First University In Nation To Use Landfill Gas As Primary Energy Source

University Of New Hampshire Will Power Its Campus With Renewable Landfill Gas From The Turnkey Recycling And Environmental Enterprise Facility Owned By Waste Management

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DURHAM, N.H. – The University of New Hampshire, in cooperation with Waste Management of New Hampshire, Inc., has launched EcoLine, a landfill gas project that will pipe enriched and purified gas from Waste Management's landfill in Rochester to the Durham campus, UNH President Mark Huddleston announced today. UNH is the first university in the nation to undertake a project of this magnitude.

The renewable, carbon-neutral landfill gas, from Waste Management's Turnkey Recycling and Environmental Enterprise (TREE) facility in Rochester, N.H., will replace commercial natural gas as the primary fuel in UNH's cogeneration plant, enabling UNH to receive 80-85 percent of its energy from a renewable source.

"By reducing the university's dependence on fossil fuels and reducing our greenhouse gas emissions, EcoLine is an environmentally and fiscally responsible initiative," said Huddleston. "UNH is proud to lead the nation and our peer institutions in this landmark step toward sustainability."

Construction is set to begin immediately on a landfill gas processing plant in Rochester which will purify the gas, and the 12.7 mile underground pipeline which will transport the gas from the plant to the university's Durham campus. UNH is expected to fuel its cogeneration plant with landfill gas by the fall of 2008. Estimated cost of the project, including the construction of a second generator at UNH, is $45 million.

"Waste Management is very pleased to work with UNH on this significant and innovative landfill gas-to-energy initiative," said Alan L. Davis, district manager of TREE for Waste Management. "This project will add to the growing roster of landfill gas-to-energy projects operated by Waste Management across the country, and it will help us responsibly allocate the company's resources while providing renewable power to the communities we serve."

As the nation's largest owner and operator of landfills, Waste Management recently announced a major landfill gas-to-energy initiative that will result in the creation of an additional 60 renewable energy facilities. In total, Waste Management will generate more than 700 megawatts of clean renewable energy – enough to power 700,000 homes or replace over eight million barrels of oil. A pioneer in landfill gas-to-energy projects, Waste Management designed and operated its first such facility in the U.S. over 20 years ago. With 281 landfills in North America and more than 100 already having landfill gas-to-energy projects underway,

Waste Management is in a unique position to expand waste-based renewable power generation across the country. Waste Management currently has two landfill gas-to-electric plants at TREE producing green power for over 9,000 homes which will continue to operate, while excess gas will be sent to UNH's new and innovative renewable energy project.

Once construction on EcoLine is completed, the pipeline will not be visible, running four feet underground along Rochester roads, the Spaulding Turnpike, and the Pan Am Railway's right-of-way onto UNH property. At UNH, landfill gas will replace commercial natural gas in UNH's cogeneration (co-gen) plant, the primary source of heat and electricity for the five million square-foot Durham campus. The co-gen plant, which began operations in 2006, captures waste heat normally lost during the production of electricity and uses this energy to heat campus buildings, making more efficient use of energy resources.

More importantly, the landfill gas will stabilize the university's fluctuating energy costs, which have doubled in the last five years and grown at an annual rate of 18.9 percent.

EcoLine will also have a major impact on UNH's carbon dioxide emissions. It will reduce the university's greenhouse gas emissions an estimated 67 percent below 2005 levels and 57 percent below 1990 levels.

Landfill gas is a naturally occurring by-product of landfill decomposition. Waste Management has a state-of-the-art gas collection system at TREE consisting of over 300 extraction wells, miles of collection pipes, and compressors to capture the landfill gas.

Ranked by the U.S. Department of Energy as in the top five percent for energy efficiency among similar colleges and universities, UNH is one of the nation's leading sustainable universities. UNH was the first university in the nation to earn the Environmental Protection Agency's Energy Star rating for seven residence halls and one administrative building, and its Wildcat Transit is the state's largest public transit system and is fueled almost exclusively by alternative fuels like B20 biodiesel or compressed natural gas.

Education and purchasing campaigns have advanced energy efficiency among students, faculty and staff, reducing the equivalent of more than 200 tons of carbon dioxide emissions in the 2006 – 2007 school year. Guided by the University Office of Sustainability, UNH integrates sustainability across the university's curriculum, operations, research and engagement, focusing its efforts on biodiversity education, climate education, culture and sustainability, and food and society.