

# Society for Technology & Action for Rural Advancement (TARA)

#### Eco Kiln Technology helps in improving energy efficiency EcoKiln (VSBK) and reducing environmental emissions in the small-scale brick sector. It is based on vertical shaft brick kiln principles and is one of the most energy-efficient technology available in the world for fired clay brick production. It essentially consists of one or more rectangular, vertical shafts within the kiln structure. This technology relies on the principle of counter-correct heat exchange in order to achieve high thermal efficiency. The EcoKiln technology considerably economizes on fuel cost, with savings of between 30 to 50% when compared. This technology has significant advantages over the traditional predominantly used- clamp technology in many developing countries. High compaction technology or binder less technology **Briquetting Machine** consists of the piston press. Most of the units currently used where the biomass is pressed in a die by a reciprocating ram at a very high pressure. Biomass briquetting press machines able to grind any type of agriculture and forestry waste and convert them into useful biomass briquettes. If raw materials contain moisture so it is necessary to dry it. The most amazing and unique features is that it does not require any binder in the whole biomass briquetting process. So, it is completely eco technology. TARA Greencast Floors technology provides a cutting-edge **TARA Greencast Floors** solution for manufacture of high quality and affordable Concrete Pavers. The GreenCast Floors technology package consists of a vibrating table with a choice of PVC moulds for manufacture of concrete decorative pavers of diverse shapes & thickness. TARA GreenCast Floors Technology is highly profitable for micro and small-scale building material producers. The concrete pavers find application in driveways, parking areas, fuel stations and rural roads. The equipment is also capable of production of GreenCast Frames.

### **BUILDING MATERIALS TECHNOLOGIES**

## WATER TECHNOLOGIES



# Jal TARA Standard Water Testing Kit



The Jal TARA water testing kit is a portable kit, designed in order to perform the basic tests for ensuring the potability of water and it can be used to assess total 14 parameters which can be divided into 3 broad categories:

### Features & Parameters:

- **Physical:** pH, Temperature, Turbidity, Hardness pH gives the idea of acidity or basicity of water sample, pH below 4 gives a sour taste and above 10 gives an alkaline taste; Turbidity is a result of fine solids in water, any substance having a particle size more than  $10^{-9}$  will cause turbidity which makes the water unfit for domestic and industrial purposes; Hardness prevents the formation of lather when using soap and increases the boiling point of water, some evidences also indicate its role in heart disease
- Chemical: Chloride, Fluoride, Iron, Nitrate, Residual • Chlorine, Dissolved Oxygen, Phosphorous, Ammonia High chloride has deleterious effect on metallic pipes, structures and agricultural crops; high fluoride causes dental and skeletal fluorosis; iron, in excessive quantities it may cause staining of clothes and utensils and its higher concentrations are unsuitable for food and beverage processing; Nitrate at level above 40 mg/L causes methemoglobinemia which may even cause death; excess chlorine is harmful to aquatic life and it may also intensify the color and odor due to other compounds; Dissolved oxygen is of major interest in water quality testing and is significant for maintaining aquatic life, addition of domestic sewage lowers down the dissolved oxygen; high phosphorous stimulates the nuisance algae and plant growth which imparts undesirable taste and odor to water; ammonia at higher concentration is harmful for fishes, other biota and even human beings
- **Biological:** Coliform Bacteria, Benthic Diversity Presence of coliforms in water is associated with the presence of pathogens in water which may cause diseases like typhoid, cholera and dysentery No. of Tests per Kit : 100 samples per parameter except

Coliform (10)

Size of the Kit : 16" x 12" x 9"

Weight of the Kit : 8 Kg

This kit is easy to use and can be used by anyone, including students and public authorities for monitoring the water quality and hence protecting the fresh water sources from being polluted further.



TARA Aqua check Vials   Image: State of the st	We are offering TARA Aquacheck Vials to our clients. TARA Laboratories have launched a revolutionary product - TARA Aquacheck - that can test the presence of pathogenic bacteria in water which cause common water borne diseases like diarrhea, dysentery, gastroenteritis. TARA Aquacheck is highly reliable and very easy to use, even by students, (www.cleanindia.org) to test quality of water. No. of Vials/Tests: 10 (Each bottle is for single test only) TARA Aquacheck has been prepared as per the quality control guidelines of UNICEF, New Delhi. <b>Details</b> Port of Dispatch: Delhi Production Capacity: 90000 pieces per month. Delivery Time: Within 3-15 days Packaging Details: Good Export quality carton box packaging as per customer's demand.
TARA Soil Testing Kits   Image: Constraint of the second s	Broad testing range Good reproducibility even at lower concentration 50 sample can be tested with one set of reagents Light weight, weighing around 2.5 kgs Tests are semi quantitative 16"x12"x9" Parameters which can be analyzed: N, P, K, pH, organic carbon and electrical conductivity