



Oakland University's New Human Health Building Becomes First LEED Platinum University Building in Michigan

"Healthiest" University Building in the State Educates Future Health Professionals

The new \$64 million Oakland University Human Health Building has become the first LEED® Platinum certified building on a university campus in Michigan.

Designed by SmithGroupJJR, Detroit, the 160,260-square-foot, five-story, terra cotta-clad building, built on the former site of a parking lot and an untended natural wetland, today features

some of the industry's most innovative, energy-efficient building systems and advanced sustainable design features.

The project's primary funding of \$40 million came from the State of Michigan legislature's Capital Outlay Program. Then, to achieve the highest LEED rating – Platinum - while staying on budget, Oakland University, assisted by SmithGroupJJR, successfully pursued a \$2.7 million grant from the U.S. Department of Energy, allowing the project to proceed with a full geothermal and renewable energy system.

"The collaboration between Oakland University, SmithGroupJJR and The Christman Company truly benefitted our ability to design and build the most energy-efficient and sustainable building on any college campus in Michigan," said Terry Stollsteimer, associate vice president, facilities management, Oakland University.

The facility's energy systems are designed to save an estimated 35% in energy costs annually compared to the LEED prescribed "baseline" building.

A geothermal field, consisting of 340 wells built 320 feet underneath the university's main parking lot, uses the earth as an energy source for heat pumps that efficiently provide heating and cooling for the building.

A total of 117 vacuum tube solar thermal panels

provide "free" heat for the building in the wintertime, the desiccant dehumidification system in the summertime, and domestic water heating all year round. Four, 25,000-gallon underground tanks store any excess solar generated hot water until it's needed.

A rooftop photovoltaic system, comprised of more than 200 solar panels covering 3,600 square feet, provides 45 kilowatts or 3% of the building's power.

"Environmentally friendly buildings have shown to have positive effects on the quality of their occupants' health, so it was easy for the university to decide that the new Human Health Building should be highly sustainable," said Chris Purdy, AIA, LEED AP, SmithGroupJJR principal-in-charge for the project. SmithGroupJJR provided architectural design and development; mechanical, electrical, plumbing, structural and civil engineering; lab planning; interior design; landscape design and LEED certification and documentation.

The building's environmental friendliness doesn't end with the innovative, energy-efficient building systems. Outside, a grand porch created by the overhang of the upper floors protects faculty offices from the solar heat gain of a southern exposure. Exterior offices are outfitted with vertical sunshades and fritted glass to reduce glare and cut down on outside heat. Rainwater from the roof is collected

SAFETY TOOL KIT



GHS Training Deadline: December 1st - Are You Ready?



BY TRACEY ALFONSI, DIRECTOR OF EDUCATION & SAFETY SERVICES

Established by the United Nations, the *Globally Harmonized System of Classification and Labeling of Chemicals* (GHS) is a system for standardizing and harmonizing the classification and labeling of chemicals to make hazard awareness universal in a way that transcends language barriers. In 2012 the United States adopted the GHS standards, which required significant changes to the language found in OSHA's Hazard Communication Standard 29 CFR 1910.1200. The new standard became effective in May 2012 but employers, suppliers and manufacturers were given a grace period to implement the required changes.

The first of many deadlines is December 1, 2013, and it requires employers to train employees on the updated standard. Training must instruct employees how to recognize and interpret label and/or Safety Data Sheet (SDS) information, and what kind of action to take in response to chemical hazards. Other training topics to include:

- Potential chemical hazards in the workplace
- Appropriate Personal Protective Equipment (PPE) selection and use

- How to safely handle materials, including disposal requirements
- What to do in an emergency
- Recognition of the new pictograms
- Container label requirements
- New Safety Data Sheet (SDS) format (formerly Material Safety Data Sheet)

The next deadline impacting construction employers is June 1, 2016. By this date, your Accident Prevention Plan must be updated to reflect the changes and all Material Safety Data Sheets (MSDS) shall be replaced with the new 16-section Safety Data Sheet format.

MIOSHA instructors have been traveling all over the state offering free workshops to inform employers about the changes and how to be in compliance. In addition, CAMSAFETY can provide training on the new requirements. For more information, contact Tracey Alfonsi at alfonsi@cam-online.com. Information can also be found at www.osha.gov and www.michigan.gov/miosha.