



**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA)
AND THE
STATE UNIVERSITY OF NEW YORK AT BUFFALO**

Purpose

The purpose of this Memorandum of Understanding (MOU) is to document the State University of New York at Buffalo's (UB) commitment to partner with EPA to reduce UB's carbon footprint. This MOU is intended to be a living document. UB has signed on as a partner for seven voluntary EPA programs that will broaden the University's sustainability initiatives and further incorporate sustainability practices into the UB culture. For UB, these programs will always be works in progress as the University recognizes that commitment to each program will require continuous planning and action to effect ongoing improvements.

UB's efforts for continuous improvement involve: using EPA's environmental stewardship programs to develop policies, practices, and specifications for environmentally efficient standards; increasing stewardship awareness; staying current with EPA regulations and guidelines; increasing involvement and recognition of UB's stakeholders and partnering with local government. UB recognizes EPA's program requirements of outreach and involvement, data collecting and reporting, and will strive to become a recognized leader and a candidate for EPA environmental stewardship awards.

For all environmental stewardship programs listed herein, the UB Green Office will be the point of contact for program work and the UB Assistant Vice President for University Facilities will provide the overall leadership. Under this MOU UB will participate in the following voluntary EPA environmental stewardship programs:

EnergyStar Building & Plant Partnership
Green Power Partnership
GreenScapes Partnership
Re-Use of Industrial Materials
Labs 21 Partnership
WasteWise Partnership
Combined Heat & Power Partnership
National Clean Diesel Campaign & Clean Construction USA
WaterSense Products

The text that follows briefly describes the voluntary EPA environmental stewardship programs as they apply to UB. The text also highlights some important sustainability initiatives UB has already begun, or is currently planning.

1. EnergyStar Building & Plant Partnership and On-Site Renewable Energy

UB will commit to registering as an EnergyStar Partner. UB will utilize EPA's program offering within EnergyStar Building & Plants entitled "Menu of EnergyStar Offerings for Higher Education" (the Menu) as a structure for continuous improvement and to achieve energy reductions under the EnergyStar Program.

UB has nearly 30 years of experience in energy conservation and efficiency. Through savings accrued over this period, UB saves over \$10 million per year. UB staff closely monitors our mechanical systems and will enact changes or replace equipment as needed in order to increase efficiency. The UB Green Office in conjunction with other campus partners works to educate students, faculty, and staff about behavioral changes they can make.

On-Site Renewable Energy

Made possible through funding from the New York Power Authority (NYPA), UB is in the process of installing a 1 MW solar array on campus. This installation joins an existing 73.5 KW array on the roof of Norton Hall. EPA recently announced that UB won the 2009–2010 College and University Green Power Challenge.

2. Green Power Partnership Program

Under this MOU, UB will continue to be a partner in the Green Power Partnership Program. UB competes against 12 other campuses in the Mid-American conference each year to see which campus is the largest purchaser of green power. 2009 is the 4th year in a row UB has placed #1 with 16,350,000 kWh of power linked to renewable generation sources, in this case wind and solar power generation. The purchase of Green Power is just one of the efforts the University is making to achieve climate neutrality at its campuses.

3. GreenScapes Partnership and Integrated Pest Management Techniques

Under this MOU, UB will utilize EPA's GreenScapes program to reduce the need to replace landscaping materials and high maintenance plants, work towards reusing landscape materials where possible, recycle organic materials and make decisions to specify and purchase products that are environmentally preferable. UB is already a leader in composting food waste using an on campus food digester and formed a partnership with an off campus commercial compost company.

UB will incorporate EPA's GreenScapes Tip Sheets and Rebuy Checklist into its own campus landscape planning. The UB GreenScapes Program document will be used for continuous improvement and UB will continue to be mindful of its waste, energy, fertilizers, pesticides and

climate change activities related to its grounds keeping efforts as it engages in Integrated Pest Management (IPM) techniques.

4. Re-Use of Industrial Materials

UB will attempt to utilize construction materials with recycled material content. UB will consider the use of coal combustion products, where appropriate, in future construction projects. The use of coal combustion products in place of Portland cement significantly reduces energy and CO2 emissions as well as concrete costs, and forms a superior product.

5. Labs 21 Partnership

As an existing Partner, UB shares the vision, goals and objectives of EPA's Labs 21 program. UB will work towards minimizing energy consumption and reducing its carbon footprint while accomplishing its goals in science education and scientific research, at the same time, maintaining health and safety as its highest priority. UB has already begun an intensive study of fume hood usage and has made adjustments in labs across campus to reduce energy use.

Under this MOU, UB will continue to study the current laboratories design conditions, study the codes, and consult with the UB Director of Environmental, Health, and Safety to identify programmatic constraints or issues that cause high energy usage. UB staff will consult EPA's recognized Center of Excellence case studies ("Institutions of Labs for the 21st Century"), EPA's video "Labs 21 Approach", and EPA's Tool Kit ("Resources for High Efficient Design, Operations and Lab Maintenance").

EPA will continue developing its Labs for the 21st Century Program, continue to develop outreach and educational materials, provide referrals for technical support and information and continue to encourage colleges and universities to join as partners, creating a network of knowledge and experience for our mutual benefit.

6. Municipal Solid Waste and Food Waste Recycling and the EPA WasteWise Program

Under this MOU, UB will join the EPA WasteWise Program and incorporate several of EPA's programs within WasteWise, including the Resource Conservation Challenge to manage materials more efficiently; WARM (an Excel spreadsheet) to estimate greenhouse gas reductions from its recycling practices; Electronics Challenge to recycle and avoid hazardous materials from entering landfills; Building Challenge to recycle, reuse and reduce construction and demolition materials; and Comprehensive Procurement Guidelines to specify and purchase standard materials containing recycled content.

UB has a waste diversion rate that hovers around 30% with a goal of increasing it to 50%. Currently UB is engaging in a strategic review of our recycling program. Lastly, UB has participated in Recyclemania for the 2009 and 2010 competitions.

EPA commits to provide UB with WasteWise Partnership news and product information, provide support to UB requests for information on WasteWise Partnership and provide materials to assist UB in outreach and education. UB shall reduce the solid waste stream. Further, UB

shall enhance current source separation and material recycling for which a new or emerging market exists, including but not limited to: paper, cardboard, news print, metal, glass, plastic containers and electronics.

Food Waste Recycling and On-Site Composting of Yard Waste

As stated above, UB is already a leader in composting food waste using an on campus food digester. The composted food waste is used as a soil amendment on campus. Yard waste is also composted on-site and used as mulch. Under the MOU, UB will investigate expanding food waste composting and report the amounts to EPA along with the other solid waste recycling information.

7. Combined Heat and Power (CHP) Partnership

UB and EPA both recognize CHP potential benefits for improving energy infrastructure and economic operations and, most importantly, lowering the impact on the environment while meeting the demands for energy. UB currently uses a small CHP system to run the pumps and heat the water of its competition pool. Beyond this, UB is currently not considering CHP to be installed on campus. The amount of energy savings using the CHP system will be estimated and shared with EPA as part of the annual reporting requirement.

UB will look to EPA's expertise in reviewing the current listing of State and federal incentives, as well as information on regulatory treatment of utility rates favorable to distributed generation projects. If CHP again becomes an option for the campus, UB will utilize EPA's tools and services for direct project assistance including third-party review of the feasibility/design study.

8. National Clean Diesel Campaign & Clean Construction USA

In its fleet of over 400 vehicles, UB has 56 vehicles fueled by compressed natural gas (CNG), 5 hybrid vehicles, and 10 electric GEM vehicles. UB currently fuels approximately 30 of its diesel vehicles with B-20 biodiesel, comprising approximately 30% of UB's total diesel use. UB will continue to pursue a wide range of emission reduction strategies for its fleet in line with the National Clean Diesel Campaign.

For future construction projects, UB will refer to the Clean Construction USA program and guidelines described in the booklet "Low-Cost Ways to Cleaner Construction". EPA commits to provide UB with Clean Construction USA program news and product information, provide support to UB requests for information and materials to assist UB in outreach and education.

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. UB will continue to implement idling reduction measures in its own fleet and encourage all contractors, employees and visitors to do the same.

9. WaterSense Products

Both UB and EPA recognize the importance of using water efficiently. Water-efficient behaviors and the use of quality products that minimize water use can result in: less water drawn from the Great Lakes and our waterways; potential improvements to western New York water quality; reduced energy use and CO2 emissions related to water treatment and pumping; reduced wastewater treatment; and reduced water utility costs.

Under this MOU, UB will utilize WaterSense Products when appropriate. UB also commits to following the WaterSense Guidelines to encourage students, faculty, staff and administrators to conserve water.

EPA commits to provide UB with WaterSense program news and product information, provide support to UB requests for information and best practices on WaterSense, and provide materials to assist UB in outreach and education.

MOU Status Reporting

In addition to the reporting items associated with EPA Partnership Programs, UB will submit an MOU status report to EPA annually beginning September 1, 2011. The report will include an update on the various activities identified in this MOU.

EPA will use this data to determine the environmental benefits associated with UB's "green" activities and will communicate its findings to UB in a prompt matter.

Terms and Conditions

This MOU is not a contractual or a financial obligation instrument. Nothing in this MOU shall obligate EPA or UB to expend appropriations or to enter into any contract or other obligations 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 UB from participating in similar activities or arrangements with other entities or Federal agencies (domestic or foreign).

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 set forth in Paragraph III, above, 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.

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

UB understands and acknowledges that, as an institution of the Federal Government, EPA has a duty to refrain from providing any commercial entity an exclusive privilege without receiving payment therefore and, as a consequence, that EPA's relationship with UB 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.

UB understands that EPA's participation in this MOU does not constitute an endorsement, express or implied, of (a) any policy advocated by UB or (b) any goods or services purchased, offered or sold by UB, or (c) any product or products solely by virtue of carrying the WaterSense or EnergyStar label.

The parties agree that any copyrightable subject matter, including but not limited to journal articles, training, educational or informational material or software, created jointly by the parties from the activities conducted under the MOU may be copyrighted by UB. UB hereby grants to EPA a royalty-free, nonexclusive, irrevocable right to reproduce, distribute, make derivative works, and publish 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 UB or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside of EPA and UB.

Effective Date and Administration

This MOU will become effective upon signature by the Regional Administrator of EPA Region 2 and the Assistant Vice President for University Facilities at UB. It may be modified or amended by written agreement signed by both parties. Unless otherwise terminated by one of the 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. This MOU may be terminated at any time by either party upon the issuance of a written notice to the other party. The Parties will annually review the provisions of this MOU and its implementation.

Signed:

Judith A. Enck
Regional Administrator
U.S. EPA Region 2

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Assistant Vice President for Facilities
State University of New York at Buffalo