Lamb Weston's Delhi, Louisiana, LEED® Platinum certified Processing Facility Facts

SUSTAINABLE SITES – PROTECTING THE ENVIRONMENT

- The landscape is designed to naturally remove pollution from storm water run-off from the building roof and parking lots, using features such as ponds, swales and wetlands.
- Landscaping with native and adopted species, more than 100 acres of the property will be maintained as open space, including protected wetland areas, ponds and restored native vegetation.
- Priority parking is given to low-emission, fuel efficient vehicles.
- Lighter colored roofing and landscaping minimizes the impacts of heat islands, which result in areas of higher local temperature.

WATER EFFICIENCY

- By implementing sustainable building practices, the plant is projecting an annual water savings of 60% compared to the LEED baseline.
- High-efficiency bathroom fixtures such as toilets, low-flow showerheads and faucets save about 60% of the potable water that would be used by equivalent standard fixtures.
- Water is conserved outside the building by landscaping with native plant species that require no irrigation once established.

ENERGY & ATMOSPHERE

- Energy-saving equipment is projected to save 40% of the annual energy consumed at a comparable plant. By identifying and recovering potential wasted energy within the building systems and processes, energy demand is greatly reduced.
- Lighting controls dim or turn off lights when not needed throughout the plant.
- Biogas, produced by treating process waste water, is piped back to the plant boilers to produce steam. This process is expected to offset approximately 20% of the annual energy demand of the plant, and prevents methane, a harmful greenhouse gas, from entering the atmosphere.

MATERIALS & RESOURCES

- Onsite recycling includes sending materials to be reused or reprocessed, rather than to a landfill. Recycled materials include box cardboard, roll cores, totes, polyethylene, metals (cans), light bulbs, batteries, pallets, shredded office paper and cooking oil.
- Office cabinets were made from wood sourced from sustainably managed forests certified by the Forest Stewardship Council.
- More than 70% of the construction waste generated from building the plant was recycled by the contractor. Wood waste from pallets was ground up by the contractor and used to prevent soil erosion on site, preventing over 300 tons of waste entering the landfill.

INDOOR ENVIRONMENTAL QUALITY

- The entire plant is climate controlled to increase worker productivity, safety and comfort. In the office and the production areas occupants have adjustable controls to customize the temperature of their workspace. The controls at the process workstations are custom designed for the Delhi Plant. Studies have shown that by giving occupants adjustable controls over their environment their productivity increases because they may be more satisfied with their workspace and take fewer sick days.
- Indoor air quality is maintained by a high efficiency air filtration system, low solvent paints and glues.

INNOVATION IN DESIGN

- The Delhi processing facility was designed with the environment in mind, with the construction process emphasizing water conservation through the use of high efficiency fixtures and zero irrigation of native landscaping; energy conservation through a commitment to renewable energy systems; minimizing global warming impact through the use of biogas (methane) and refrigerant selection, and construction efficiency through the implementation of recycling and materials selection.
- Education – Achieving a LEED rating was a unifying goal during design and construction. Integrated design where consultants collaborated to optimize sustainability features was essential to accomplishing LEED Platinum. Fisher and Sons also educated more than 45 sub-contractor firms and 30 vendors on job site best practice and documentation requirements; providing a legacy of green building knowledge in the regional economy.
- A comprehensive Green Education Program has been implemented at the plant to educate employees and visitors on what makes the Delhi Plant a green manufacturing space and why it is an important act of environmental stewardship.

Source: http://news.msu.edu/media/documents/2010/08/840514e8-0b32-4aa4-9fc8-276b688dfed4.pdf and http://www.iaqscience.lbl.gov/performance-summary.html