



## POABS ENTERPRISES PVT.LTD.

Kuttoor P.O., Tiruvalla, Kerala, India - 689 106  
Phone: +91 - 469 2743300 Fax: +91 - 469 2743330  
Email : mail@poabs.com Website : www.poabs.com

The Director, DoECC & Secretary SEAC Kerala  
Devi Kripa, Pallimukku , Pettah P.O,  
Thiruvananthapuram  
Kerala – 695024.

28- 07- 2015

Sub: Environmental Clearance – Proposed quarry project Sy. Nos. 266/15, 266/24, 266/16-1, 266/16-2, 271/7-1, 271/7-2, 271/7-3, 272/5, 267/5, 268/2-1, 268/2-2, 268/3-2-1, 268/3-2-2, 268/5-2, 268/6, 268/7, 269/9-2, 268/8-1, 268/8-2, 268/4, 268/4-2, 268/4-3, 271/4 & 271/5, Chithara Village & Panchayat, Kottarakkara Taluk, Kollam District, Kerala – Compliance report – Reg.

Ref: File No. 35/SEIAA/KL/6090/2012

Respected Sir,

Our quarry project was accorded with Environmental Clearance vide order No. 35/SEIAA/KL/6090/2012 dated 14-11-2012. Fifth compliance report to the specific and general conditions of the Environmental Clearance (hard copy as well as softcopy (CD)) for the period of January- June, 2015 is enclosed.

Thanking you,

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

Thomas Jacob  
(Director)

Copy to:

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

**COMPLIANCE REPORT**  
**TO**  
**THE CONDITIONS OF**  
**ENVIRONMENTAL CLEARANCE ORDER**  
**NO: 35/SEIAA/KL/6090/2012**  
**DT. 14 – 11 – 2012**

**BY**  
**STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)**  
**FOR**  
**PROPOSED QUARRY PROJECT**

**AT**  
**Sy.Nos. 266/15, 266/24, 266/16-1, 266/16-2, 271/7-1, 271/7-2, 271/7-3,**  
**272/5, 267/5, 268/2-1, 268/2-2, 268/3-2-1, 268/3-2-2, 268/5-2, 268/6,**  
**268/7, 269/9-2, 268/8-1, 268/8-2, 268/4, 268/4-2, 268/4-3, 271/4 & 271/5**  
**CHITHARA VILLAGE & PANCHAYAT, KOTTARAKKARA TALUK, KOLLAM**  
**DISTRICT, KERALA**

**BY**  
**POABS ENTERPRISES PRIVATE LIMITED**  
**KOLLAI P.O.CHITARA, KOLLAM, KERALA**

**(JANUARY- JUNE, 2015)**

## **INTRODUCTION**

M/s Poabs Enterprises Pvt. Ltd. is a stone quarry situated at Sy.Nos. 266/15, 266/24, 266/16-1, 266/16-2, 271/7-1, 271/7-2, 271/7-3, 272/5, 267/5, 268/2-1, 268/2-2, 268/3-2-1, 268/3-2-2, 268/5-2, 268/6, 268/7, 269/9-2, 268/8-1, 268/8-2, 268/4, 268/4-2, 268/4-3, 271/4, 271/5, Chithara village, Kottarakkara Taluk, Kollayil P.O, Kollam District, Kerala. The quarry project was accorded with the environmental clearance by state Environmental Impact Assessment Authority on 14-12-2012. Six monthly 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 January-June, 2015 (Fifth 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:**

**Assurance in the form of affidavit was submitted to SEIAA Kerala that eco-restoration including the mine closure plan will be done at our expenses on 19.03.2014. The copy of the same is provided at Annexure No.1. Following the shutting of the mine, ten percent of the mined area will be retained as water storage area. In the left over area, it is planned to build up a green belt with indigenous plant species after reclaimed with stacked dumping and overburden.**

➤ **Condition 2)**

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

**Compliance:**

Amount of overburden and their storage are previously provided to SEIAA Kerala. The quantity of overburden together with topsoil is expected to be 21,454m<sup>3</sup>. The excavated top soil is stored separately in a prefixed location and the stored soil is stabilized by planting grasses and herbs on it. List of plant species used for the stabilization of topsoil and disturbed areas are as follows.

Sl. No	Botanical Name	Common Name	Family
1	<i>Axonopus compressus</i> (Sw.) P.Beauv.	Kaalappullu/Carpet Grass	Poaceae
2	<i>Cymbopogon flexuosus</i> (Nees ex Steud.) W.Watson	Lemon grass/ Inchipullu	Poaceae

The photographs showing top soil storage area are provided at Annexure No.2.

➤ **Condition 3)**

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

**Compliance:**

Interior road system is maintained well. There is about 0.70km of roads having 7.0m width is present in the project area. Sides of the road system not

having natural vegetation are planted with indigenous plant species. Details of the plant species planted along the road sides are given below.

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>Terminalia catappa</i> L.	Badam	Combretaceae	Plains, Cultivated	Malaysia to North Australia and Polynesia, Commonly planted in the tropics
3	<i>Bauhinia tomentosa</i> L.	Manjama ndaram	Caesalpiniaceae	Cultivated as ornamental plant	Native of South east Asia

Map showing the internal road system 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:**

The excavation of the mineral is proposed by excavators and the mineral is fractured and easily exploit by rock breakers and excavators. The hard strata are proposed to excavate after drilling and blasting. The specific methodology adopted for drilling, blasting and the geometry of drill holes is provided at Annexure No.4.

➤ **Condition 5)**

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

**Compliance:**

**Garland drains are constructed within the project area to channelize the storm water and the photographs of the same are provided at Annexure No. 5. Check dam model de-siltation traps are provided in the garland drains, which arrest the passage of debris and silt from quarry site to the main streams.**

➤ **Condition 6)**

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

**Compliance:**

**De-siltation traps are provided in the storm water channels, which will arrest the passage of debris and silt from quarry site entering the main streams. Debris and silt from the trap are 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:**

**The dust and sound levels and water quality are monitored through an NABL accredited laboratory (Polluchem Laboratories (P) LTD) periodically 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 46.4dB and 38.1dB respectively. Value of Particulate matters PM<sub>10</sub> and PM<sub>2.5</sub> are 47.2µg/M<sup>3</sup> and 23.7µg/M<sup>3</sup> correspondingly. Sulphur dioxide and Nitrogen dioxide values in the air are 2.7µg/M<sup>3</sup> and 3.2µg/M<sup>3</sup> respectively. The copy of the ambient air quality monitoring report, ambient noise monitoring report and water quality analysis report are provided at Annexure No. 7, 8 and 8a 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 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 font size of not less than 40 is installed. The photograph of the display board is provided at Annexure No. 9.

**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 system is constructed in the project area. Harvesting system consists of 3 concrete wells each having the capacity of 35350 liters and two harvesting tanks constructed with stone masonry wall having the

capacity of 180000 liters each. Details of the rainwater harvesting system are as follows.

Sl. No.	Type	Length (m)	Width (m)	Height (m)	Diameter (m)	Capacity (L)
1	Tank constructed with stone masonry wall 1	15	12	1	-	180000
2	Tank constructed with stone masonry wall 2	15	8	1.5	-	180000
3	Concrete wells 1	-	-	5	3	35350
4	Concrete wells 2	-	-	5	3	35350
5	Concrete wells 3	-	-	5	3	35350

**Photograph of the rainwater harvesting system as enclosed at Annexure A.**

➤ **Condition ii)**

Environment monitoring cell should be formed and made functional.

**Compliance:**

An environmental monitoring cell was formed with Mr. Joseph Jacob (Managing Director of the Company) 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 (Managing Director of the Company)	Mr. Thomas Jacob
2	Head in charge (Environment)	Mr. VT Thomas
3	Senior Environmental	Mr. Rinoy Varghese



	Officer	
4	Environmental Officer	Mr. Navin Xavier
5	Name of the environmental officer in charge at Site	Mr. K. Sambath Raj
6	Name of the officer of Environment, Health and safety at Site	Mr. Rajesh. K.
7	Name of the Asst. officer of Environment, Health and safety at Site	Mr. Pandyarajan
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:**

**There are natural vegetations including trees, shrub and herbs in the sides of tarred road and parking areas. We planted the area with less vegetation with trees, shrubs etc. and a nursery is maintaining for further plantations. Photographs showing the same are provided at Annexure B. Details of the tree species planted as follows**

Sl. No.	Scientific Name	Common Name	Family
1	<i>Cassia fistula</i> L.	Indian Laburnum/ Kanikkonna	Fabaceae
2	<i>Mangifera indica</i> L.	Mango tree/ Mavu	Anacardiaceae
3	<i>Polyalthia longifolia</i> (Sonn.) Thwaites	Arnanamaram	Annonaceae

4	<i>Terminalia catappa L.</i>	Badam	Combretaceae
5	<i>Bauhinia tomentosa L.</i>	Manjamandaram	Caesalpiniaceae

➤ **Condition iv)**

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

**Compliance:**

**Solar Energy devices such as solar lights and water heater were installed within the project area. A biogas plant was also established in the project area. Solar water heater and biogas plant are associated with canteen and are used for kitchen purposes. Solar lights were installed in different locations of the project area. Photograph showing the same is enclosed 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.**

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

#### **➤ 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](http://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 at SEIAA Kerala. . The copy of the advertisement is provided at Annexure D1 & D2. Details of the news paper advertisements are given below.**

<b>Sl. No.</b>	<b>Annexure</b>	<b>Name of the News paper and edition</b>	<b>Dated</b>
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:**

**A copy of the environmental clearance letter was submitted to the Panchayat Office on 10.10.2013. The environmental clearance order is uploaded in the website of the company and it can be seen in the website [www.msand.in](http://www.msand.in). Receipt from the Panchayat Office stated that environmental clearance letter was received is enclosed as Annexure E.**

➤ **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:**

**Fifth compliance report is being submitted to Department of Environment and Climate change, Govt. of India both in hard copy as well as soft copy (CD and through mail).**

➤ **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 at Department of Environment and climate change on 23.12.2012 and the copy of the same is enclosed as Annexure No. F.**

# ANNEXURE 1



കേരളം KERALA

AH 236965

## AFFIDAVIT

I, Thomas Jacob, Director & authorized signatory of M/s POABS Enterprises Pvt. Ltd. having its correspondence office at Kollai P.O., Chithara Village, Kollam, Kerala-691541 do hereby affirm and confirm as follows:-

1. That, M/s. POABS Enterprises Pvt. Ltd. running a Quarry Project at Survey Nos. 266/15, 266/24, 266/16-1, 266/16-2, 271/7-1, 271/7-2, 271/7-3, 272/5, 267/5, 268/2-1, 268/2-2, 268/3-2-1, 268/3-2-2, 268/5-2, 268/6, 268/7, 269/9-2, 268/8-1, 268/8-2, 268/4, 268/4-2, 268/4-3, 271/4 & 271/5, at Chithara Village & Panchayat, Kottarakkara Taluk, Kollam District, Kerala.
2. That, the eco-restoration including the mine closure plan will be done at our expenses.

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: Thiruvalla  
Date: 19.03.2014

Solemnly affirmed and signed  
before me by the deponent who  
is personally known to me in  
my office at Thiruvalla on this  
the 19th day of March 2014.

DEPONENT

Thomas Jacob  
Director  
M/s poabs Enterprises Pvt. Ltd  
Kollai P.O.,  
Pin - 691541

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

P. KRISHNAN KUTTY NAIR  
THIRUVALLA VENDOR



## ANNEXURE 2



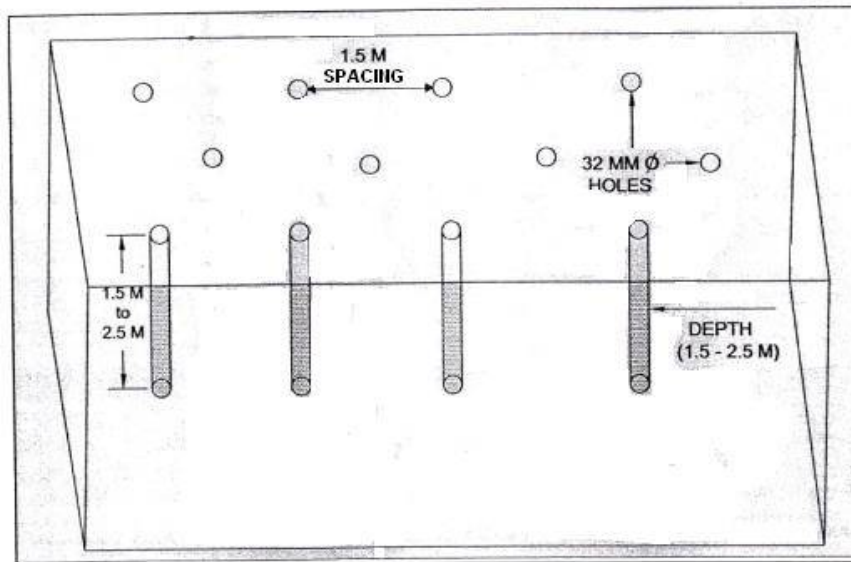
**Photographs showing top soil storage area**



## ANNEXURE 4

### 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 project sites to channelize storm water**



## ANNEXURE 6



**Photographs showing storm water channels with de-siltation trap (Check dam like)**



## POLUCHEM LABORATORIES (P) LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY

PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM -683 104

PHONE: 0484 - 3261174, 2544030, E-mail: poluchem@gmail.com

## ANNEXURE 7

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

### TEST REPORT

Page 01 of 02

Ref.No. PL/RT/DW/09/2014

Name & address of customer

Project Site

Date of Issue: 13/08/2014

: M/s Poabs Enterprises Pvt. Ltd, Kottarakkara, Kollam

: M/s. Poabs Enterprises Pvt Ltd, Sy.No.266/15, 266/24, 266/16-1

266/16-2, 271/7-1, 271/7-2, 271/7-3, 272/5, 267/5,

268/2-1, 268/2-2, 268/3-2-1, 268/3-2-2, 268/5-2, 268/6,

268/7, 269/9-2, 268/8-1, 268/8-2, 268/4, 268/4-2,

268/4-3, 271/4, 271/5

Chithara Village & Panchayath, Kottarakkara Taluk,

Kollam Dist, Kerala.

Sample description

Sample Code

Location of sampling

Date of sample collected

Date of analysis started

Date of completion of analysis

: Drinking water

: H/09/2014

: Openwell water

: 05/08/2014

: 06/08/2014

: 12/08/2014

Parameters tested	Test method	Results	Acceptable limit As Per IS 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	BDL	1 NTU
pH	IS 3025 (P) 11 – 1983	6.73	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 15 – 1984	90 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 – 1983	35.64 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 – 1986	22 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	17.99 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991	11.11 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994	1.92 mg/l	30 mg/l
Iron as Fe	IS 3025 (P) 53 – 2003	0.11 mg/l	0.3 mg/l
Sulphate as SO <sub>4</sub>	IS 3025 (P) 31 – 1988	20.05 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 – 2008	BDL	1 mg/l

Note: BDL – Below Detection Level

For Poluchem Laboratories (P) Ltd.

SREEJA  
Quality Manager  
Poluchem 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.**

ANALYTICAL, CHEMICAL &amp; ENVIRONMENTAL LABORATORY

PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM -683 104

PHONE: 0484 - 3261174, 2544030, E-mail: poluchem@gmail.com

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

Page 02 of 02

Continuation of Test Certificate No: 09/2014

Parameters tested	Test method	Results	Acceptable limit As Per IS 10500-2012
Selenium as Se	APHA 3111B	BDL	0.01 mg/l
Arsenic as As	APHA 3111B	BDL	0.01 mg/l
Copper as 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	0.001 mg/l
Cyanide as CN	APHA 4500 E	BDL	0.05 mg/l
Lead as Pb	APHA 3111 B	BDL	0.01 mg/l
Aluminum as Al	APHA 3500 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
Coliform Organisms/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.

SREEJA RAMESH  
Quality Manager  
Poluchem 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

## ANNEXURE 8



### POLUCHEM LABORATORIES (P) LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY

PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM -683 104

NABL ACCREDITED  
Certificate No: T-1658

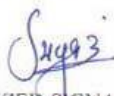
PHONE: 0484 - 3261174, 2544030, E-mail: poluchem@gmail.com

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

### TEST REPORT

Client Name & Address  M/s Poabs Enterprises Pvt. Ltd Kottarakkara, Kollam.	Certificate No:	PL/EW/RT/13/2014
	Date of issue:	13/08/2014
	Date of monitoring	04/08/2014 12.30 Hrs to 05/08/2014 12.30 Hrs
	Date of sample received:	06/08/2014
	Date of analysis	07/08/2014
	Monitoring Location	M/s. Poabs Enterprises Pvt Ltd. Sy.No.266/15,266/24,266/16-1,266/16-2,271/7-1,271/7-2,271/7-3,272/5,267/5,268/2-1,268/2-2,268/3-2-1,268/3-2-2,268/5-2,268/6,268/7,269/9-2,268/8-1,268/8-2,268/4,268/4-2,268/4-3,271/4,271/5 Chithara Village & Panchayath, Kottarakara Taluk, Kollam Dist, Kerala
	Sample description	Ambient air – Near east side boundary
	Sample code given by client	Nil
	Sample identification No:	G/H/13/14

SL NO	PARAMETERS	TEST METHOD	RESULTS	LIMITS
01	Particulate Matter (PM <sub>10</sub> )	I S 5182 Part 4 1999	47.2 µg/M <sup>3</sup>	100 µg/M <sup>3</sup>
02	Particulate Matter (PM <sub>2.5</sub> )	CPCB	23.7 µg/M <sup>3</sup>	60 µg/M <sup>3</sup>
03	Sulphur dioxide	I S 5182 Part 2 2001	2.7 µg/M <sup>3</sup>	80 µg/M <sup>3</sup>
04	Nitrogen dioxide	IS 5182 Part 06 1975	3.2 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
---	---

SRB  
Quality  
Poluchem 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





## POLUCHEM LABORATORIES (P) LTD.

ANALYTICAL, CHEMICAL & ENVIRONMENTAL LABORATORY  
PALLATH BUILDING, N. KALAMASSERY P.O., ERNAKULAM - 683 104  
PHONE: 0484 - 3261174, 2544030, E-mail: poluchem@gmail.com

## ANNEXURE 8A

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

### TEST REPORT

Client Name & Address  M/s Poabs Enterprises Pvt. Ltd Kottarakkara, Kollam.	Certificate No:	PL/SD/RT/3655/2014
	Date of issue:	13/08/2014
	Date of monitoring	04/08/2014 12.30 Hrs to 05/08/2014 12.30 Hrs
	Monitoring Location	M/s. Poabs Enterprises Pvt Ltd. Sy.No.266/15,266/24,266/16-1,266/16-2,271/7-1,271/7-2,271/7-3,272/5,267/5,268/2-1,268/2-2,268/3-2-1,268/3-2-2,268/5-2,268/6,268/7,269/9-2,268/8-1,268/8-2,268/4,268/4-2,268/4-3,271/4,271/5. Chithara Village & Panchayath, Kottarakkara Taluk, KollamDist, Kerala
	Sample Description	Ambient Sound Level (Leq)

Monitoring Location	Time	Results
Near east side boundary	12.30 Hrs	47.2 dB (A)
	13.30 Hrs	46.8 dB (A)
	14.30 Hrs	45.7 dB (A)
	15.30 Hrs	46.1 dB (A)
	16.30 Hrs	44.6 dB (A)
	17.30 Hrs	42.3 dB (A)
	18.30 Hrs	40.9 dB (A)
	19.30 Hrs	40.5 dB (A)
	20.30 Hrs	40.1 dB (A)
	21.30 Hrs	39.6 dB (A)
	22.30 Hrs	39.2 dB (A)
	23.30 Hrs	38.7 dB (A)
	00.30 Hrs	38.1 dB (A)
	01.30 Hrs	37.6 dB (A)
	02.30 Hrs	36.9 dB (A)
	03.30 Hrs	37.2 dB (A)
	04.30 Hrs	39.8 dB (A)
	05.30 Hrs	40.9 dB (A)
	06.30 Hrs	41.6 dB (A)
	07.30 Hrs	44.3 dB (A)
	08.30 Hrs	48.7 dB (A)
	09.30 Hrs	50.2 dB (A)
	10.30 Hrs	51.3 dB (A)
	11.30 Hrs	51.8 dB (A)
Leq(Day time)		46.4 dB (A)
Leq(Night time)		38.1 dB (A)

For Poluchem Laboratories (P) Ltd.

SREEJA RAJESH  
Quality Manager  
Poluchem 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



## ANNEXURE 9



**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 tree planted around parking areas and road sides**

## ANNEXURE B1



Photograph showing the Solar Energy device within the project area



# ANNEXURE C1

Page 1 of 1

## LICENCE FORM LE-3

(See article 3(a) to (d) of Part I 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/22/1537(E64133)  
Annual Fee Rs 2500/-

अनुज्ञप्ति प्रमाणित  
LICENCE ENDORSED

उ.मु.वि.मि. एरनाकुलम  
D. C. C. E., Ernakulam



1. Licence is hereby granted to **Shri. JOSEPH JACOB, Managing Director, (Occupier : Joseph Jacob, Managing Director, Poabs Enterprises Pvt Ltd)**  
**M/s. POABS ENTERPRISES PVT LTD., Kuttoor Post, Tiruvalla,, Town/Village - Tiruvalla**  
**District-PATHANAMTHITTA, State-Kerala, Pincode - 689106**

2. Status of licensee : **Company**  
3. Licence is valid only for the following purpose : possess for use of **Nitrate Mixture, Safety Fuse, Ordinary Detonator, Electric Detonators.**  
4. (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	5000 Mtrs
3.	Ordinary Detonator	6, 3	0	2000 Nos.
4.	Electric Detonators	6, 3	0	10000 Nos.

(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 premises shall conform to the following drawing(s):  
Drawing No : E/SC/KL/22/1537(E64133) dated : 13/02/2013  
6. The licensed premises are situated at following address:  
**Survey No. 268/5/2 of Block No.56 , Town/Village : Chithara(v), Kottarakkara-Taluk**  
**Police Station : Kollam**  
**PinCode : 691541**  
**Phone : 04743294866**  
**District : KOLLAM**  
**E-Mail : mail@poabs.com**  
**State : Kerala**  
**Fax :**
7. The licensed premises consist of following facilities : **Type A, magazine-Lobby, HE and Detonator rooms**
8. 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

9. This licence shall remain valid till **31st day of March 2016**

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: 13/02/2013

Joint Chief Controller of Explosives  
South Circle, Chennai

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.**

2/15/2013

\\000111\Exp\Explosives\licenceLE3.asp



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

No.: E/SC/KL/22/1537(E64133)

Dated:27/06/2013

To,  
Mr. JOSEPH JACOB, Managing Director.,  
M/s. POABS ENTERPRISES PVT LTD., Kuttanur Post, Tiruvalla, Town/Village - Tiruvalla  
District-PATHANAMTHITTA, State-Kerala, Pincode - 689106

Subject: Possession for Use of Explosives from magazine situated at Survey No.:268/5/2 of Block No.56, Chithara  
(v), Kottarakkara-Taluk, Dist. KOLLAM, Kerala -Licence No.: E/SC/KL/22/1537(E64133) granted in Form LE-3 of  
Explosives Rules, 2008 -  
Amendment of Quantity of Explosives/Monthly Purchase Limit .

Sir(s),

Please refer to your letter No. x dated 24/06/2013 on the subject cited above

The Licence No. E/SC/KL/22/1537(E64133) is duly amended in respect of,

**Quantity of Explosives/Monthly Purchase Limit**

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	5000	Mtrs
3	Ordinary Detonator	6	3	0	2000	Nos
4	Electric Detonators	6	3	0	10000	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 2016.**An amount of **Rs. 500/-** balance is in your credit, which may be utilized for future transaction by quoting this reference

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,  
(K. Sundaresan)  
Controller of Explosives  
For Joint Chief Controller of Explosives  
South Circle, Chennai

Copy Forwarded to:

1. The Dy. Chief Controller of Explosives, Kochi.
2. District Magistrate, KOLLAM, Kerala with reference to his No: No.D.Dis/55387/11-M7 Dated: 10/12/2012.
3. Superintendent of Police, KOLLAM, 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>]

## ANNEXURE C2

Phone: 0474-276211  
Fax: 0474-276211  
E-mail: kspcbkollam@yahoo.com  
www.keralapcb.org



### KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

DISTRICT OFFICE

ജില്ലാ ഓഫീസ്

USHUS BUILDING, BIG BAZAR, KOLLAM - 691 001

ഉഷസ് ബിൽഡിംഗ്, ബിഗ് ബാസാർ, കൊല്ലം - 691 001

Registered with A/D

FILE No. - PCB/KO/CTO/G/280/2013

### INTEGRATED CONSENT TO OPERATE

ISSUED UNDER

Air (Prevention & Control of Pollution) Act, 1981  
&  
Environment (Protection) Act, 1986.

TO

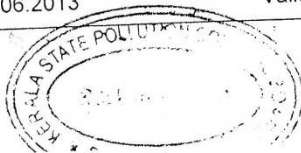
Consent No: PCB/KO/CTO/F/281/2013

✓ Shri. Joseph Jacob,  
Managing Director,  
Poab's Enterprises Pvt Ltd,  
Chakkamala,  
Kolayail P.O.,  
Chithara

(M/s. Poab's Rock Quarry, Survey no. 266/5, 24, 16-  
1, 16-2, 271/7-1, 7-2, 7-3, 272/5, 267/5, 268/2-1, 2-2, 3-  
2-1, 3-2-2, 5-2, 6, 7, 4-2, 4-3, Chithara village)

Date of Issue: 12.06.2013

Validity: 31.12.2015



Environmental Engineer  
Kerala State Pollution Control Board  
Kollam - 691 001

# ANNEXURE C3

	
നമ്പർ <u>A2-10901/12 C1757</u> <u>വിനയ</u> ഗ്രാമ പഞ്ചായത്ത്	
1994 ലെ കേരളാ പഞ്ചായത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ വകുപ്പുകൾ പ്രകാരവും അതേ തുടർത്തുള്ള പട്ടണലും അനുസരിച്ചു കൊടുത്ത	
<b>ലൈസൻസ്</b>	
ലൈസൻസുടമസ്ഥന്റെ പേരും മേൽവിലാസവും	<u>ശ്രീ. ഭജാനന്ദഭട്ടർ</u> <u>മാണിക്യപുരം റോഡ്</u> <u>പോലീസ് സ്റ്റേഷൻ ഓഫീസ് റോഡ് CPX</u> <u>കൂട്ടം തിരുവല്ല പഞ്ചായത്ത്</u>
എന്താവശ്യത്തിന് ലൈസൻസ് അനുവദിച്ചു എന്ന്	<u>മദ്യ സാമ്പ്യം ഉല്പാദന നിർമ്മാണം</u> <u>നിർമ്മാണം</u>
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡ് നമ്പരും	<u>CPX Sy No: 297/2-2-2, 207/23</u> <u>2-4</u>
ലൈസൻസിന്റെ കാലാവധി	<u>31 03 2013</u>
ലൈസൻസ് ഫീസ്	<u>24000/- രൂപ</u> പൈസ
നിമിഷം	<u>30 മിനിറ്റ്</u> നിർമ്മാണ പ്ലാൻ സമർപ്പിക്കുകയും അതിന്റെ അടിസ്ഥാനത്തിൽ പ്ലാൻ സമർപ്പിക്കുകയും ചെയ്തതിന്റെ അടിസ്ഥാനത്തിൽ മദ്യ സാമ്പ്യം ഉല്പാദന നിർമ്മാണം
<u>വിനയ</u> ഗ്രാമ പഞ്ചായത്ത്	
തീയതി <u>15/10/2012.</u>	



# Corp to implement ban sans alterna

# Trouble in a can

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

While hair for little girls, the price of Santa caps and masks keep the range from Rs 20 to 80.

**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), ninth semester LLB (five-year) to be conducted in January and second semester MSc computer science exam to begin from January 4 at the Institute of distance education is available in the website [www.keralalibrary.ac.in](http://www.keralalibrary.ac.in).

**NOTICE**  
This is to inform the General Public that the proposed quarry project at Chithara Village, Panchayath, Thiruvananthapuram District, Kerala, India, is being proposed by M/s. Panchayath, Thiruvananthapuram District, Kerala, India. The project is being proposed by M/s. Panchayath, Thiruvananthapuram District, Kerala, India. The project is being proposed by M/s. Panchayath, Thiruvananthapuram District, Kerala, India.

**NOTICE**  
This is to inform the General Public that the proposed quarry project at Chithara Village, Panchayath, Thiruvananthapuram District, Kerala, India, is being proposed by M/s. Panchayath, Thiruvananthapuram District, Kerala, India. The project is being proposed by M/s. Panchayath, Thiruvananthapuram District, Kerala, India.

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

## APPLICATION PROCEDURE

For application forms & prospectus, send a Demand Draft of Rs 1100/- to IMP-COL, A-16, Street 3, UPSIDC Industrial Area, Viceroy Road, Ghaziabad in favour of IMTCD, payable at Delhi. You can also Apply Online at [www.imtcd.ac.in](http://www.imtcd.ac.in). Forms also available at Information Centres.  
E-mail: [newadmission@imtcd.ac.in](mailto:newadmission@imtcd.ac.in); Tel: 0120-6744744

**1 YEAR PGDIP (EXECUTIVE)**  
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In collaboration with National Law University (NLU), for graduates in any discipline with 50% marks. To enroll visit our website.

**INFORMATION CENTRES:** GHAZIABAD (Head Office): 0120-6744744; 22811332, 9830328593; Mumbai (Navi): 022-22277316; Nappur: 32272228, 9923594888, H Almedabad: 9377575768; Bangalore: 32512000; Bhubaneswar: 2436656, 9861061012; Indore: 20565653, 9826222362

**A MEDICAL SERVICES CORPORATION LTD**  
TMENT OF HEALTH & FAMILY WELFARE, GOVT. OF KERALA)  
Head Office : Thiruvananthapuram-14,  
phone No. 0471-2337353, 3045600 FAX No. 0471-3045647,  
[theadrugs@kmscl.kerala.gov.in](mailto:theadrugs@kmscl.kerala.gov.in), website : [www.kmscl.kerala.gov.in](http://www.kmscl.kerala.gov.in)

**TENDER NOTICE**  
31/2012  
Date: 22.12.2012

**Controversial win for Juve**  
Milan: Defending champions Juventus scored two stoppage-time goals to snatch a controversial 3-1 win over 10-man Cagliari in Serie A on Friday.  
Mirko Vucinic sealed the result following two goals from former Cagliari striker Alessandro Matri — the decisive second after an apparent handball by Cagliari's defender, Mirko Vucinic.

**Kashyap, Sindhu in maiden GP final**  
Astheem Mukerji / INM  
Lucknow: P Kashyap and PV Sindhu carried Indian hopes into the finals of the Syed Modi India Grand Prix Gold tournament on Saturday. Kashyap will be a big day for both as they play their maiden Grand Prix final at the BBD Academy here on Sunday.

uses of intense battle Sugarto netted the shot trying to dribble, the Indian heaved a sigh of relief. Kashyap now plays Tanong Seensomboonsuk of Thailand who overruled another Indonesian Yunus Alamsyah, the 11 seed, 21-14, 21-17.  
Young Sindhu, on the other hand, took confidence as she set up a final clash against domestic Lbadawet Panviri. Niamtaling form and tempo she displayed in the early rounds. Sindhu continued her march into final in style. The tall 19-year-old girl defeated her first opponent 21-14, 21-17.

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

was denied by Arsenal's Polish keeper Wojciech Szczesny and Dave Jones thumped a shot narrow-

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

Kaif 68, Praveen Gupta 46 no	Nachim 2-63, S Mohammed
All Murtaza 49 no, R Mahajan	2-26) vs Assam
3-83) vs TN	At Aggr 1-88 Goa vs Tripu
At Hudd 1-88 Goa vs Tripu	No play, bad light.





**ANNEXURE E**

**Chithara Grama Panchayat**

Kizhakkumbhagam, Chithara PO, Pin: 691559

Date: 01/02/2014

No. A2-8596/13

From

Secretary

To

The Manager

Poabs Enterprises Pvt Ltd

Madathara


Sir,

Sub: Environmental Clearance Certificate - regarding

Ref: Your letter dated 31/01/2013.

This is to Inform you that an Environmental Clearance Certificate with no: 35/SEIAA/ KL/6090/2012 dated 14/11/2012 was received at this office on 27/05/2013 as part of an application for D & O License.



  
SECRETARY  
CHITHARA GRAMAPANCHAYATH  
KOLLAM DIST. KERALA, INDIA  
Mob: 9048456540

## ANNEXURE F



കേരളം കേരल KERALA

P 788360

### AFFIDAVIT

I, Thomas Jacob, Director & authorized signatory of M/s Poabs Enterprises Pvt. Ltd. having its correspondence office at Kollai P.O., Chithara Village, Kollam, Kerala-691541 do hereby affirm and confirm as follows:-

1. That, M/s. Poabs Enterprises Pvt. Ltd. proposes to develop a Quarry Project at Chithara Village & Panchayat, Kottarakkara Taluk, Kollam 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 : Kollam

Date : 23.12.2012

No - 42613 PSC00L

19.12.12

Mr. Thomas Jacob  
Director, Poabs Enterprises Pvt. Ltd.  
Kollai P.O., Chithara

