## APPLICATION FOR ENROLMENT TO THE FaL-G:CDM BUNDLE

## PROMOTED BY M/S ECO CARBON PVT. LTD., VISAKHAPATNAM

#### FOR EARNING CERTIFIED EMISSION REDUCTIONS (CERs) BASED ON FaL-G BRICK-BLOCK PRODUCTION AND SALES

**Details of Plant and Sub-Project Entity (SPE):** Name of the Plant Year of Establishment Detailed Postal Address of the Plant **Contact Phone Numbers** Survey Number of the Land where Survey No. Plant located Own Land Leased land: Un-Registered for years. Topo Plan attested by Licensed Surveyor: Enclosed. Detailed Postal Address of the Registered office Contact Phone Numbers: Name of Proprietor/ Mr. Ms. Age: Partners/concerned person of Son/Spouse of: Production. Contact Phone Numbers: Name of the Authorized Signatory. Mr. Ms. Age: Son/Spouse of: Contact Phone Numbers: Res: Mobile: Documentary Support for 1) Partnership Deed/Articles 2) Letter of authority/Resolution Authorised Signatory Banker's Details: Account No: Bank Name: Branch Code No.

Photograph of Proprietor/Mg. Partner and Authorised Signatory, if any.

Statutory Registrations:					
SSI Registration	No.		Date:		
Pollution Board Clearance	No.		Date:		
Sales Tax Registration	No.		Date:		
Any other Registration (s)	No. Date:		Date:		
Production Details:					
Nature of the Machinery:	Μ	lake	Year		
Roller Mixer					
Casting Machine					
FaL-G Technological Practice	Lime	Route	OPC Route		
Source of Fly ash					
Source of Lime/OPC					
Source of Gypsum					
<u>Production capacity:</u> Solid and/or Hollow Per day Per year Operating days/year	Size		Cu.m		
Power per day: For Electricity Users:	Units: Service Connection	on No:			
Generator/Diesel Engines:	Generator capacity: Engine capacity if directly coupled to Machinery: Consumption of Diesel/shift:				
FaL-G Mix being practiced: (Inputs in Kg per batch)	Fly ash lime	OPC gyps	sum Filler		
Mix 1					
Mix 2					
Mix 3					
Community Benefit Program:					
As prescribed in Emission Reduction Transfer Agreement (ERTA) to be signed with ECPL.					

Compliance to Agreement:				
Commitment to Verification methodology	Received the details vide Annexure I to III and understood the details. I accept to adhere to them.			
	Signature:			
Commitment to Quality	I have taken note of minimum standards laid down for raw material procurement and finished product vide Annexure III, and commit to adhere to the same.			
	Signature:			
Payment of Technical Fee:	Technical Services fee vide Cheque/DD No in favour of INSWAREB for Rs. 39,708/- (Rs. 36,000 + 3,708 as service tax) is attached.			
	Signature:			
I, Signatory of M/s	as Proprietor/Mg. Partner/Authorized			
submit this application form and hereby testify that the particulars provided therein are true.				
I have thoroughly understood the obligations and responsibilities to be complied by us yide				

I have thoroughly understood the obligations and responsibilities to be complied by us vide Annexure I, II and III of this application form. I agree to be dropped from the bundle without seeking any claims and compensations in case of non-compliance or not adhering to the stipulations vide Annexure I, II and III.

I agree to sign and submit the Emission Reduction Transfer Agreement (ERTA) as a mark of my consent to participate as SPE in the bundle of the FaL-G brick-blocks promoted as CDM Project by Eco Carbon Pvt. Ltd., Visakhapatnam.

Place:

Signature\_\_\_\_\_

Date:

Seal of SPE

#### Annexure I:

#### Periodic verification of SPE-Records by Carbon Inspectors

The SPEs should provide monthly reports as per templates provided by ECPL. In order to ensure prevalence of due diligence, the sponsors conduct periodical inspection of units at any given time in a year. For this purpose ECPL deploy Carbon Inspectors who visit the SPEs and study their records in order to get satisfied with the upkeep. The Carbon Inspectors would duly attest the records as a mark of satisfactory inspection. In case of minor lapses, due education would be imparted to the SPEs about accountabilities. Senior Executives of ECPL and DOE would also check the records in order to ensure due compliance, and as part of Verification as per UNFCCC norms.

The records to be inspected and subjected for Verification include:

#### **Statutory Clearances such as:**

- SSI Registration.
- Pollution Board Clearance/Consent.
- Sales tax Registration.
- Local body clearances.

#### Raw materials & Utilities:

- Inward stock registers for raw materials.
- Delivery Challans of thermal plants/boilers/Transporters for fly ash,
- Invoices or bills for lime, OPC and gypsum.
- Purchase bills for Diesel (if used)
- Bi/Monthly Electricity bills as provided by the Service Provider.

#### **Production and sales records:**

- Stock register showing daily production and sales of bricks and blocks
- Sales invoices or bills.
- Salestax payment challans.
- Stock register for Diesel (if used)

#### **Diesel and/or Power Consumption data**

The consumption of diesel has to be recorded on daily basis in the stock register. In the case of diesel, the purchase bills would be verified. In the case of power, the meter reading as per demand note would be taken on record. At the same time, the SPE has to record the readings on the last day of every month and provide in monthly report.

The SPEs, who disregard the Inspectors' advice and prove continuously complacent in maintaining the stipulated records, would be dropped from the bundle.

## Annexure II. Responsibilities of SPEs for Environment

All the SPEs should have concern for the welfare of environment, workers and community while carrying on their production. For this purpose certain measures are notified.

- Keep the fly ash in silos; otherwise ensure to wet the fly ash and cover it with HDPE tarpaulins.
- Ensure to put lime in pits to avoid spillage and accidents.
- Any other guideline provided by ECPL to ensure clean operation of the plant.

SPE should meet the expenditure for the above measures at their cost but compliance is strictly unavoidable.

## Annexure III. Product Quality

## Raw Materials:

Fly ash should be availed from any boilers operated with CFB (Circulated Fluid Bed) technology or PCB (Pulverised Coal Bed) technology. The unburnt carbon should not cross 5% and loss on ignition should be below 8%.

Cement should comply IS: 8112-1989 (Specification for 43 Gr. Ordinary Portland Cement) or IS: 12269-1987 (Specification for 53 Gr. Ordinary Portland Cement).

OPC can be substituted with Ground Granulated Blast furnace Slag complying IS: 12089-1987 (Specifications for Granulated Slag for the manufacture of Portland Slag Cement) not exceeding 50%, as long as the physical norms of the finished product are feasible.

While it is desirable to use hydrated/slaked lime with not less than 70% purity, no lime should be used with Ca(OH)<sub>2</sub> purity below 50%.

It is desirable to use anhydrite gypsum available from the industry of hydrofluoric acid at a purity of not less than 95% in terms of CaSO<sub>4</sub>. However other forms of gypsum could be used, if the technicalities and use of such product is approved by INSWAREB, subject to compliance of physical norms given below:

- The dry strength of the solid brick/block should not be less than 6 MPa and 2.5 MPa in case of hollow blocks.
- After drying to constant weight, when the product is soaked in water for 24 hours or constant weight, the water absorption should not cross 15%.
- The coefficient of softening (wet strength/dry strength) should not go below 0.85 in case of solid bricks/blocks.

## Finished Product:

The finished product should be tested once in six months in the months of September and March by accredited laboratories such as engineering colleges, polytechnics and HUDCO-sponsored Building Centres, and the Test Certificate should be provided as per the template attached.

#### TEMPLATE FOR TEST CERTIFICATE (ON THE LETTER HEAD OF THE TESTING LABORATORY) \*\*\*\*\*

Name of the production unit:

Address:

Date of Testing:

# Type of product tested: FaL-G bricks\*/ blocks\* - Solid\*/ Hollow\*

Number and Name of Testing Standards referred:

IS 12894-2002 : Pulverised fuel ash – Lime Bricks specification (Table 1 for identifying Strength Class)

IS 516 - 1959: Methods of Test for Strength of Concrete (for testing the bricks\*/blocks\*)

S. No	Size in cm	Load in kN	28-day wet compressive strength, MPa or kg/cm <sup>2</sup>
1			
2			
3			

\* To retain whichever is applicable.

Signature of the authorized person together with seal of the testing lab