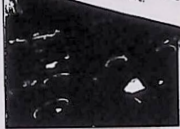


For sale: Commercial sites
undergoing rehabilitation

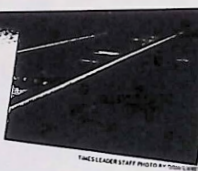
Seeing Now

HARKLE BANK BUILDING
1100 Lehigh Avenue, Allentown
Size: 11-story building
Stage of project: State is marketing on the Department of Environmental Protection Web site. Known asbestos and lead paint throughout building from previous assessments
Contact: The city of Allentown. A remediation notice has not been filed with the state.
Note: Has drawn the attention of local and federal politicians. Last summer, U.S. Sen. Rick Santorum announced efforts to secure federal funding to rehabilitate the structure.



THIS LEASED SITE PHOTO BY DON CAREY

AVOCA YARD
York Avenue, Avoca
Zoning: Industrial and in Keystone Opportunity Zone, a state program providing tax breaks
Size: 50 acres of former rail beds and yard
Stage of Project: DEP and federal Environmental Protection Agency are beginning to assess contamination.
Note: Is eligible for property tax breaks for several years through the state Keystone Opportunity Zone.



THIS LEASED SITE PHOTO BY DON CAREY

ASHLEY YARD
Main Street, Ashley
Zoning: Industrial and 402 site
Size: 80 acres of former rail yard (rail still served by two railroads)
Stage of Project: DEP and EPA are beginning to assess contamination. Note: Rail lines in the Ashley Yard remain active. Federal and state officials are assessing contamination of the property.



THIS LEASED SITE PHOTO BY DON CAREY

FORMER POSEIDON POOL PROPERTY
Crescent Industrial Park, Wright Township
Size: 400,000 sq ft
Stage of Project: Assessments complete, ready to remediate. Some pool chemical contamination of Buell Creek by the Greater Wilkes-Barre Chamber of Commerce and the Greater Industrial Fund. The owner will remove contaminated soil and remove a wastewater treatment plant and lead efforts to market the property. May join clean acreage with another parcel treating an almost 80-acre shovel-ready site.

State program makes it easier to
get contaminated sites known as
brownfields cleaned up and put
back into productive use.

By Donna Thomas

Marleen Troy, an assistant professor at Wilkes University, regularly sends her students on "windshield reconnaissance" to find potentially contaminated sites.

Students cruise the streets and back of Luzerne County, noting empty lots, abandoned gas stations and dry cleaners.

The seniors in the university's environmental engineering program are helping a local effort to put abandoned commercial sites back to good use. Their information-gathering missions are adding to the month-old Luzerne-Lackawanna County Brownfields Development Opportunities Task Force's inventory.

"It is a significant challenge to put together a comprehensive inventory of brownfields," said Ellen Alaimo, director of the Northeast office of the Pennsylvania Department of Environmental Protection, lead agency for the task force.

Alaimo said the inventory has about 50 sites listed now, up from the few she had in July when the task force was formed. A brownfield site could be anything from a small building that contains asbestos to insulation to someone's back yard that had a leaking oil storage tank.

Since 1995, landowners in Pennsylvania voluntarily have rehabilitated and redeveloped almost 700 so-called brownfield sites through the state's Land Recycling Program. The program seeks to remove old barriers to cleanup and return land to productive use.

The local effort, however, has been slow. Of the 17 sites cleaned up in Luzerne County and 24 in Lackawanna County, most were owned by regional electricity utility PPL. Only three of the Luzerne sites and seven of those in Lackawanna were non-PPL sites.

"It's nice to see those kind of numbers, but they're all from one company," said Joseph Brogna, program manager for the state Department of Environmental Protection. "When it comes down to other industrial sites, we're sure they're out there, potentially at least."

Alaimo is looking to list not only sites that have known contamination but also those where damage is suspected. In other words, anyone who was anxious about selling property in the past because the buyer's bank wanted a guarantee the property isn't contaminated is a

candidate for the list.

A property owner targeted by one of the reconnaissance missions shouldn't be alarmed, Brogna said. In fact, anyone who kept land off the market for fear of being required to do an expensive cleanup should probably give Alaimo a call, he suggests.

"Don't be afraid. Be proud," he said. "It's a brownfield. It's the best place for someone who wants to build a small factory."

How things work

Things have changed in the regulatory world since the days when moon and pop's gas leak was promoted with the same vigor as the principal polluters in environmental disasters.

The Land Recycling Program has taken away some of the hoop that land owners would have to jump through to clean up their sites. In the past, property owners often were held responsible for expensive cleanup of sites, regardless of who caused the damage or what the new site will be used for.

The state's new philosophy is that cleanup standards for a site for future industrial use don't need to be as stringent as one that could become a day-care center.

Also, past contamination on a site—even after a rehabilitation project—rendered many sites unsalable. Many new land owners found themselves financially responsible for contamination on properties that were polluted 50 years before they even saw a for sale sign. The program limits the liability of new and old owners of properties that undergo a cleanup.

There are three steps to the process of taking a property and renewing its life. Alaimo said the first is to find out what's on the property—if anything. "If you're lucky and you have a site contamination that isn't that hot, as we say, you may not have to remediate," Brogna said. "A little more than that you may have a problem."

The state Department of Community Development could lend owners up to 75 percent of the cost of evaluation and cleanup at 2 percent interest. The loan can be higher than \$1 million in extreme cases.

The second is to answer the question: How clean is clean? If property is found to be "dirty," what cleanup methods should take place? If not, you're land is certified clean and salable.

The third step is to market the land or build on it. Gov. Thomas Ridge recently announced a state Web site that lets the world know about shovel-ready sites or those needing a bit of work.

The city of Wilkes-Barre was one of the three property owners that took advantage of the program in Luzerne County. The city was able to make a land swap deal with Chuck's Bowling Center in 1995 and was a large cell center to the bowling alley's South Main Street property. The deal included providing the center with a city-owned public works garage that was "recycled" through the program.

"I think this land recycling is a great program," said Wilkes-Barre Mayor Thomas McGarry. "For years, politicians were afraid of this."

"For years, politicians were afraid of this."

Wilkes-Barre Mayor Thomas McGarry

THE CITIZENS' VOICE Salutes

C.V.
10/15/00

Dr. Marleen A. Troy



Wilkes University professor Dr. Marleen A. Troy was honored recently by the Pennsylvania Department of Environmental Protection for her work in environmental education and pollution prevention.

The recognition came as part of DEP's fourth annual Pollution Prevention Week.

Dr. Troy, who utilizes a hands-on approach to environmental education, has partnered with DEP on a number of important projects over the last three years.

"The textbook and classroom stuff is important too, but you need to go out and do things," Dr. Troy said in a recent interview, describing her approach. "The projects allow (students) to see things they didn't know were out there and now they're taking a second look."

Examples of recent projects include one in which students collected data from area hotels to assist in implementing water conservation measures, and another in which students interviewed DEP staff on agency operations and pollution control measures.

DEP spokesman Mark Carmon said Dr. Troy's efforts have helped the state agency operate more efficiently, in addition to providing a unique learning experience for her students.

"The students brought an outside perspective to what we do," he said. "We're getting a whole new set of eyes looking at problems and suggesting solutions."

Wilkes professor earns accolades for her environmental work

By Tom Venosky
Citizens' Voice Staff Writer 10-9-00

A Wilkes University professor was recently recognized by the Department of Environmental Protection (DEP) for her untiring efforts in environmental education and pollution prevention.

Professor Marleen A. Troy, PhD., P.E., was honored by DEP last week as part of the fourth annual Pollution Prevention Week.

Dr. Troy is a firm believer in hands-on experience for her students and for the past three years she has partnered with DEP on a number of student interaction projects. She said the hands-on approach is crucial to environmental education because students need to see the problems first hand.

"The textbook and classroom stuff is important too, but you need to go out and do things. The projects allow them to see things they didn't realize were out there and now they're taking a second look," she said. "By going out and actually doing things, it gives them a more real world perspective."

Dr. Troy and her students have worked with DEP on a number of projects recently. A senior design project required students to go into area hotels and collect and evaluate data to assist them in implementing water conservation and energy efficiency measures.

DEP supplied the students with software from the Environmental Protection Agency, which the students used to analyze data.

Another important project involved the students conducting interviews of DEP staff on



Jack Kelley/Citizens' Voice
Wilkes Professor Marleen A. Troy, PhD., P.E., was honored by the Pennsylvania Department of Environmental Protection for her untiring efforts in environmental education and pollution prevention.

agency operations and implementation of pollution prevention measures. The students then evaluated the information and made recommendations to DEP to better incorporate pollution prevention techniques.

DEP incorporated several of the recommendations into their daily procedures.

"We used more electronic methods, such as email, to eliminate a lot of paper," said Mark Carmon, spokesperson for the DEP northeast regional office.

"We are getting more integration of the pollution prevention in a lot of our programs."

ment and it also benefited them after they graduated. "They didn't realize what was involved in the business and regulatory side of the environmental field. A number of the students found the experience was beneficial to use during job interviews as well," she said.

Since January of 1997, when the award was first handed out, the 132 winners have realized a combined savings of more than \$130 million and have reduced wastewater by three billion gallons, solid waste by 88 million tons, air emissions by 84 million tons and saved more than 37 million kilowatt hours of electricity.

"Pollution Prevention Week is about recognizing the efforts of people like Dr. Troy and showing the community how easy it really is to get into the pollution prevention habit," said Robert Markanie, DEP Deputy Secretary for Pollution Prevention and Compliance Assistance.

Troy said the award was a surprise and it gives her an incentive in teaching pollution prevention.

"I appreciate it very much. Pollution prevention is a major part of the environmental field."

Before, we had been teaching students how to treat what comes out of the end of the pipe. With pollution prevention, we're trying to eliminate the pipe," she explained.

Carmon said Troy's focus on hands-on teaching sets her apart from other teachers.

"Her students are out in the community and they are working with state agencies. She goes beyond the average teacher," he said.

Carmon said the students provided a new viewpoint into DEP operations and made the staff more aware of pollution prevention techniques, especially during site visits in the community.

"She really came to the pollution prevention staff and made a commitment to work with us," stressed Carmon. "The students brought an outside perspective into what we do. We're getting a whole new set of eyes looking at problems and suggesting solutions."

Troy said the experience with DEP made the students aware of the many duties of the depart-

Environmental Partnership Awards and Thomas P. Shelburne

Environmental Leadership Award

Nominations for Ms. Marleen Troy, Ph.D., P.E.

file

SUMMARY:

The Northeast Regional Office of the Pennsylvania Department of Environmental Protection (DEP) hereby nominates Marleen Troy, Ph.D., P.E., Assistant Professor of Environmental Engineering at Wilkes University, for the Environmental Partnership and Thomas P. Shelburne Environmental Leadership Awards. Dr. Troy's academic responsibilities include instructing a Pollution Prevention (P2) course at Wilkes University. She has taken this responsibility far beyond traditional "textbook" teaching. She has exposed her students to real-world experiences while fostering their concern for the environment. In doing so, she has reached out to the local business community, developing partnerships that enhance her students' learning experience while promoting the concepts of pollution prevention to businesses.

Dr. Troy first contacted the regional office from the Department's website and since the initial contact, both she and her class have continued to develop a mutually beneficial working relationship with the Department. By taking an active role in integrating the school and her students with the community in terms of conducting pollution prevention site visits or acquiring information, she has in turn allied the school with the state government via the DEP. She has not only worked closely with the Office of Pollution Prevention and Compliance Assistance (OPPCA), but she also worked with

other programs in the DEP such as during the Process Mapping project, which will be detailed below.

INSTRUCTION OF ENVIRONMENTAL COURSES--

THE HOTEL/MOTEL PROJECT

Professor Dr. Michael Terry is the assistant professor of Environmental Engineering at Wilkes University, who has had the opportunity to interact closely during the last year with environmental education and pollution prevention courses. One such example of Dr. Terry's involvement in a project was the Hotel/Motel Project involving the cooperation with the Northern Region's Office of Pollution Prevention and Control (ORPPCA). Students and faculty from Wilkes University in Wilkes-Barre worked on a cooperative project with Northern Regional ORPPCA staff to conduct a waste usage study at a local hotel.

The Wilkes' master design process for the project involved the Environmental Protection Agency's (EPA) Water Alliance for Voluntary Efficiency (WAVE)'s software program with annual data derived from a local hotel, the Ramada Inn, Wilkes-Barre. WAVE was used to collect data from Ramada Inn and conduct a water usage analysis. The analysis determined areas in which the hotel could implement water conservation and energy efficiency measures resulting in pollution prevention and cost saving activities.

Consequently the Wilkes University Hotel Study was to be held at the Ramada Inn in Wilkes-Barre, Pennsylvania. A few at the General Hotel agreed to withdraw from the Water Alliance for Voluntary Efficiency (WAVE) Program study that would be conducted by Wilkes University students. Searching for an alternate site in the area, Ramada Inn volunteered. In April of 1996 Wilkes University students presented their

NOMINATION DETAIL:

INSTRUCTION OF ENVIRONMENTAL COURSES— THE MOTEL/HOTEL PROJECT

Because Dr. Marleen Troy is the assistant professor of Environmental Engineering at Wilkes University, she has had the opportunity to instruct courses dealing directly with environmental education and pollution prevention courses. One such example of Dr. Troy's coordination of a project was the Hotel/Motel Project conducted in conjunction with the Northeast Region's Office of Pollution Prevention and Compliance Assistance (OPPCA). Students and faculty from Wilkes University in Wilkes-Barre worked on a cooperative project with Northeast Regional OPPCA staff to conduct a water usage study at a local hotel.

The Wilkes' senior design course for the project involved the Environmental Protection Agency's (EPA) Water Alliance for Voluntary Efficiency (WAVE) software program with actual data derived from a local hotel, the Ramada Inn, Wilkes-Barre. WAVE was used to collect data from Ramada Inn and conduct a water usage analysis. The analysis determined areas in which the hotel could implement water conservation and energy efficiency measures resulting in pollution prevention and cost saving initiatives.

Originally the Wilkes University Hotel Study was to be held at the Genetti Hotel in Wilkes-Barre; however, a fire at the Genetti Hotel caused them to withdraw from the Water Alliance for Voluntary Efficiency (WAVE) Program study that was to be conducted by Wilkes University students. Searching for an alternate site in the area, Ramada Inn volunteered. In April of 1999 Wilkes University students completed their

class project. Using the WAVE software program, students collected and evaluated data to develop ways to save water at the hotel. Wilkes University students were able to share all that they learned when they presented their findings on April 27, 1999. (See Attachment I for more information).

INTEGRATION PROJECT—PROCESS MAPPING

Dr. Troy was also involved in Process Mapping to Promote Pollution Prevention. As part of the requirements for an undergraduate course in Solid Waste Management, eight Wilkes University environmental engineering students were assigned a term project entitled *Process Mapping to Promote Pollution Prevention*. This project was done in conjunction with the Northeast Regional Office of the Pennsylvania Department of Environmental Protection (NEPADEP). The objectives of the project were two-fold:

1. To allow the students to gain some very valuable "real-world" experience in the environmental field through an understanding of how a regulatory agency operates and;
2. To evaluate the 'regulator's' perspective on the hurdles of implementing pollution prevention initiatives.

Key suggestions reported by the students included: Promoting greater use of computers for all activities (correspondence as well as creation of databases to allow easy retrieval of information); making fewer copies of documents and making double-sided copies as often as possible; incorporating more incentive programs; increasing

communication (particularly between permit writers and inspectors); and making certain pollution prevention issues mandatory instead of voluntary. The results of this study have been used to assist on-going initiatives at NEPADEP to promote pollution prevention in day-to-day regulatory activities.

Eight Wilkes University students enrolled in the Fall 1998 undergraduate course in Solid Waste Management (ENV 315) were assigned a Term Project. The students were paired into groups of two and each group was assigned to one of the following four Pennsylvania DEP programs (Air Quality, Waste Management, Water Management, and Water Supply Management). OPPCA coordinated the scheduling of interviews, and the students interviewed and evaluated the Permitting and Inspection staff in each program.

An initial 'kick-off' meeting was held at the Northeast regional office of the DEP (NEPADEP, Wilkes-Barre, PA) where students met with members of OPPCA as well as the Assistant Regional Director of the NEPADEP. At this meeting, the scope of work for the project was discussed. At the conclusion of the meeting, NEPADEP contacts and phone numbers were exchanged and the students were ready to begin the project.

The job responsibilities of DEP personnel in each of the four groups interviewed were permit writing and inspections. As a result of these interviews, there were four key items that the students were to address in their term projects:

1. Understanding of what the objectives of the designated DEP program were and what the person's job responsibilities were;

2. Identify potential areas in their job responsibilities where pollution prevention practices could be incorporated. The reasons why these areas were chosen was also to be defined.
3. A checklist of potential areas where pollution prevention initiatives should be integrated into their respective job responsibilities was to be developed. Possible mechanisms for implementing these strategies were also to be suggested.
4. Other states' activities were to be reviewed to gather additional program ideas or suggestions were also to be briefly reviewed.

Results of the Term Project performed by the students in the Wilkes University Fall 1998 Solid Waste Management (ENV 315) Class in Conjunction with OPPCA of the Northeast Regional Office of the Pennsylvania DEP were very interesting. This "experiment" allowed a unique opportunity for learning by the students. Several findings as listed below exemplify "thinking out of box," including:

- Promoting greater use of computers for all activities more so to perform cost analysis on different pollution prevention (p2) alternatives;
- Greater emphasis on public education regarding p2;
- Revisions to existing application forms to incorporate p2 concepts;
- Include a p2 component in all pre-application conferences;
- Making less copies of documents and double sided copies as often as possible;
- Incorporating more incentive programs;
- Increasing communication particularly between permit writers and inspectors;
- Making certain p2 issues mandatory instead of voluntary.

This project went beyond the scope of many environmental course offerings. It allowed the students to see how the different departments of the DEP function and what

the Department is all about, with the goal of developing strategies to increase integration among DEP programs. (See Attachment II for more information).

POLLUTION PREVENTION/ENERGY EFFICIENCY (P2/E2) SITE VISIT—PROJECT WITH DIAMOND MANUFACTURING COMPANY

In the spring of 2000, OPPCA staff was invited to speak to Dr. Marlene Troy's Pollution Prevention class regarding their Pollution Prevention/Energy Efficiency Site Assessment term project. The class performed a site assessment at a local metal fabrication facility in accordance with the terms and conditions of the DEP Act 190 Site Assessment Program. Pollution prevention and energy efficiency opportunities were discussed along with preparation of the follow-up report. This project was also being coordinated with the Mentoring Subcommittee of the Northeastern Pennsylvania Pollution Prevention Roundtable.

Individual student teams concentrated on the following areas: Water, Air, Hazardous Waste, Solid Waste, and Energy Efficiency. They were able to work with the Northeast Pennsylvania Industrial Resource Council (NEPIRC) on this project and performed the assessment for Diamond Manufacturing Company in Wyoming, PA. The goal was to promote learning about pollution prevention using a "real industry." The expectation of this project was to allow a 'win-win' situation, with the students getting a hands-on experience with pollution prevention and energy efficiency techniques, and the business getting useful information and ideas that will result in preventing pollution and cost savings initiatives.

This project allowed the networking of Dr. Troy's class and herself with PADEP, NE OPPCA, NEPIRC, the business Diamond Manufacturing Company, and the Mentoring Subcommittee of the Northeastern Pennsylvania Pollution Prevention Roundtable. By becoming involved with these different organizations, the working relationships established among all parties will be an instrumental tool for future use. (See Attachment III for more information).

HOST SITE FOR NE P2 ROUNDTABLE

On May 18, 2000, the quarterly Northeastern PA Pollution Prevention Roundtable Meeting was held at Wilkes University. The Wilkes University Department of Environmental Engineering hosted it with the theme focusing on the subject of P2 through materials tracking and reduction. Mike Parrent of Tobyhanna Army Depot spoke about the materials tracking system implemented at TYAD. The meeting also included a presentation by students of a Wilkes University P2 class, who reported their findings after undertaking a semester-long P2/E2 assessment of Diamond Manufacturing Company in Wyoming, Luzerne County, PA. The results of the assessment were well received by the attending members of the roundtable. The meeting concluded with a tour of the Wilkes University Center for Geographic Information Sciences (GIS), including an overview of GIS theory and applications. By hosting the Roundtable, this allowed networking and

familiarity between Dr. Troy, her students, OPPCA, and the members of the Northeast Region's Roundtable.

Wilkes professor honored for environmental work

CV 9-27-00

The state Department of Environmental Protection honored a Wilkes University professor for her environmental protection and pollution efforts.

"Marleen A. Troy, Ph.D., P.E., has taken her teaching and monitoring responsibilities far beyond traditional textbook teaching and exposed her students to real world experiences while fostering their concern for the environment," said Robert Barkanic, DEP deputy secretary for pollution prevention and compliance assistance.

"In doing so, she reached out to the local business community and developed partnerships that enhanced her students' learning experiences. Dr. Troy's efforts, along with her students at Wilkes University and the community, make our work that much more meaningful."

Dr. Troy and her students have worked with DEP on a variety of projects.

One project involved senior students collecting and evaluating data from local hotels and motels to assist them in implementing water conservation and energy efficiency measures.

Another project involved students interviewing DEP staff to understand how a regulatory agency operates and to hear the regulatory's perspective on imple-

menting pollution prevention initiatives.

Eight students were assigned to conduct the interviews, evaluate the information and submit written suggestions to better incorporate pollution preven-

tion techniques into DEP's regulatory framework.

DEP has implemented several of the students' suggestions, including increased use of electronic and computerized data sharing to reduce paperwork and incorporating pollution prevention

components in DEP pre-application conferences.

Dr. Troy is an assistant professor of environmental engineering in Wilkes University's GeoEnvironmental Sciences and Engineering Department.

She received her doctorate and master's degree in civil engineering from Drexel University.

She also holds a master's degree in microbiology from the University of Rhode Island.

Inside this story...

Marleen A. Troy, Ph.D., P.E., a professor at Wilkes University, was honored by the Pennsylvania Department of Environmental Protection for her environmental protection and pollution efforts.

Marleen A. Troy, Ph.D., P.E.

Since 1997, Marleen A. Troy, Ph.D., P.E., has been one of the most well-respected members of Wilkes University's GeoEnvironmental Sciences and Engineering Department. Currently an Assistant Professor of Environmental Engineering, Dr. Troy is an environmental engineer with specialized experience in pollution and biological treatment techniques for remediation. She has over eight years experience in hazardous waste remediation consulting and contracting.

Marleen earned a Bachelor of Science Degree in Biological Science from Philadelphia's Drexel University in 1980. A move to Kingston, Rhode Island, resulted in her receiving a Master of Science Degree in Microbiology from the University of Rhode Island in 1982. Returning to Drexel, she completed another Master of Science Degree, this time in Civil Engineering in 1986, and she received her Ph.D. in the same discipline from Drexel in 1989.

The recipient of numerous accolades, Marleen received the S.J. Leonard Teaching Assistant Award from Drexel's Civil Engineering Department. During 1988-89 academic year, she earned the United States Environmental Protection Agency National Network for Environmental Management Studies Fellowship and the Steven Giegerich Memorial Scholarship. Marleen was twice named to Marquis Who's Who in Science and Engineering, and also received the OHM Award for Technical Excellence.

Prior to joining the Wilkes University family, Marleen worked as a Senior Environmental Engineer with Dupont Environmental Remediation Services (DER), in Wilmington, Delaware; as a Program Manager, Senior Engineer, Bioremediation Services, at Groundwater and Environmental Services (GES), Inc., in Wall, New Jersey; as a Project Engineer with OHM Remediation Services Corp., in Trenton, New Jersey; as an Adjunct Assistant Professor with Drexel University's Department of Civil and Architectural Engineering; and as a Research Assistant III with the University of Rhode Island's Department of Microbiology.

Dr. Troy is a member of the American Society for Civil Engineers, the American Society for Microbiology, the National Groundwater Association, the American Society for Engineering Education, the American Chemical Society, the Northeast Pennsylvania Pollution Prevention Roundtable, the Advisory Board of the Pennsylvania Environmental Council, and, in 1998 and 1999, was a judge for the Pennsylvania DEP Environmental Excellence Awards.

Well-published, Dr. Troy has completed nearly 30 publications, abstracts, and/or presentations.

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From: Vaughn Shinkus <shinkus@wilkes.edu>
Subject: Fwd: Troy - Pollution Prevention Week Award
Status:

FYI. Info from DEP on Marleen Troy

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>Mr. Shinkus,
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>It was a pleasure speaking with you this morning. I
>your offer of assistance in promoting this event. As
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>We are happy to present her with this year's Pollution Prevention Week 2000
>Award, she certainly deserves it! Wilkes University students are lucky to
>have such a dedicated professor to help them achieve their academic goals.
>The presentation will take place at 1:00 pm on Wednesday September 20, at
>our office. We are looking forward to it!

>
>If you have any additional questions or concerns please contact me at
>826-2475 as Mr. Carmon is on vacation this week. Thanks.

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Date: Tue, 5 Sep 2000 11:32:00 -0400

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From: Vaughn Shinkus <shinkus@wilkes.edu>

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>Business Development Center (SBDC) develop an intern program for students
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>SBDC. She is continually striving to provide opportunities for her
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Janet Warnick

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MARLEEN A. TROY, Ph.D., P.E.
ASSISTANT PROFESSOR OF ENVIRONMENTAL ENGINEERING
GEOENVIRONMENTAL SCIENCES & ENGINEERING DEPARTMENT
WILKES UNIVERSITY
WILKES-BARRE, PA 18766
PHONE: (570) 408-4615
EMAIL: troy@wilkes.edu

SUMMARY

Environmental Engineer with specialized experience in pollution prevention and biological treatment techniques for remediation. Over eight years hazardous waste remediation consulting and contracting experience. Diverse background includes environmental science and engineering, regulatory compliance, management, teaching, presentation and writing skills.

PROFESSIONAL EXPERIENCE

WILKES UNIVERSITY, GEOENVIRONMENTAL SCIENCES AND ENGINEERING DEPARTMENT,

Wilkes Barre, PA (1997 - present)

Assistant Professor of Environmental Engineering

Instructor for Fundamentals of Soil Science, Solid Waste Management, Pollution Prevention, Hazardous Waste Management, Bioremediation, Fundamentals of Environmental Science, Environmental Policy and Environmental Health. Advisor to Environmental Engineering Senior Projects entitled: Evaluation of Natural Attenuation For Brownfields Development, Design for Water Conservation in the Lodging Industry and Design of Alternative Fuels Shuttle Bus System; and Environmental Science Senior Projects entitled: Performance Evaluation of Constructed Wetlands for Acid Mine Drainage Treatment, and Evaluation of the Microbiology of Solomon's Creek.

DUPONT ENVIRONMENTAL REMEDIATION SERVICES (DERS), Wilmington, DE (1995-1996)

Senior Environmental Engineer

Was responsible for natural and enhanced bioremediation site assessments, system design, implementation, regulatory compliance, technical consulting and project oversight (chlorinated solvent, nitrogen-substituted aromatic, and petroleum hydrocarbon contaminated soil and groundwater). Supported site evaluation and system design of constructed wetlands for treatment of landfill leachate; cost-estimation and conceptual design of groundwater pump-and-treat system; and remedial alternative analysis for Superfund project.

GROUNDWATER AND ENVIRONMENTAL SERVICES (GES), INC. Wall, NJ (1993 - 1995)

Program Manager, Senior Engineer, Bioremediation Services

Coordinated management and implementation of bioremediation projects for all GES offices. Duties included the technical management and project engineering of process systems and treatability studies for the biological treatment of petroleum hydrocarbon contaminated soil and groundwater. Included site assessment, system design, monitoring program design, report preparation, regulatory reviews for compliance, statistical data analysis, technical staff direction, sampling activities, project cost estimating / scheduling / monitoring and environmental permitting.

OHM REMEDIATION SERVICES CORP., Trenton, NJ (1989 - 1993)

Project Engineer

Designed, implemented and managed bioremediation projects located in OHM's Northeast Region. Provided support to other remedial projects being performed at OHM which included proposal writing; project scoping, estimating and scheduling; preparation of work-plans, quality assurance plans, project operation plans, and sampling plans; due-diligence investigations; site assessments; and feasibility studies.

DREXEL UNIVERSITY, DEPARTMENT OF CIVIL AND ARCHITECTURAL ENGINEERING,

Philadelphia, PA. (Spring Semester 1994, Fall Semester 1995, Spring Semester 1996).

Adjunct Assistant Professor

Instructor for Water, Wastewater and Hazardous Waste Treatment System Design I and III.

UNIVERSITY OF RHODE ISLAND, DEPARTMENT OF MICROBIOLOGY, Kingston, RI (1982-1983).

Research Assistant III

Technical supervisor on a research effort funded through the EPA's Office of Innovative Research designed to investigate the use of certain bacterial groups as indicators of nutrient pollution (eutrophication) of freshwaters. Responsibilities included management of the laboratory as well as organization of the research efforts of three technicians.

EDUCATION

Ph.D., Civil Engineering, Drexel University, Philadelphia, PA. (1989)

Area of Concentration: Environmental Engineering.

Subject of Dissertation: Design Considerations For Aerobic Fixed-Film Microbiological Remediation of Contaminated Waters.

M.S., Civil Engineering, Drexel University, Philadelphia PA. (1986)

Area of Concentration: Environmental Engineering.

Subject of Thesis: The Effects of Water Quality Parameters on Coliform Detection by Clark's Presence-Absence Test.

M.S., Microbiology, University of Rhode Island, Kingston, RI. (1982)

Area of Concentration: Environmental Microbiology.

Subject of Thesis: *Acinetobacter calcoaceticus* as a Potential Indicator of Limnetic Water Quality.

B.S., Biological Science, Drexel University, Philadelphia, PA. (1980)

HONORS

1993, 1995 Marquis Who's Who in Science and Engineering

1991 OHM Award for Technical Excellence

1988-1989 Steven Giegerich Memorial Scholarship, Civil Engineering Department, Drexel University.

1988-1989 United States Environmental Protection Agency National Network for Environmental Management Studies Fellowship.

1987-1988 S.J. Leonard Teaching Assistant Award, Civil Engineering Department, Drexel University.

1978-1980 Dean's List, Drexel University.

PROFESSIONAL REGISTRATION

Registered Professional Engineer, Pennsylvania.

SPECIALIZED TRAINING

OSHA 40 HOUR Site and Safety Training

OSHA Supervisor Training

ENSYS Immunoassay Field Screening Methods

Pennsylvania Department of Environmental Protection (DEP) Act 190 P2/E2 Site Assessment Training

ANSI-RAB ISO 14000 36 Hour Lead Auditor Training Course – Certificate No: 173

PROFESSIONAL AFFILIATIONS

American Society for Civil Engineers (ASCE)

American Society for Microbiology (ASM)

National Groundwater Association (NGWA)

American Society for Engineering Education (ASEE)

American Chemical Society (ACS)

Northeast Pennsylvania Pollution Prevention Roundtable

Member, Advisory Board Pennsylvania Environmental Council

Judge, 1998, 1999, Pennsylvania DEP Environmental Excellence Awards

PUBLICATIONS / ABSTRACTS / PRESENTATIONS

- Moyer, B., M.A. Troy, H.A. Minnigh and W.O. Pipes. 1985. Transit, Storage and Delayed Effects on Coliform Detection by Clark's P-A Test. Abstract ASM National Meetings. Las Vegas, NV.
- Pipes, W.O., H.A. Minnigh, B. Moyer and M.A. Troy. 1986. Comparison of Clark's P-A Test and the MF Method for Coliform Detection in Potable Water Samples. *Applied and Environmental Microbiology*. 52:439-443.
- Troy, M.A., H.A. Minnigh, B. Moyer, W.O. Pipes. 1986. The Effects of Water Quality Parameters on Coliform Detection by Clark's P-A Test. Abstract ASM National Meetings. Washington D.C.
- Pipes, W.O., M.A. Troy and H.A. Minnigh. 1986. Empirical Evaluation of Present and Possible Future Microbiological MCL Rules. Abstract A.W.W.A. National Meetings. Denver, CO.
- Pipes, W.O., K. Mueller, B. Moyer and M.A. Troy and H.A. Minnigh. 1987. Frequency of Occurrence Monitoring of the Microbiological Quality of Water Distribution Systems. *Journal of the American Water Works Association*. 79:11:59-63.
- Troy, M.A., H.A. Minnigh and W.O. Pipes. 1987. Aerobic Microbiological Remediation of Contaminated Ground Water. In Toxic and Hazardous Wastes. Proceedings of the Nineteenth Mid-Atlantic Industrial Waste Conference. Edited by J.C. Evans. Technomic Publishing Co., Inc., Lancaster, PA. pp. 524-537.
- Troy, M.A. and W.O. Pipes. 1989. Design Considerations for Fixed-Film Aerobic Microbiological Degradation of Hazardous Wastes. In Third International Conference on New Frontiers in Hazardous Waste Management, Proceedings. September 10 - 13, 1989. Pittsburgh, Pennsylvania. United States Environmental Protection Agency. Risk Reduction Laboratory, Cincinnati, OH. EPA/600/9-89/072.
- Troy, M.A., B. P. Greenwald, S.W. Berry, T. Price, P. Woodhull and D.E. Jerger. 1990. Biological Land Treatment of Diesel Fuel Contaminated Soil, A Case Study. In Hazardous and Industrial Wastes. Proceedings of the Twenty-second Mid-Atlantic Industrial Waste Conference. Edited by Joseph P. Martin, Shi-Chieh Cheng and M.A. Susavidge. Technomic Publishing Co., Inc., Lancaster, PA. pp. 425-437.
- Troy, M.A. S.R. McGinn, B. P. Greenwald, D.E. Jerger and L.B. Allen. 1992. Bioremediation of Diesel Fuel Contaminated Soil at a Former Railroad Fueling Yard. In Contaminated Soils - Diesel Fuel Contamination. Edited by Paul T. Kostecki and Edward J. Calabrese. Lewis Publishers. Chelsea, MI. pp. 63-80.
- Essel, A.A and M.A. Troy. 1992. Information Requirements for the *In situ* Biological Treatment of Petroleum Hydrocarbon Contaminated Soils. In Hazardous and Industrial Wastes. Proceedings of the Twenty-Fourth Mid-Atlantic Industrial Waste Conference. Edited by Brain E. Reed and William A. Sack. Technomic Publishing Co., Inc., Lancaster, PA. pp.179 -196.
- Troy, M.A. and D.E. Jerger. 1992. Bioremediation of Diesel Fuel Contaminated Soil. Presented at the American Chemical Society's IE&C Special Symposium, Emerging Technologies for Hazardous Waste Management. Atlanta, GA. September 21-25, 1992.
- Troy, M.A. and D.E. Jerger. 1992. Biological Land Treatment of Diesel Fuel Contaminated Soils. Presented at the Mid-Atlantic Air and Waste Management Association Meeting. Atlantic City, NJ. October 1, 1992.
- Troy, M.A. and W. O. Pipes. 1993. Secondary Removal of Chlorophenolic Contaminants from Water. *International Journal of Environment and Pollution: Policy, Science and Engineering*. 3:4:233-249.

- Troy, M.A., E.W. Blonar and D.E. Jerger. 1993. Assessing Biological Land Treatment of Petroleum Hydrocarbon Contaminated Soils. Presented at the Water Environment Federation's Specialty Symposium: The Development of Soil, Sediment and Groundwater Cleanup Standards for Contaminated Sites. How Clean is Clean? Washington, D.C. January 10 - 13, 1993.
- Troy, M.A. and J.L. Brown. 1993. Soil Remediation in Railroad Yards - How Clean is Clean? In Principles and Practices for Diesel Contaminated Soils. Volume III. Edited by P.T. Kostecki, E.J. Calabrese and C.P.L. Barkan. Amherst Scientific Publishers. Amherst, MA. pp. 79-88.
- Troy, M.A. and D.E. Jerger. 1993. Evaluation of Laboratory Treatability Study Data for the Full-Scale Bioremediation of Petroleum Hydrocarbon Contaminated Soils. Presented at Applied Bioremediation 93'. October 25-26, 1993. Fairfield, NJ.
- Troy, M.A. and D.E. Jerger. 1994. Matrix Effects On The Analytical Techniques Used To Monitor The Full-Scale Biological Land Treatment Of Diesel Fuel-Contaminated Soils. In Hydrocarbon Remediation. Edited by R.E. Hinchee, B.C. Alleman, R.E. Hoeppe, and R.N. Miller. Lewis Publishers. Boca Raton, FL. pp. 343 - 346.
- Troy, M.A., S.W. Berry and D.E. Jerger. 1994. Bioremediation of Diesel Fuel-Contaminated Soil; Emergency Response Through Closure. In Bioremediation - Field Practice. Edited by P. Flathman, J. Exner and D. Jerger. Lewis Publishers, Chelsea, MI. pp. 145-160.
- Troy, M.A., L.B. Allen and D.E. Jerger. 1994. Bioremediation of Petroleum Contaminated Soils at Railroad Facilities. In Remediation of Hazardous Waste Contaminated Soils. Edited by D.L. Wise and D. J. Trantolo. Marcel-Dekker, Inc. New York, NY. pp. 227-243.
- Troy, M.A. 1994. Bioengineering of Soils and Groundwaters. In Bioremediation. Edited by K.H. Baker and D.S. Herson. McGraw Hill Book Co. New York, NY. pp. 173-202.
- Troy, M.A., K.H. Baker and D.S. Herson. 1995. Evaluating Natural Attenuation of Petroleum Hydrocarbons: How Much Information is Needed? In Intrinsic Bioremediation. Edited by R.E. Hinchee, J.T. Wilson and D.C. Downey. Battelle Press. Columbus, OH. pp. 85-90.
- Maresco, V.S., A. Kearns, T.R. Byrnes, D.J. Bender and M.A. Troy. 1995. Evidence For Natural Attenuation Of BTEX After Termination Of A Groundwater Pump-And-Treat System - A Case Study. In Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Groundwater: Prevention, Detection and Remediation Conference. Nov. 29 - Dec. 1, 1995. Houston, TX. National Groundwater Association. Dublin, OH. pp. 509-525.
- Swindoll, C.M. and M.A. Troy. 1996. Natural and Enhanced Bioremediation Of Chlorinated Compounds. Presented at the I&EC Special Symposium. American Chemical Society. Birmingham, AL. Sept. 9-12, 1996.
- Troy, M.A. and C.M. Swindoll. 1996. Assessment Of Intrinsic Bioremediation of Chlorinated Hydrocarbons at Several Industrial Facilities. Presented at the U.S. EPA Symposium on Natural Attenuation of Chlorinated Organics in Groundwater. Dallas, TX. Sept. 11-13, 1996. EPA/540/R-96/509.
- Swindoll, C.M. and M.A. Troy. 1996. Demonstrating Intrinsic Bioremediation Potential of Chlorinated Aliphatic Hydrocarbons. In Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Groundwater: Prevention, Detection and Remediation Conference. Nov. 13-15, 1996. Houston, TX. National Groundwater Association. Dublin, OH. pp. 383-398.
- Perkins, R.E., C.M. Swindoll and M.A. Troy. 1997. Bioremediation Evaluation of Nitroaromatic and Aromatic Amine Contaminated Sediment. Presented at the 1997 Battelle Fourth International Symposium on In Situ and On Site Bioremediation. April 28 - May 1, 1997. New Orleans, LA.
- Baker, K.H., M.A. Troy and D.S. Herson. 2000. Detection and Occurrence of Indicators and Pathogens in Water. *Water Environment Research Literature Review*. September/October 2000.

Wilkes University

News

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Wilkes University Welcomes New Faculty Members

WILKES-BARRE-Wilkes University welcomes fourteen professionals who recently joined the Wilkes faculty family. The new faculty members include: Dr. Marleen Troy, Ms. Judy Reishtein, Dr. Nicole Sparano, Dr. Rebecca Sutherland Borah, Dr. Hieu Tran, Dr. Ghassan Ibrahim, Dr. Wendi McKinzie, Dr. Brian Whitman, Dr. S. Thomas Abraham, Mr. James Culhane, Mr. Cliff Jernigan, Dr. William VanDerSluys, Ms. Amy Liebermann, and Dr. Abraham Wender.

Dr. Marleen Troy joins Wilkes University as an Assistant Professor of Environmental Engineering. She received her Bachelors, Masters and Ph.D. from Drexel University and earned a second Masters degree from the University of Rhode Island.

Ms. Judy Reishtein, received both her Bachelors and Masters degrees from Wilkes University. She joins the Wilkes faculty as a Visiting Assistant Professor of Nursing.

Dr. Nicole Sparano holds the title of Assistant Professor of Pharmacy Practice (Primary Care). She received her Pharmacy degree from Medical

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FIRST ADD--WIKES UNIVERSITY WELCOMES NEW FACULTY MEMBERS

University of South Carolina and her Bachelor of Science degree from Rutgers University.

Dr. Rebecca Sutherland Borah received her Ph.D. from Southern Illinois University. In addition to her Ph.D. she obtained both her Masters and Bachelors degrees from Northeast Missouri State University. She joins Wilkes University as Director of the Writing Center and as an Assistant Professor of English.

Dr. Hieu Tran has been named Assistant Professor of Pharmacy Practice (Cardiology). He received his Pharmacy and Bachelors degrees from the Philadelphia College of Pharmacy Science.

Dr. Ghassan Ibrahim will be a Visiting Associate Professor of Electrical Engineering. He received his Ph.D. from North Carolina State University and his Bachelor of Science degree from the University of London, England, United Kingdom.

Dr. Wendi McKinzie received both her Pharmacy and Bachelors degrees from the St. Louis College of Pharmacy. She joins Wilkes University as an Assistant Professor of Pharmacy Practice (Critical Care).

Mr. Brian Whitman received his Masters and Bachelors degrees from Michigan Technological University. He holds the title of Assistant Professor of Environmental Engineering. Whitman is currently working on his final dissertation for his Ph.D. from Michigan Tech.

Dr. S. Thomas Abraham received his Pharmacy degree from East Tennessee State University, his Bachelor of Science degree from Mars Hill College and his Associate of Science degree from Chowan College. He joins Wilkes University as an Assistant Professor of Pharmaceutical Science.

Mr. James Culhane received his Bachelor of Arts degree from

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SECOND ADD--WILKES UNIVERSITY WELCOME NEW FACULTY MEMBERS

Washington and Jefferson College. He is currently working on his final dissertation for his Pharmacy degree from West Virginia University.

Culhane joins the University Faculty as an Assistant Professor of Pharmaceutical Science (Pharmacology).

Mr. Cliff Jernigan received his Bachelor of Arts degree from The City College of New York, his Master of Arts degree from Duquesne University and is currently working on his final dissertation to obtain his Ph.D. from Penn State University.

Dr. William VanDerSluys joins the Wilkes Faculty as an Associate Professor of Chemistry. He received his Ph.D. from Indiana University of Inorganic Chemistry and his Bachelor of Science degree from State University of New York.

Ms. Amy Liebermann received her Master of Arts degree from Yale University and her Bachelor of Arts degree from Stanford University. She joins the Wilkes Faculty as a Visiting Assistant Professor of Music.

Dr. Abraham Wender joins Wilkes University as a Visiting Assistant Professor of Math/Computer Science. He received his Ph.D. from the State University of New York and both his Master of Science and Bachelor of Science degrees from Tel Aviv University.

Wilkes University welcomes all newly hired faculty to the Wilkes Family.

Photo:

Row 1 L-R: Dr. J. Michael Lennon, vice president for Academic Affairs; Dr. Marleen Troy, assistant professor of Environmental Engineering; Ms. Judy

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THIRD ADD--WIKES UNIVERSITY WELCOMES NEW FACULTY MEMBERS

Reishtein, visiting assistant professor of Nursing; Dr. Nicole Sparano, assistant professor of Pharmacy Practice (Primary Care); Dr. Christopher N. Breiseth, president of Wilkes University.

Row 2 L-R: Dr. Rebecca Borah, assistant professor of English & director of Writing Center; Dr. Hieu Tran, assistant professor of Pharmacy Practice (Cardiology); Dr. Ghassan Ibrahim, visiting associate professor of Electrical Engineering; Dr. Wendi McKinzie, assistant professor of Pharmacy Practice (Critical Care).

Row 3 L-R: Mr. Brian Whitman, assistant professor of Environmental Engineering; Dr. S. Thomas Abraham, assistant professor of Pharmaceutical Science; Mr. James Culhane, assistant professor of Pharmaceutical Science (Pharmacology); and Mr. Cliff Jernigan, associate professor of Communications.

Missing from Photo: Dr. William VanDerSluys, associate professor of Chemistry; Ms. Amy Liebermann, visiting assistant professor of Music; Abraham Wender, visiting assistant professor of Math/Computer Science; and Dr. Ahmed Tawfik, assistant professor of Math/Computer Science.

Wilkes program wins state environmental award

By Tom Venesky
Citizens' Voice Staff Writer

A Wilkes University program that brings together the environment and business was recently recognized by the state.

Wilkes' Small Business Development Center and the GeoEnvironmental Sciences and Engineering Department were selected for the 2002 Governor's Award for Environmental Excellence.

The award is for the work performed by students in the SBDC's Environmental Management Assistance Program, which offers small businesses a format to become more efficient and environmentally friendly.

Ruth Hughes, director of the SBDC, said each semester a small business is selected for the program and students develop an environmental management system for the business.

She said the award was given to the 2001 program, which used Nardone Bros. Bakery in Hanover Township as its client.

"The SBDC offers business consultation services using our staff, the EMAP program and

university resources," Hughes explained. "This partnership with the students is a part of that."

CV 10-8-02
'WE'RE
THRILLED FOR
THE
RECOGNITION
THIS VALUABLE
PROGRAM HAS
RECEIVED.'
RUTH HUGHES
SBDC DIRECTOR

ness to institute an environmental management system.

The system takes in to account policy, day-to-day operations, employee involvement and industry standards.

"Besides being good for the environment, this can save a business money," Troy said.

"For example, with waste reduction we review office paper use, double-sided copies and

packaging materials.

"This gives the students a chance to see the actual operation and a more realistic perspective in to the program," she added.

The program was initiated in 2000, and to date, two businesses have participated for one semester a year. It allows Wilkes students to receive hands-on experience while businesses benefit by increasing efficiency and addressing environmental compliance issues.

Hughes said clients must be small businesses to participate.

"This is meant for the small business person. They can realize tremendous cost savings in a variety of ways by becoming more efficient," she said. "We're thrilled for the recognition this valuable program has received."

In addition to the Governor's Award, the SBDC and GSE received Pollution Prevention plaques from David Hess, secretary of the state Department of Environmental Protection, for their work with the Nardone Bros. Bakery.

tvenesky@citizensvoice.com