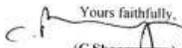
Quantity of Explosives/Monthly Purchase Limit

with condition QUARTERLY RETURNS SHALL BE SUBMITTED ON-LINE IMMEDIATELY and forwarded herewith;

The licence capacity at any one time shall not exceed the kinds and quantities mentioned below :

No	Explosive(s)	Class	Div	Sub Div	Capacity	Unit
1	Nitrate Mixture	2	0	0	300	Kg.
2	Safety Fuse	6	1	0	30000	Mtrs
3	Electric and/or Ordinary Detonators	6	3	0	40000	Nos.

Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : **20 times as above.**This Licence shall remain valid till **31st day of March 2017.**For further renewal of licence, please follow the procedure under Rule 112 of Explosives Rules, 2008.
Receipt of this letter may please be acknowledged.**Enclosures :**

Yours faithfully,

 (C. Shanmugam)
 Controller of Explosives
 For Joint Chief Controller of Explosives
 South Circle, Chennai

Copy Forwarded to:

1. The Dy. Chief Controller of Explosives, Kochi.
2. Additional District Magistrate, THIRUVANANTHAPURAM, Kerala with reference to his Noc No: A17-9946/2011 Dated: 31/10/2011.
3. Superintendent of Police, THIRUVANANTHAPURAM, Kerala

For Joint Chief Controller of Explosives
 South Circle, Chennai

[For more information regarding status, fees and other details, please visit our web site <http://peso.gov.in>]<http://10.0.1.11/IntExp/AmdCoveringLetterNew.asp>

10/4/2012

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

Licence to possess : (c) for use,explosives of class 1, 2,3,4,5,6 or 7 in a magazine

Licence No. : E/SC/KL/22/1452(E68709)
Annual Fee Rs 4500/-



- Licence is hereby granted to : **Shri ABY MATHEW, Managing Director (Occupier : SHRI ABY MATHEW MG. DIRECTOR M/s. Poabs Granites Pvt.Ltd.)**
M/s. POABS GRANITES PVT. LTD. Kuttoor,PO, Tiruvalla, Town/Village - Kuttoor District-PATHANAMTHITTA, State-Kerala, Pincode - 689551
- Status of licensee : **Company**
- Licence is valid only for the following purpose : possess for use of **Nitrate Mixture, Safety Fuse, Electric and/or Ordinary Detonators.**
- (a) Licence is valid for the following kinds and quantity of explosives:

Sr. No.	Name and Description	Class & Division	Sub-division (If any)	Quantity at any one time
1.	Nitrate Mixture	2,0	0	300 Kg.
2.	Safety Fuse	6,1	0	30000 Mtrs
3.	Electric and/or Ordinary Detonators	6,3	0	40000 Nos.

(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : **20 times as above.**

- The licensed premises shall conform to the following drawing(s):
Drawing No : E/SC/KL/22/1452(E68709) dated : 03/07/2012
- The licensed premises are situated at following address:
Survey No. 194/6,Block No.39 , Town/Village : Vellanadu,Nedumangadu.Taluk
Police Station : **Aryanadu** District : **THIRUVANANTHAPURAM** State : **Kerala**
PinCode : **689551** Phone : E-Mail : Fax :
- The licensed premises consist of following facilities : **Magazine for High Explosives ,detonators& Lobby as per the plan**
- The licence 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 Annexures.
(1) Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
(2) Conditions and Additional Conditions of this licence signed by the licensing authority.
(3) Distance Form DE-2
- This licence shall remain valid till **31st day of March 2017**

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there 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 Annexure attached hereto.

The Date: 03/07/2012

Joint Chief Controller of Explosives
South Circle, Chennai

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 16/08/2012
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 04/10/2012

Endorsement for renewal of licence:

Date of Renewal	Date of Expiry	Signature of licensing authority
-----------------	----------------	----------------------------------

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

Trouble in a can

A Housewife's Death In Aluva Following Burns She Suffered In A Canister

and large sizes. The Santa caps and masks keep the

write hair for the girls. The price of Santa caps range from Rs.20 to 80.

Tham With Care

- Online Digital Library
- Video Conferencing Facility
- Continuous Online Mentoring.
- Extensive Corporate Tie-ups
- 12-hr Contact Classes for each subject

APPLICATION PROCEDURE

For application forms & prospectus, send a Demand Draft on Rs.100/- to IIMT-CDL, A-6, 5th/8th UPSIDC Industrial Area, Vasant Road, Ghazalabad in favour of IIMT-CDL payable at Delhi. You can also Apply Online at www.iimtdc.ac.in. Forms also available at Information Centres.

E-mail: newadmission@iimtdc.ac.in Tel: 0120-6744744.

INFORMATION CENTRES: GHAZIABAD (Head Office): 2015465/480/492/493 Delhi (CP): 9711005080, Noida (Sector 22B1) 332-98380316663, Mumbai (Navi Mumbai): 40809248-9322677316, Nagpur: 3227238-9923594888, H Ahmednagar: 9375767668-9375767669, Bangalore: 32512000-9945900775, Bhubaneswar: 2436656-9861061017, Indore: 9055565-9996222362.

1 YEAR PGDIP (EXECUTIVE)
Recognised by DCE (Fully Online Mode)

1 YEAR PGDIP IN CYBER SECURITY
Recognised by DCE for graduates in any field

M.S. in CYBER LAW & SECURITY
In collaboration with National Law University (NLU) for graduates in any discipline with 50% marks. To enroll visit our Website.

Last date extended: The Kerala University has extended the last date to submit applications for admission to MPhil courses for the year 2012-13, till December 31.

Exam timetable: The timetable for the fifth semester LLB (three-year), sixth semester LLB (five-year) to begin from January 3 and second semester Msc computer science exam to begin from January 4 at the Institute of distance education www.ku.ac.in.

NOTICE
This is to inform to the General Public that the proposed quarry project at Chithira Puzha, Village Puzha, Kottayam Taluk, Kerala being developed by M/s Ponds Engineering Ltd. is accorded with ENVIRONMENTAL CLEARANCE by State Environment Impact Assessment Agency, Kerala vide Order No. 35SE/AA/06/02012 dt. 14-12-2012 and the copy of the Environmental Clearance of Department of Environment and Climate Change, Govt of Kerala and may also be seen on the website of the Authority at www.zedkerala.org

NOTICE
This is to inform to the General Public that the proposed quarry project at Chithira Puzha, Village Puzha, Kottayam Taluk, Kerala being developed by M/s Ponds Engineering Ltd. is accorded with ENVIRONMENTAL CLEARANCE by State Environment Impact Assessment Agency, Kerala vide Order No. 35SE/AA/06/02012 dt. 14-12-2012 and the copy of the Environmental Clearance of Department of Environment and Climate Change, Govt of Kerala and may also be seen on the website of the Authority at www.zedkerala.org

Kashyap, Sindhu in maiden GP finals
Asstheem Mukereji | TNK
A tense battle Sugiarto netted the shut-out to drizzle. The Indian heaved a big sigh of relief. Kashyap now plays Tapanasak Senosombansit of Thailand who outwitted another Indonesian Yunus Alamsyah, the fifth seed 21-14, 21-17.

SYED MODI GRAND PRIX GOLD
A tough resistance from P. Kashyap had to overcome
India's top player Kashyap had to overcome a tough resistance from P. Kashyap, Sindhu to win the maiden Grand Prix final at the BBD Academy here on Sunday.

Controversial win for Juve
Mihai: Defending champions Juventus scored two stoppage-time goals to snatch a controversial 3-1 win over U-man Cagliari in Serie A on Friday.

Champions League place.
Wigan remain in the relegation zone after their fourth defeat in their last five league games, secure

was denied by Arsenal's Polish keeper Wojciech Szczesny and Dave Jones thumped a shot narrowly wide of the upright with Szczesny through on goal but dragged a left-

TENDER NOTICE
131/2012
Date: 22.12.2012

Kachim 2-63, 5 Mohammed 2-265 vs Assiam
At Agalpur, Goa vs Tirupur.
No play, bad light.

Kaif 68, Praveen Gupta 46 no, All Mirraza 49 no, R Malolan 3-83 vs TN
At Madurai, Haryana 293/7

Lackluster in the opening minute to set them on their way to a 4-2 home win over Gatale in the earlier kickoff.

Champions League place.
Wigan remain in the relegation zone after their fourth defeat in their last five league games, secure

was denied by Arsenal's Polish keeper Wojciech Szczesny and Dave Jones thumped a shot narrowly wide of the upright with Szczesny through on goal but dragged a left-

cas wigan, third from bottom, had the best chance of a poor first half when Aronuna Kone sprinted through on goal but dragged a left-

A MEDICAL SERVICES CORPORATION LTD
MINISTRY OF HEALTH & FAMILY WELFARE, GOVT. OF KERALA)
Head Office : Thiruvananthapuram-14,
Telephone No. 0471-2337353, 3045600 FAX No. 0471-3045647,
mailto:info@kmsci.kerala.gov.in, website : www.kmsci.kerala.gov.in

ANNEXURE E

തിരുവനന്തപുരം കോർപ്പറേഷൻ		നോൺ : 2320821
	0046369	കൈപ്പറ്റ് രസീത്
നമ്പർ 455/14	തീയതി 16.01.2014	
<p>Received the copy of order no. 37/SE/AA/12/6092/12, dated 14.12.2012, of the member secretary SE/AA, Kerala being environmental clearance whole EIA certificate for quarry project @ Malankal, 2006. VTK, TUM</p>		
 <p>Pooha Granites private Limited, Kuzhupattanam, TUM,</p>		(മുദ്ര)

മറുപുറത്ത് പറഞ്ഞിട്ടുള്ള താങ്കളുടെ മേൽനമ്പർ ഹർജി/പരാതി/മെമ്മോറാണ്ടം കൈപ്പറ്റിയിരിക്കുന്നു. ആയതു മേൽനടപടികൾക്കായി മറുപുറത്ത് പറഞ്ഞിട്ടുള്ള സെക്ഷനിഫോക്ക് അയച്ച് കൊടുത്തിട്ടുണ്ട്. ആയതിന് 15 ദിവസത്തിനകം യാതൊരു മറുപടിയും ലഭിക്കാത്തപക്ഷം താങ്കൾക്ക് സെക്രട്ടറിയേയോ/സെക്രട്ടറിയുടെ ഓഫീസണൽ അസിസ്റ്റന്റിനേയോ നേരിൽ കണ്ട് വിവരം ബോധിപ്പിക്കാവുന്നതാണ്.


 ക.ഊണ്ടർ സൂപ്രണ്ട്/ക.ഊണ്ടർ ഓഫീസർ

ANNEXURE F



കേരളം കേരल KERALA

P 788331

AFFIDAVIT

I, Jabu K Abraham, Director & authorized signatory of M/s Poabs Granites Pvt. Ltd. having its correspondence office at Kuthirakalam P.O., Trivandrum, Kerala-695543 do hereby affirm and confirm as follows :-

1. That, M/s. Poabs Granites Pvt. Ltd. proposes to develop a Quarry Project at Peroorkada Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala.
2. That, all the conditions stipulated in the Environment Clearance would be scrupulously followed.

DEPONENT

Verification :

Verified that my above statements are true to the best of my knowledge and belief and nothing material has been concealed therein.

DEPONENT

Place : Thiruvananthapuram

Date : 23-12-2012



No. 47615 PSL001-
19.12.12
Mr. Jabu K Abraham, Director
Poabs Granites Pvt. Ltd., Kuthirakalam
TUM