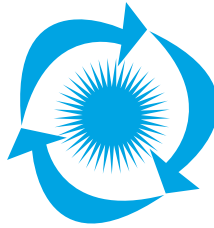




PORTLAND CEMENT ASSOCIATION SUSTAINABLE MANUFACTURING

2008



# PCA ENERGY & ENVIRONMENT AWARDS

*Preserving Our World*

PORTLAND CEMENT ASSOCIATION

2008 SPRING MEETING

CHICAGO MARRIOTT O'HARE

CHICAGO, ILLINOIS

TUESDAY, APRIL 29, 2008





## ENVIRONMENTAL SPIRIT

In 2000, the **Portland Cement Association** launched a program to foster continuous environmental improvement in the U.S. cement industry. One element of the program is to recognize individual facilities that have shown a commitment to continuous environmental and energy efficiency improvement.

PCA and *Cement Americas* magazine presented the first cement industry awards in 2002 to the winners for 2001. The awards program is open to any cement manufacturing plant in Canada, the United States, and Mexico. The awards honor activities conducted during the previous calendar year. The judges represent groups within and outside the industry including the World Resources Institute, World Wildlife Fund, and the U.S. Environmental Protection Agency. Additional judges come from the National Ready Mixed Concrete Association, the Cement Association of Canada, *Cement Americas* magazine, and PCA. Each judge is independent from the cement manufacturers competing for the awards.

## ENVIRONMENTAL PERFORMANCE

*This category honors facilities that go beyond laws, permits, and regulations to minimize their impact on the environment.*

**Runner Up:**

**Lafarge North America Inc.**  
Sugar Creek, Missouri

**Finalist:**  
**CEMEX**

Davenport, California

**Winner:**

**Holcim (US) Inc.**  
**Theodore, Alabama**

The Holcim Theodore facility has developed programs to respond to air, water, and solid waste emissions. The plant meets all air emission limits with particulate matter emissions at 17% of the standard and dioxin and furan emissions at 1% of the limit. All cement kiln dust is reused within the manufacturing process which limits carbon dioxide emissions. The plant received the 2007 Gulf Guardian Award from the U.S. Environmental Protection Agency for its stormwater management program. In 2007, no stormwater was released from the cement manufacturing plant or from the plant's off-site limestone and clay quarries.

## LAND STEWARDSHIP

*This category recognizes efforts to protect and enhance the surrounding land and wild life.*

**Runner Up:**

**St. Marys Cement Inc.**  
**(Canada)**  
Bowmanville, Ontario

**Finalists:**

**Lafarge North America Inc.**  
Brookfield, Nova Scotia

**Titan America LLC / Roanoke  
Cement Company**  
Troutville, Virginia

**Winner:**

**CEMEX**  
**Davenport, California**

The CEMEX Davenport plant has established a diverse land stewardship program. In 2007, the plant partnered with the University of California in Santa Clara to complete an inventory of the wildlife habitats at the facility. UCSC also collected flora and fauna from the site for its arboretum. The CEMEX plant was given the Forest Stewardship Council Smartwood Certification from the Rain Forest Alliance for the management of its 9,000 acre forest. The plant's management program includes the annual planting of 20,000 redwood seedlings and selective timber harvests. In 2007, more than 20 acres of the quarry were reclaimed with the planting of native habitats. Plant employees also participated in a Monterey Bay fish clipping event to track the return of hatchery fish to the region.



## OUTREACH

*This category honors activities that enhance community, employee, and government relations.*

**Runners Up:**

**Holcim (US) Inc.**  
Theodore, Alabama

**Lehigh Inland  
Cement Limited**  
Edmonton, Alberta

**Finalist:**

**Holcim (US) Inc.**  
Holly Hill, South Carolina

**Winner:**

**Lafarge North America Inc.**  
**Sugar Creek, Missouri**

The Lafarge Sugar Creek facility has an inclusive environmental outreach program. In 2007, the plant sponsored an Earth Day event for personnel and family members. Each participant received energy conservation information and a compact fluorescent light bulb for their home. During the year, students and other interested groups toured the plant to learn about its sustainable manufacturing practices.

The facility has a variety of environmental communication programs for employees and a community environmental liaison panel for plant neighbors, government officials, and local business owners. The plant is a member of the Greater Kansas City Climate Protection Partnership, which supports economic competitiveness and the reduction of greenhouse gas emissions.

## INNOVATION

**Winner:**

**Lafarge North America Inc.**  
**Sugar Creek, Missouri**

*This category recognizes the development and application of innovative technologies relevant to environmental protection or energy efficiency.*

**Runner Up:**

**Suwannee American Cement**  
Branford, Florida

**Finalist:**

**GCC of America, Inc.**  
Tijeras, New Mexico

Energy utilization is a concern of all cement plants. The Lafarge Sugar Creek plant has found an innovative means to address their energy needs. In 2007, the plant commissioned an alternative fuels processing facility. This facility will store, shred, and weigh various industrial byproducts which will be pneumatically fed into the kiln preheater tower. The plant expects to replace 40% of the required fossil fuels with industrial byproducts such as rubber, plastics, cellulose, and textiles. The plant has also successfully utilized landfill gas in their facility as well; in 2007, more than 1.2 million standard cubic feet of gas was used from an adjacent municipal landfill. A contract with a second nearby landfill may triple the landfill gas available to this cement plant.

## ENERGY EFFICIENCY

***This category focuses on energy planning, applications of efficient technologies and practices, and climate change mitigation efforts.***

**Runners Up:**

**St. Marys Cement Inc.**  
(Canada)  
Bowmanville, Ontario

**Suwannee American Cement**  
Branford, Florida

**Finalist:**

**CEMEX**  
Davenport, California

**Winner:**

**California Portland Cement Company**  
Colton, California

The California Portland Cement Company (CPCC) Colton plant has an efficiency program that has resulted in major energy reductions, saved thousand of dollars, and prevented the emission of tens of thousands of tons of carbon dioxide. In 2007, CPCC added a corporate director of energy services who, with other senior executives and plant staff members, supervised energy conservation efforts. Also in 2007, the Colton plant scored 100% on the U.S. EPA ENERGY® Star benchmarking program and received the ENERGY STAR Sustained Excellence Award. Energy efficiency projects have included compress air system improvements, air leakage reduction for waste heat boilers, grinding mill optimization, drive belt replacement, high-efficiency motor installation, tighter cement grinding controls, and kiln operation improvements.

## OVERALL ENVIRONMENTAL EXCELLENCE

***This award recognizes a facility that demonstrates excellence in multiple categories.***

**Runner Up:**

**Lafarge North America Inc.**  
Sugar Creek, Missouri

**Finalists:**

**Lafarge North America Inc.**  
Alpena, Michigan

**Titan America LLC / Roanoke Cement Company**  
Troutville, Virginia

**Winner:**

**CEMEX, Davenport, California**

Honored as the winner of the Land Stewardship category and finalist in the Environmental Performance and Energy Efficiency categories, the CEMEX Davenport plant demonstrates excellence in several aspects of environmental responsibility. In 2007, the facility completed improved dust management, site paving, storm water controls, and site aesthetic improvements. The plant beneficially uses all produced kiln dust and reclaims more than 26,000 tons from an existing dust landfill. The facility uses byproducts from other industries and wastewater from the local community to conserve resources. The plant received the 2007 U.S. EPA ENERGY STAR award for energy efficiency. The facility involves the local community in plant activities.

# 2008 ENERGY AND ENVIRONMENT AWARD NOMINEES:

Ash Grove Texas, L.P., Midlothian, Texas  
California Portland Cement Company, Colton, California  
CEMEX, Brooksville, Florida  
CEMEX (South), Brooksville, Florida  
CEMEX, Davenport, California  
CEMEX, Louisville, Kentucky  
CEMEX, Lyons, Colorado  
CEMEX, New Braunfels, Texas  
CEMEX, Victorville, California  
GCC of America, Inc., Tijeras, New Mexico  
Holcim (US) Inc., Holly Hill, South Carolina  
Holcim (US) Inc., Theodore, Alabama   
Giant Cement Holding, Inc. / Keystone Cement Company, Bath, Pennsylvania  
Lafarge North America Inc., Alpena, Michigan  
Lafarge North America Inc., Brookfield, Nova Scotia  
Lafarge North America Inc., Ravena, New York  
Lafarge North America Inc., Sugar Creek, Missouri  
Lafarge North America Inc., Woodstock, Ontario  
Lehigh Cement Company, Union Bridge, Maryland  
Lehigh Inland Cement Limited, Edmonton, Alberta  
Mitsubishi Cement Corporation, Lucerne Valley, California  
St. Marys Cement Inc. (Canada), Bowmanville, Ontario  
St. Marys Cement Inc. (Canada), St. Marys, Ontario  
St. Marys Cement Inc. (U.S.), Charlevoix, Michigan  
Suwannee American Cement, Branford, Florida  
Titan America LLC / Roanoke Cement Company, Troutville, Virginia



**Concrete  
Thinking**  
for a sustainable world



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