MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY (EPA)
AND
RARITAN VALLEY COMMUNITY COLLEGE

Purpose

The purpose of this Memorandum of Understanding (MOU) is to document Raritan Valley Community College's (hereinafter also referred to as 'RVCC' or 'College') commitment as an environmental steward that pledges to reduce its carbon footprint and generally contribute to a better environment by partnering with the United States Environmental Protection Agency (EPA). This MOU is intended to be a living document

RVCC's commitment for continuous improvement involves: using EPA's environmental stewardship programs to develop policies, practices, and specifications for environmental efficiency standards; increasing stewardship awareness; remaining current with EPA regulations and guidelines; increasing involvement and recognition of RVCC's stakeholders in environmental sustainability programs; partnering with local government on environmental initiatives; and addressing environmental concerns swiftly. RVCC recognizes EPA's program requirements for outreach and involvement, data collecting and reporting, and will strive to become a recognized leader and a candidate for EPA environmental stewardship awards.

Under this MOU, Raritan Valley Community College will participate in the following voluntary EPA environmental stewardship programs:

- ENERGY STAR® Building & Plant Partnership
- WasteWise Partnership
- National Clean Diesel Campaign & Clean Construction USA
- WaterSense Products

The sections below briefly describe the voluntary EPA environmental stewardship programs as they apply to RVCC. The text also highlights some important sustainability initiatives RVCC has already begun, or is currently planning.

Clean Energy

In 2007, RVCC installed a 1.4MW cogeneration engine becoming the first community college in the country to do so. Combined Heat and Power (CHP), also known as cogeneration, is the concurrent production of electricity or mechanical power and useful thermal energy (heating and/or cooling) from a single source of energy. CHP is not a single technology but a suite of

technologies that generate electricity or power at the point of use, allowing the heat that would normally be lost in power generation, transmission, and distribution processes to be recovered for heating and/or cooling. This allows for much greater improvement in overall fuel efficiency, resulting in lower operating costs and CO2 emissions. The goal of the plant is to reduce carbon emissions by 1900 tons per year. The College received a grant for $1 million from the NJ Board of Public Utilities to construct the cogeneration plant. RVCC will consider joining the EPA partnership program for combined heat and power.

ENERGY STAR Building & Plant Partnership

Under this MOU, RVCC will become an EPA ENERGY STAR Partner. RVCC will utilize EPA's program offering within ENERGY STAR Building & Plants entitled "Menu of ENERGY STAR Offerings for Higher Education" (the Menu) as the structure for continuous improvement and to meet or exceed the goal of 10% energy reduction under the program.

RVCC has implemented many specific energy conservation measures (ECMs) based on energy audits of the major buildings and systems on campus. RVCC has already taken steps to reduce energy usage across its campus, like installing energy efficient lighting in many buildings including a recent project at the Arts Building where they received a SmartStart grant from the state. RVCC is in the process of installing a voltage reducer for the pool lighting which will decrease lighting energy in the building by 15%. Through the EPA's ENERGY STAR partnership, which includes recommendations specifically for colleges and universities, RVCC will reduce energy use across campus by an additional 10 percent. RVCC is currently designing a new heat exchanger for the pool to use more efficient central plant heating and eliminate the use of the gas boiler.

Many lighting upgrade and retrofit projects designed to save energy while maintaining or even improving lighting comfort have been undertaken at RVCC. Occupancy sensors have been installed in a large number of classrooms to control lighting while rooms are unused. All Exit sign lighting has been replaced with LED signs, and the College is researching the use of LED lighting technology in other areas. All lighting at the entrance to the Theatre will be replaced with LED fixtures.

Utilizing Portfolio Manager, EPA's interactive energy management tool, RVCC will track and assess the energy and water consumption of all major buildings on campus. RVCC will also determine the energy performance rating of all major buildings on campus. Based on the rating results, RVCC will establish energy use reduction goals.

Energy Audit: RVCC recently contracted with an energy consulting firm to do a complete energy audit of the entire campus. The college received a grant for $70,000 from the State of New Jersey to help pay for the audit. The audit will be complete by June of 2009.

Energy Recovery: RVCC has installed an air-to-air heat exchanger at the Science building which captures the waste heat from exhaust fans and preheats the fresh air coming into the building.

Energy Curtailment: RVCC is a participant in the Energy Curtailment program offered by the PJM Interconnection which is the regional transmission organization for electric. When called

upon by the power company, RVCC shuts down certain equipment (air conditioning) for short periods of time so as to help reduce load on the northeast grid.

GreenPower Partnership

The College is in the process of identifying renewable energy opportunities on campus utilizing solar photovoltaic (PV) systems where feasible. Potential solar PV projects include new PV systems on the Arts Building; and pole mounted or canopy systems in College parking lot areas. External sources of funding are needed to implement future renewable energy projects and the availability and applicability of such funding sources are being evaluated.

RVCC recently installed several traffic signs that are powered by solar energy. In addition, RVCC will be installing three new scoreboards for the athletic fields that will be completely powered by solar energy.

The College is currently evaluating its options for purchasing green power under the EPA GreenPower partnership.

GreenScapes

Under this MOU, RVCC will consult with the EPA GreenScapes Program. RVCC 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. RVCC will to utilize EPA's GreenScapes Tip Sheets and Re-buy Checklist to develop its own written GreenScapes program by the end of 2010. RVCC's GreenScapes Program document will be used for continuous improvement and RVCC will keep records of waste, energy, and climate change activities related to its grounds keeping efforts. RVCC has already planned to landscape the new science building stairs with sustainable vegetation. The college will eliminate the use of herbicides and use only organic fertilizers starting on July 1, 2009.

WasteWise Partnership and Solid Waste Recycling

Under this MOU, RVCC will become an EPA WasteWise Partner. The College encourages and enforces recycling programs. Materials recycled include glass, aluminum and bi-metal containers, paper, and cardboard. In addition, an electronic devices recycling program is in place. The College will consider participating in the annual RecycleMania event sponsored by EPA.

High efficiency hand dryers have been installed in several locations on campus. In addition to promoting better hygiene, the hand dryers allow the College to decrease its waste stream of paper towels. Installation of these devices in other locations is being evaluated.

Under the MOU, RVCC will work with its vendors to consider the use of EPA's Food Waste Calculator. Effective July 1, 2009, the College will send all bio-degradable kitchen waste to an

off-site composting facility. The College will also consider using 100% bio-degradable disposable serviceware and containers.

The College recently purchased 75 additional recycling containers that have been deployed throughout the campus.

Re-Use of Industrial Materials

Re-use, and re-buy are also a part of RVCC's planning process for new construction and renovation projects. When possible RVCC will specify the use of construction materials with recycled material content, materials manufactured locally within a 500 mile radius, and materials with low volatile organic compounds (VOC) off-gassing. In addition, RVCC will engage construction and demolition debris haulers/recyclers to recycle waste that is generated from new construction and renovation projects. Raritan Valley Community College will report on the amount of material re-used or recycled under this MOU for projects initiated after 2011.

For any future construction projects, RVCC will 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.

Under this MOU, RVCC will work to incorporate many of EPA's tools and targeted initiatives within WasteWise, including the Waste Reduction Model (WARM) 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. Achievements in this area will be reported under this MOU.

WaterSense Products

Both RVCC 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 New Jersey resources; reduced energy use and CO2 emissions related to water treatment and pumping; and reduced water utility costs.

RVCC has already eliminated water cooled condensers in the Kitchen and replaced them with more efficient air cooled condensers that do not waste water. RVCC also renovated bathrooms and replaced urinals with waterless fixtures and metering faucets. In 2006, RVCC replaced all of the underground heating and cooling piping that was leaking, saving on several thousand gallons of make up water.

Under this MOU, RVCC will utilize WaterSense Products, where appropriate. RVCC also commits to following the WaterSense Guidelines in order to encourage students, faculty, staff and administrators to conserve water; provide EPA with annual water consumption data; and feature WaterSense products on RVCC's sustainability web page.

Sustainable Design, Construction and Operations Practices

RVCC is committed to incorporating the principles of the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) green building rating system in new and renovated buildings. Two projects whose design was completed several years ago are undergoing evaluation regarding the possibility of achieving LEED certification. They are the 150,000 square foot Multi-Purpose Activity Center, currently nearing completion, and a planned 45,000 square foot residence hall. If certification cannot be achieved due to previous design constraints and construction schedules, a significant number of LEED principles have been and will be incorporated into each facility.

RVCC will build all future buildings to LEED Silver certification. The Director of Facilities for RVCC recently obtained certification as a LEED Accredited Professional. RVCC recently completed the baseline carbon calculation for the campus.

Green cleaning products are used in several campus facilities. Green cleaning products include glass cleaner, all-purpose cleaner, and floor cleaner. The College intends to consult the EPA's Environmentally Preferable Products list and expand its green cleaning program to cover additional facilities and to include additional cleaning products.

National Clean Diesel Campaign & Clean Construction USA

Under this MOU, RVCC will join 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. RVCC will consider converting kitchen waste oil to 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. RVCC will 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. RVCC 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

Raritan Valley Community College 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. Raritan Valley Community College will use clean vehicles in its own fleets, and promote the use of clean vehicle fleets by its contractors, faculty, staff and students. (Additional info on projected future number of vehicles may be included, if known)

Benefits for "Clean" Commuters

Raritan Valley Community College will encourage its faculty, staff and students by providing discounted parking passes and preferred parking for those with hybrid or alternatively fueled vehicles. Raritan Valley Community College will also promote emission reductions efforts such as car pooling and public transportation.

Campus and Community Involvement

RVCC takes the environmental and sustainable message to its academic community and the regional community. Its proximity to the Raritan River and its place in a vibrant region with expanding development gives it unique insights and special responsibilities when it comes to the environment. RVCC will consider applying for River Friendly certification of the pond and stream that runs through the campus.

The RVCC campus has an active student body with over 20 student organizations. Students participate in Social Justice Club, REAL (Raritan Environmental Action League) and contribute to sustainability efforts through estuary clean-up projects, Habitat for Humanity and the Outdoor Clubs. Raritan Valley Community College students also actively promote and participate in the nationally recognized "Earth Day" events, tree planting and stream monitoring. There is also a college wide Sustainability Team that recommends green initiatives.

The Somerset County Business Partnership sponsors a first of its kind in the state program called "Somerset County High Performance Buildings Program." RVCC participates in many of their initiatives including our new West Building which is a featured on their program website.

MOU Status Reporting

RVCC will submit an MOU status report to EPA twice per year starting six months after the official signing of the MOU. The report will include an update on the various activities identified in this MOU, and will include the reporting items associated with EPA Partnership Programs. EPA will use this data to determine the environmental benefits associated with RVCC's "green" activities and will communicate its findings in a prompt matter.

Terms and Conditions

This MOU is not a contractual or a financial obligation instrument. Nothing in this MOU shall obligate the EPA or RVCC to expend appropriations or to enter into any contract or other

obligations or be cited as the basis for the promise or transfers of funds. Collaboration under this MOU shall be in accordance with applicable statutes and regulations.

This MOU does not restrict EPA or RVCC 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 transmitting a signed writing to that effect to the other party. By mutual agreement, which may be either formal or informal, each party may modify the list of its intended activities set forth above, and/or determine the practical manner by which its goals, purposes and activities set forth in 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.S.C. §552, shall be governed by the provisions of the FOIA.".

RVCC 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 NMS by virtue of any other law, contract and/or assistance agreement.

RVCC 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 RVCC 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.

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

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 RVCC. RVCC hereby grants to the Government a royalty-free nonexclusive, irrevocable right to reproduce, make derivative works, and publish said copyrightable subject matter arising from this MOU.

Any intellectual property developed collaboratively by the Parties will be governed by the Federal Copyright Statute at Title 17 of the United States Code and/or by the Federal Patent Statute at Title 35 of the United States Code. RVCC shall maintain full right, title and interest in any intellectual property right, including a copyright, in any work product developed solely by RVCC in furtherance of the objectives of this MOU.

This MOU does not authorize RVCC to use any EPA logo, trademark or other intellectual property without prior approval of EPA. This MOU does not authorize EPA to use any RVCC logo, trademark or other intellectual property without the prior approval of RVCC.

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 private 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 RVCC or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside of EPA and RVCC.

Effective Date and Administration

This MOU will become effective upon signature by the Regional Administrator of EPA Region 2 and the President of Raritan Valley Community College. 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 review annually the provisions of this MOU and its implementation.

AGREED AND ACCEPTED	AGREED AND ACCEPTED
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY	RARITAN VALLEY COMMUNITY COLLEGE
By:	By:
_____	_____
Date: _____	Date: _____