



Memorandum of Understanding
Between
The United States Environmental Protection Agency (EPA)
And
Rutgers University

PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to document Rutgers University's commitment to partner with the EPA as environmental stewards for reducing our need for fossil fuels, and consequently our carbon foot print, along with making the university a leader in sustainability. The MOU will be a living document updated as the university achieves more and more of its sustainable goals. To enhance our environmental stewardship, Rutgers University will launch new initiatives derived from EPA partnership programs. Rutgers will strive to become a recognized leader in sustainable practices and energy conservation.

BACKGROUND

The Environmental Protection Agency is charged with protecting the environment and human health. The agency works through its headquarters and regional offices reaching out to industry, businesses, state and local governments and non-profits, with pollution prevention and energy conservation efforts.

In the 1987 report of the UN Commission on Environment and Development, *Our Common Future*, "sustainable development" (sustainability) is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Colleges and universities are in a unique position to fashion the behavior of future generations through the policies and practices they enact. To do so, they must not only ask that the student population adopt a sustainable philosophy, but emulate these behaviors through the ways in which they run their facilities.

MEMORANDUM OF UNDERSTANDING COMMITMENTS

This document represents the continuing collaboration between Rutgers University and the EPA. This effort will continue to address the needs of society through design, maintenance and management of this and other higher educational institutions.

FACILITIES & CAPITAL PLANNING SUSTAINABLE PRACTICES

National Clean Diesel Campaign & Clean Construction USA

Under this MOU, Rutgers University will refer to EPA's Clean Construction USA Program to cooperatively promote and implement measures to effectively reduce emissions from vehicles and other internal combustion engines used in construction and operation of its facilities, with a focus on diesel engine emission reductions. Rutgers University will consider converting kitchen waste to bio-diesel fuel for use on campus.

Clean Construction Equipment and Clean Fuel Use

Clean construction equipment reduces pollution from conventional diesel fuel-powered construction vehicles and equipment by requiring the use of Ultra-Low Sulfur Diesel (ULSD) fuel and best available pollution control retrofit technologies. Rutgers University will strive to include the use of clean construction equipment and clean fuel use in its specifications for contractors working on future facility construction projects. Clean construction equipment includes retrofit technologies for construction vehicles such as Diesel Particulate Filters (DPFs). In combination with the use of cleaner ULSD fuel, this practice will greatly reduce construction vehicle emissions during construction.

Enhanced Idling Reduction

Enhanced idling reduction measures reduce fuel consumption and pollution by setting a reasonable time limit for idling and actively encouraging that this limit be followed. Rutgers University will implement idling reduction measures in its own fleet, and encourage its service vendors, contractors, students, faculty and staff to do the same.

Transportation and Commuter Programs

Rutgers University will create a transportation plan that promotes clean transportation alternatives through the use of fuel-saving strategies, commuter benefit programs, and other innovative measures. Programs may include, but not be limited to the following:

Clean Vehicle Fleets

Clean vehicle programs reduce fuel consumption and improve air quality by taking advantage of the latest technologies available to improve fuel economy and reduce emissions from on-road vehicles. Clean vehicle fleet measures include purchase of cleaner (hybrid or alternatively fueled) light-duty vehicles, and use of ultra-low sulfur diesel fuel and best available retrofit technologies on diesel fuel-powered on-road vehicles. Rutgers University will work towards using clean vehicles in its own fleets, and promote the use of clean vehicle fleets by its contractors, faculty, staff and students.

Benefits for “Clean” Commuters

Rutgers University will look into giving its faculty, staff and students discounted parking passes and preferred parking for those with hybrid or alternatively fueled vehicles.

Rutgers University will also promote emission reductions efforts such as car pooling and public transportation.

Recycling Achievements and The EPA Waste Wise Program

This year the university recycled 62% of its solid waste, with the Piscataway/New Brunswick campus recycling 63%. Contractors are required to meet university standards for construction waste. These recycled construction materials include concrete and asphalt, fluorescent lighting, scrap metal, carpeting, furniture, and ceiling tiles. Rutgers has won many awards and is frequently asked to speak about its winning program to other institutions. Rutgers University awards include: the U.S. EPA’s Partner of the Year Award as well as the Governor’s Award for Recycling in 2006. In 2007, the U.S. EPA’s Gold Achievement award; and in 2006 and 2007 the Gorilla Prize (total overall tons) and Food Organics in the annual nationwide Recyclemania competition. In addition, the university is also a partner in the Waste Wise Program.

LEED Silver

Rutgers University’s new construction and major renovations are to be designed to LEED Silver specifications, although certification is not required. The University uses the rating as a benchmark to insure that projects are built to incorporate and promote sustainable practices.

Cleaning Products

All cleaning and floor care products are bio-based and environmentally friendly, where available. In 2005, Rutgers University Environmental Services completed an in-depth study of cleaning and floor care manufacturers. This allowed the university to change from petroleum based products to renewable, sustainable bio-based products. In addition, consistent measurement was obtained by installing new, metered, simple to use dispensing systems which conserve both water and product.

Commissioning and Reuse of Industrial Material

The University is following American Society of Heating, Refrigerating, Air Conditioning Engineers standards for building commissioning. Areas in four new buildings, as well as two renovated areas, have been commissioned. Also, five buildings had areas where the HVAC and/or control equipment was repaired or replaced during this process. Additionally, a major HVAC system retro-commissioning has been performed at the Nelson Biology building.

For any future construction projects, Rutgers will look to incorporate the use of coal combustion products (CCP) in place of portland cement for concrete, where feasible. The amount of CCP will be reported under this MOU.

Energy Efficient Equipment and the ENERGY STAR® Program

Per the design standards, all new buildings will have high efficiency transformers and premium efficiency motors. All HVAC systems will be specified with high efficiency as criteria. All equipment must meet Energy Star or equivalent levels and qualify for New Jersey Smart Start rebates.

Rutgers University became an ENERGY STAR® Program Partner in 2008. ENERGY STAR® programs assist the University with the protection of the environment by providing cost effective efficiency solutions. The program has offered proven energy management strategies that help in measuring current energy performance, setting goals and tracking savings.

Alternative Energy

Rutgers currently has a Cogeneration plant that produces 13 Mega Watts of electricity and high temperature hot water for central heating of the Busch and Livingston Campuses. Rutgers has just completed a 1.4 MW ground mounted solar farm which supplies electric power to 10% of the Livingston campus. Under this MOU, Rutgers has joined the EPA Combined Heat and Power (CHP) Partnership program. The CHP Partnership is a voluntary program seeking to reduce the environmental impact of power generation by promoting the use of CHP. The Partnership works closely with energy users, the CHP industry, state and local governments, and other clean energy stakeholders to facilitate the development of new projects and to promote their environmental and economic benefits.

Storm Water and Turf Management Practices

Regulations have been enacted to manage storm water and improve downstream conditions. Therefore, all projects that disturb 5,000 sf or more of earth, create more than one-quarter acre of impervious surface or are greater than one acre in size are required to adhere to the soil erosion and sediment control or storm water requirements.

Currently, Rutgers has established ten acres of low/no mow areas, and has incorporated wild flowers at various campus locations as a means of reducing carbon emissions and labor in an effort to increase storm water compliance on campus. The use of weed control chemicals is now limited to flower beds, and very high profile buildings such as student and recreation centers. Fertilizer applications have been reduced to once a year, or as needed, based on soil sample results.

Integrated Pest Management

The university uses integrated pest management practices.

STATUS REPORTING

Rutgers University will submit a Status Report to EPA two times a year starting six months after the official signing of this MOU. The report will include an update on the various activities identified in the agreement. EPA will use this data to determine the environmental benefits associated with Rutgers University's "green" activities.

TERMS AND CONDITIONS

This MOU is not a contractual or a financial obligation instrument. Nothing in this MOU shall obligate EPA or Rutgers University to expend appropriations or to enter into any contract or other obligation or be cited as the basis for the promise or transfer of funds. Collaboration under this MOU shall be in accordance with applicable statutes and regulations.

This MOU does not restrict EPA or Rutgers University from participating in similar activities or arrangements with other entities or federal agencies.

Either party may unilaterally withdraw at any time from this MOU by issuing a signed written notice to that effect to the other party. By mutual agreement, which may be either formal or informal, the parties may modify the list of intended activities and/or determine the practical manner by which the goals, purposes and activities of this MOU will be accomplished. Modification to other written parts of this MOU must be made in writing and signed by both parties or their designees.

Nothing in this MOU shall be construed to authorize or permit any violation of any Federal, State or local law, including, but not limited to, any environmental law administered and/or enforced by EPA.

Access to all documents generated pursuant to the activities set forth in this MOU that constitute agency records for purposes of the Freedom of Information Act ("FOIA"), 5 U.C.S. 552, shall be governed by the provisions of the FOIA.

Rutgers University agrees that it does not expect, nor will it ever seek to compel from EPA in any judicial forum, the payment of money, services or other thing of value from EPA based upon the terms of this MOU. The foregoing provision does not in any way affect any legal rights accruing to Rutgers University by virtue of any other law, contract and/or assistance agreement.

Rutgers University understands and acknowledges that EPA's relationship with Rutgers University in no way affects, alters or otherwise constrains EPA's right to provide similar (or identical) services to, or establish similar (or identical) relationships with, any other entity.

Rutgers University understands that EPA's participation in this MOU does not constitute an endorsement, express or implied, of (a) any policy advocated by Rutgers University or (b) any goods or services purchased, offered or sold by Rutgers University.

The parties agree that any copyrightable subject matter, including but not limited to journal articles, training, education or informational material or software, created jointly by the parties from the activities conducted under the MOU may be copyrighted by Rutgers University. Rutgers University hereby grants to the government a royalty-free, nonexclusive, irrevocable right to reproduce, distribute, make derivative works, and publish or perform the work(s) publicly, or to authorize others to do the same on its behalf.

The EPA enters into this MOU under the authority of Section 103 of the Clean Air Act, 42 U.S.C. §7403, Section 104 of the Clean Water Act, 33 U.S.C. §1254, and Section 8001 of the Solid Waste Disposal Act, 42 U.S.C. §6981, Section 6604 of the Pollution Prevention Act, and Section 324A of the Energy Policy and Conservation Act, which provide EPA with authority to undertake cooperative efforts with other organizations to promote the coordination and acceleration of research, studies, training, and other efforts to prevent, reduce and eliminate pollution.

This MOU does not create any right or benefit, substantive or procedural, enforceable by law or equity against Rutgers University or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside of EPA and Rutgers University.

EFFECTIVE DATE AND ADMINISTRATION

This MOU will become effective upon signature by the Regional Administrator of EPA Region 2 and the Senior Vice President for Finance and Administration of Rutgers University, or their designees. It may be modified or amended by written agreement between both parties. This MOU will terminate at the end of five (5) years from the date of signature unless revised or extended at that time by written agreement of the parties. It may be terminated at any time by either party upon the issuance of a written notice to the other party. The parties will review annually the provisions of this MOU and its implementation.

Signed:

George Pavlou
Acting Regional Administrator
U.S. EPA Region 2

Bruce C. Fehn
Senior Vice President for Finance
and Administration,
Rutgers University

Date: _____

Date: _____