

# FUELS BLENDING AND ENERGY RECOVERY

For more than 20 years, TRADEBE Treatment and Recycling, LLC has processed hazardous waste into fuel for cement kilns. By using an onsite shredder and chemical expertise, we consistently produce a uniform fuel from a wide variety of viable hazardous waste. By using hazardous waste as fuel, cement kiln recycling reduces the consumption of fossil fuels by the equivalent of 1 million tons of coal annually.

## RCRA/BIF Cement Kiln Waste-To-Energy Use

TRADEBE adheres to the Responsible Recycling Hierarchy. We send our processed waste products to permitted RCRA/BIF cement kilns located across the country, or to Norlite Corporation, our subsidiary located in Cohoes, NY. All cement kilns serviced by TRADEBE meet the Maximum Achievable Control Technology (MACT) combustion standards. The combustion of organic hazardous wastes at high temperatures in cement kilns is the Best Demonstrated Available Technology (BDAT) for treating high BTU hazardous wastes.

Waste-to-energy
recycling conserves
fossil fuels and keeps
waste out of the
environment



## **Norlite Corporation**

Tradebe's subsidiary, Norlite Corporation, operates two high-temperature rotary kilns that use recycled fuel and other recoverable products to produce a lightweight aggregate that is used in bridges, buildings, specialized fill, and growing media for green roofs. Norlite achieves 99.9995% destruction removal efficiency on the most difficult to incinerate organic materials. Processes are in place at Norlite to ensure the integrity of the waste storage tanks and kiln system. Operating conditions are constantly monitored to ensure that fuel is consumed completely. In addition, emissions are carefully monitored, controlled and treated to prevent air pollution. Norlite sets the standard found in the new hazardous waste combustor MACT regulations for lightweight aggregate kilns. Visit the Norlite website for more information at http://www.norliteagg.com.

#### Triborough Bridge, New York, NY



Superior durability, excellent resistance to freeze-thaw and improved skid resistance are some of the prime reasons for the increased use of lightweight concrete in bridge construction.

# Green Roof at the Culinary Institute of America, Hyde Park, NY



Norlite lightweight aggregate is an established component in growing media on numerous rooftop gardens. The use of this environmentally friendly ceramic material, which weighs significantly less than natural planting media, in green roof design helps address important issues such as managing storm water runoff, improving water quality, reducing urban heat, conserving energy, lowering dead load and increasing green space.

### Structural Concrete: Comcast Center, Philadelphia, PA



The secret to high quality lightweight structural concrete lies in the aggregate used to produce the mix. Norlite is a ceramic material produced by expanding and vitrifying select shales, in a rotary kiln. The process produces a high quality ceramic aggregate that is structurally strong, durable, environmentally inert, light in weight, and highly insulative. It is a natural, non-toxic, absorptive aggregate that is dimensionally stable and will not degrade over time. Norlite used in structural

lightweight concrete can reduce the weight of the concrete by 20% -40%, saving structural steel and foundations on projects. This saves materials and resources and can reduce the embodied energy and carbon footprint of the project.



# Tradebe Treatment & Recycling, LLC

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