



# STARK STATE COLLEGE

## Environmental Awareness and Regulation Source

*Environmental, Health and Safety Newsletter*

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### Department Chair

Greetings Environmental Health and Safety Students! Spring is just around the corner and you know what that means. Tornado season is nearly upon us. In preparation for this I have recently purchased a Midland Digital Weather Alert Radio. It activates on the National Weather Service alerts. Its sole function is to alert my family to potential tornados. It has a very loud weather alert siren that sounds with weather alerts. This is especially useful for late night tornado watches and warnings when most people are sleeping. This should be a very handy safety tool that can be purchased for a relatively inexpensive price. My model was purchased new on eBay for approximately \$35.00 total.

We are still very pleased with the continual growth and interest of students and business and industry professionals in our Environmental Health and Safety program. We are always looking for additional suggestions for continual improvement for existing programs and courses as well as new ideas for additional EH&S courses, certificates, and programs. Please feel free to contact me at [dball@starkstate.edu](mailto:dball@starkstate.edu) or Bob Collins [rcollins@starkstate.edu](mailto:rcollins@starkstate.edu) with any ideas or suggestions.

Please remember to register early for summer classes!

Donald M. Ball  
Director of Apprenticeship & Industrial Training

### Get to Know Your Faculty

Bill Courser has been teaching Industrial Processes and Pollution Control (ENV222) and Environmental Special Projects (ENV236). He started his EHS career in 1971 at the Southwest Florida Water Management District, where he set

up a multi-disciplinary environmental section, including hiring, budgeting, and laboratory functions. He then helped lead the District through a time of growth and change as Resource Regulation Department Director with 90 staff and \$5 million budget. He was active in the District Speaker's Bureau and also dealt with print and broadcast media. Additionally, he was qualified as an expert witness at administrative hearings, before a public agency board and at a pre-trial hearing. Concurrently with this, Bill was an Adjunct Faculty Member at Pasco-Hernando Community College from 1980-1985.

After moving to Ohio, Bill worked first at a small consulting firm, providing consultant services to over 70 industries (metal working, plastic, construction) in regard to environmental and OSHA regulations. He trained over 5,000 hourly and management employees on OSHA hazard communication and provided over 50 hazard communication programs. He has visited TSD facilities in 5 states and worked on UST regulations including tank removal, corrective action reports and tank management plans for both petroleum and solvent tanks, and also assisted with RI/FS work and closure plans. He also developed OSHA Asbestos training for a brake factory.

In 1989, Bill moved on to FOSECO Management, Inc (eventually a unit of Burmah-Castrol) where he became a Corporate Environmental Manager. While at FOSECO, he directed multi-media, multi-state regulatory compliance activities at eight different facilities, 7 remediation project sites (including asbestos abatement) and 10 superfund sites. His work included preparation of appropriate filings and negotiations with regulatory agencies at various levels and development of solutions to environmental problems. He also developed Environmental Control Instructions and Environmental Management System Manuals (ISO 14000 component) for active facilities and audited the facilities against those policies. He also trained personnel in compliance, which

includes safety, and developed Green product documentation.

Bill enjoys outdoor activities, fishing, botany, and bird watching (he is a Past-President of the Florida Ornithological Society), and has seen how proper stewardship of our natural resources can help provide solutions to the various environmental problems the world faces. He has also published articles in the scientific and environmental literature.

Bill has been an adjunct instructor with SSCT for five years. He also operates a small EHS consulting firm. It is rewarding to him to know SSCT provides students the necessary skills to help solve current and future environmental problems.

## **EPA Approval**

The Certification Unit of the Ohio Environmental Protection Agency (OEPA) has approved all of the 37 new water / wastewater operator training courses for continuing education contact hours. In addition, all of the existing EH&S Technology program courses, including the 40-Hour HAZWOPER course, have been similarly approved.

As you may know, OEPA provides tests and certifications for Water and Wastewater Treatment Plant Operators throughout Ohio. Once certified, these operators must complete 8 to 24 contact hours of acceptable continuing education training during each two (2) year period to retain their certification.

With these approvals, the 37 new water / wastewater courses and 10 existing EH&S Technology program courses can be used to:

- Complete a one-year Certificate of Competence in either Water or Wastewater operations. When combined with necessary experience, this will make it possible for students to take and pass the Level I certification examination.
- Satisfy continuing education requirements to retain an existing water / wastewater operator certificate.
- Provide additional technical electives for existing EH&S Technology students.

Data obtained from the American Water Works Association (AWWA) shows that Level I operators can make between \$32,749 and \$45,260 per year. At the time that this newsletter was being prepared, there were 25 job vacancies for Ohio EPA certified operators posted on the [Operator Training Committee of Ohio](#) web site.

## **New Courses**

Three (3) new courses have been developed for use as technical electives in the EH&S Technology program. These are:

- Introduction to Facility Operations;
- Introduction to Facility Maintenance; and
- Program-Specific EH&S Training.

The Introduction to Facility Operations course combines an introduction to basic unit operation commonly found in manufacturing and distribution facilities with program-specific EH&S training courses. It is a four (4) credit course intended to serve as a practical introduction for students to operations they are likely to see in real-world applications.

The Introduction to Facility Maintenance course combines an introduction to general maintenance operations and non-destructive testing programs found in manufacturing and distribution facilities with program-specific EH&S training courses. It is a four (4) credit course intended to serve as a practical introduction for students to maintenance activities they are likely to encounter in real-world applications.

The Program-Specific EH&S Training course provides students with a generalized introduction to EH&S laws and regulations governing specific facility operations. This course consists of 13 modules including;

- Hazard Communication;
- Bloodborne Pathogens;
- Hazardous Energy Control (i.e., Lockout / Tagout);
- Powered Industrial Truck Operations;
- Crane Safety;
- Personal Protective Equipment;
- Hearing Conservation;
- An Overview of Process Safety Management;
- Respiratory Protection;
- Confined Space Entry;

- Fire Safety;
- Standard First Aid and Cardio Pulmonary Resuscitation; and
- Hot Work.

Each training module ranges from 2 to 16 contact hours. Students can select any number of modules to include in this course resulting in classes worth one (1) to four (4) credit hours.

All three (3) courses can be taken as for-credit courses using Independent Study courses within the Engineering Technology series of special courses (i.e., ETD201 – ETD204).

## **Job Hunting**

As you near the end of your time here at Stark State College of Technology and approach graduation, what steps should you take to ensure that you will have a job when you graduate? Here are some helpful hints.

**Start Early** – Don't wait until your last semester to get started. Start no later than the semester before you will be graduating. If you will be graduating at the end of spring semester, start your job search early in the fall semester before.

**Decide What You Want to Do** – Start by deciding what kind of EH&S job you want. At present, approximately two-thirds of our graduates choose to do field work with local, regional and national consulting firms. These jobs include field sampling and sub-surface investigations. Of the remaining one-third, half choose to work in manufacturing and distribution facilities as EH&S program managers / coordinators. The remaining half chooses to work in local, regional and national laboratories performing water and other analyses.

**Prepare Resume(s)** – Prepare a written resume that addresses the specific EH&S job you are trying to get. If you wish to explore more than one possible job opportunity, you should prepare more than one (1) resume that addresses each specific job you are trying to find. The Career Services staff (Room S100 in the Student Center) can be very helpful in preparing your resume(s). Please feel free to contact them to develop a positive and effective resume for each type of job you will be seeking.

**Mock Interviews** – You should always remember that with each employer contact, whether in writing or in person, you are trying to

sell yourself. If you keep this in mind and prepare to put your best foot forward in every employer contact, you will maximize your likelihood of success. The Career Services office (Room S100 in the Student Center) offers periodic mock interviews with area business staff. Please avail yourselves of the opportunity to sharpen your interview skills.

**Network Effectively** - The largest percentage of jobs found are not found through job boards, news media postings or internet services. Most jobs are found through networking. To this end, students should avail themselves of opportunities to attend the meetings of local chapters of national trade associations. The local chapters of the American Society of Safety Engineers and American Industrial Hygiene Association welcome student participation. You will find no greater opportunity to meet and interact with local EH&S community leaders. If there are suitable jobs available locally, they will be among the first to know about them. Talking with them regularly will ensure that you find out about these job opportunities as well.

**Seek Out Potential Opportunities** – As you enter your last semester of study, all of the preceding steps should be completed. Your last semester of study should be dedicated to finding specific opportunities that interest you. Sources for finding potential EH&S employment opportunities include:

- The Career Services office located in Room S100 of the Student Center;
- The College Central Network accessible through Stark State's Career Services web page;
- Networking with local EH&S community leaders through trade association meetings;
- Internet job boards; and
- Local newspapers.

### **On-Line Job Board (College Central Network)**

Approved students and alumni are eligible to use the Stark State College online job board after completing a registration process. After registration, students/graduates will be able to search jobs and e-mail a resume to employers. Employers will also be able to search resumes and contact candidates directly for job opportunities. All students are encouraged to meet with a career services representative to

learn more about the College Central Network. The hyperlink for College Central is <http://www.collegecentral.com/starkstate/>. The Career Services office maintains a Web page with hyperlinks to multiple job search sites. It can be accessed through the Stark State College home page.

If you start early and always put your best foot forward, you will succeed in finding the job you want.

**Remember:** There are many resources offered by Stark State College to support you in your development from student to successful graduate. Take advantage of these opportunities.

## **Environmental Club**

The Environmental Club successfully reorganized during spring semester. Officers elected during their first meeting are:

- President – Kevin Sapper;
- Vice President – Robert Keller; and
- Secretary – Eric Oldroyd.

Early goals of the newly reorganized Environmental Club are to:

- Develop a web page for the Environmental Club to be accessible from the Stark State web site. Club members have completed initial work on this web page. Interested students should check it out at <http://www.starkstate.edu/environmentalclub/>.
- Obtain funding for the purchase and installation of campus beautification projects. Club members obtained \$250 in funding from the Student Affairs Committee for the purchase and installation of animal feeders around campus.

Students interested in supporting Environmental Club activities should contact a club officer to find out about the date, time and location of the next Environmental Club meeting. If you are interested in participating in this exciting club, please contact [Bob Collins](#).

## **Recycling Continues**

As the one-year anniversary of recycling at Stark State draws near, it is important to look back at

how far we've come before looking forward to where we have yet to go. In the initial weeks of recycling operations, it took several weeks to fill the outside dumpster. More recently, we have been filling the outside dumpster each week making weekly pick-ups necessary. At this pace, the revenue received from recycling combined with the savings in waste disposal costs (1 less dumpster to be landfilled each week) has risen to approximately \$1,500 per year. This amount of recycling saves us approximately 800 trees, 18,000 gallons of oil, 140 cubic yards of landfill space, 187,000 kW of electricity and 328,000 gallons of water.

Even with these impressive numbers, there is still much progress to be made. The United States leads the way in recycling among developed nations by recycling approximately 32.1% of solid waste generated. At present, Stark State only recycles approximately 18.8% of all solid wastes. This is only a little over half of the national recycling rate. As a result, we will be looking to expand this program in the months ahead. At present, recycling receptacles are located mostly in staff and faculty areas limiting recycling to only those areas.

In the weeks and months ahead, we will be looking for ways to expand recycling into student areas. This effort will be helped with the approved hiring of a part-time Environmental, Health and Safety Student Assistant starting in spring semester. This student will be paid under the Federal Work Study Program for up to 10 hours per week. Their primary responsibility will be to assist in management of the recycling program.

## **Instructors – Spring 07**

I want to thank the following EH&S instructors for their dedicated teaching efforts to provide a quality EH&S program to our students during spring 2007.

ENV121– *Regulations & Compliance*: Dominic Nardis (from The Timken Co.)

ENV221 - *OSHA 40-Hr Hazwoper* & ENV230 - *OSHA 8-Hr Refresher*. Team taught by Bob Collins and Jennifer Zylko (8-Hour).

ENV225 - *Solid & Hazardous Waste Sampling*: Bill Ullom (from Vadose Environmental Consultants).

ENV226 - *Water Sampling, Analysis and Control*: Bob Collins (New Instructor and EH&S Coordinator)

ENV228 - *Health & Safety*: Team taught by John Pflaum and Giulio Gabriele (from Air Braking Systems Corporation)

ENV236 – *Health & Safety Special Projects*: Bill Courser

## **Instructors – Summer 07**

ENV221 - *OSHA 40-Hr Hazwoper*: Team taught by Bob Collins and Jennifer Zylko.

ENV230 - *OSHA 8-Hr Refresher*: Jennifer Zylko

## **Instructors – Fall 07**

ENV221 - *OSHA 40-Hr Hazwoper & ENV230 - OSHA 8-Hr Refresher*. Team taught by Bob Collins and Jennifer Zylko (8-Hour).

ENV222 – *Industrial Processes and Pollution Control*: Bill Courser.

ENV223 – *Basic Geology / Hydrology*: Bill Ullom (from Vadose Environmental Consultants).

ENV224 – *Air Sampling, Analysis and Control*: Bob Zahirsky (from Canton City Health Department).

## **Career Information** **[EH&S Technology Home Page](#)**

**Bachelor of Science Completion Programs (Articulation Agreements with 4-year colleges):** Stark State College has articulation agreements with two 4-year colleges. That means that students with an A.A.S degree in EH&S Technology can pursue their bachelor of science (B.S.) at those schools with minimal, if any, bridge work.

- *University of Akron* – B.S. in Emergency Mgmt. The University of Akron offers a B.S. completion program in Emergency Management through their Public Health Division in the Community and Technical College. [For more information, visit their website](#)
- *University of Findlay* – B.S. in Environmental Mgmt. The University of Findlay offers a B.S. completion program in Environmental Mgmt. Most

of their courses can be taken on-line. [For more information, visit their website](#)

We are currently in discussions with a number of other colleges that may lead to new Articulation Agreements with Youngstown State University, Ohio University in Athens, Ohio and the Rochester Institute of Technology (RIT) in Rochester, New York.

### **What Does an Environmental Technician Do?**

The Environmental Technician conducts field investigations, collects samples, and performs laboratory tests to obtain data. The technician analyzes and interprets data, and communicates the results in written and oral forms for use by environmental, engineering and scientific personnel in determining sources and methods of controlling pollutants in the environment.

### **What Does a Safety and Health Technician Do?**

- The Safety and Health Technician recognizes, evaluates, and controls workplace hazards through employee education and engineering practices to ensure a safe and healthy work environment.

### **Emerging Trends at the Environmental Technology Level**

- Indoor Air Quality and Microbial Support Services
- Ergonomics
- Nanotechnology and Ultrafine Particles
- Pollution Prevention and waste minimization
- Non-point source pollution control
- Movement away from regulations towards best business/management practices
- International standards such as ISO 14000/14001 environmental mgmt standards
- Treatment standards
- Innovative treatment technology
- Use of computerized mapping
- In-field sample analysis
- Watershed analysis
- Permitting

## Activities

**EnviroFun 2007** – Our sixth EnviroFun event will take place on March 22, 2007. The agenda has been firmed up and informational packets were mailed to interested parties in mid January. EH&S students will be needed to man our exhibit space and help in other ways. Students who wish to contribute should contact Bob Collins at Ext. 4014 or [rcollins@starkstate.edu](mailto:rcollins@starkstate.edu).

## News

**Employers/Job Titles of Stark State Graduates**  
**Advanced Analytics Labs/Lab Technician**  
**Aircraft Braking Systems/Environmental Engineering Assistant**  
**American Environmental Group/Operations Maintenance**  
**BJAAM Environmental, Inc/Field Technician**  
**City of Canton/ Lab Technician**  
**Clayton Group Services/Environmental Technician**  
**IT Corporation/Landfill Gas Technician**  
**JR Wheel/Safety Manager**  
**Marathon Ashland Petroleum/EH&S Technician**  
**PEL Technologies/Lab Technician**  
**Roadway Express/No job title given**  
**Scanacon/Lab Technician/Research**  
**Strasburg Wastewater/Operator**  
**Summit Environmental/Lab Technician**  
**SunPro/Environmental Technician**  
**The IT Group/Environmental Data Manager**

## Students

**Graduating Class** – There were four (4) students scheduled to graduate after Spring Semester (2007). Graduating students are:

- Jill Burns;
- Christopher Monroe;
- Robert Rayman; and
- Kevin Sapper.

Please join us in congratulating this year's graduates.

**Undeclared Students** – If you are still undecided about a major, there is important career information in Environmental, Health and Safety Technology available under <http://www.starkstate.edu/div42022.htm> if you would like to pursue a challenging and rewarding career in EH&S Technology. If you would like to discuss an A.A.S. degree in EH&S and a B.S.

degree after Stark State College, just e-mail me at [rcollins@starkstate.edu](mailto:rcollins@starkstate.edu) to chat further about this long-standing and emerging field.

### **EH&S Major - Enrollment**

- Students enrolled in 2007 53
- Students enrolled in 2006 44
- Students enrolled in 2005 23
- Students enrolled in 2004 18
- Annual Enrollment Increase 24.8%

### **Number of students per class (Spring 2007)**

- ENV121: 14
- ENV225: 5
- ENV226: 5
- ENV228: 7
- ENV236: 6
- ENV221 & ENV230: 9

## Professional Organizations

National Registry of Environmental Professionals [www.nrep.org](http://www.nrep.org)  
Ohio Water Environment Association  
[www.ohiowater.org/owea](http://www.ohiowater.org/owea)  
Institute of Hazardous Materials Management  
[www.ihmm.org](http://www.ihmm.org)  
Environmental Organizations  
[www.webdirectory.com](http://www.webdirectory.com)  
EnviroLink  
[www.envirolink.org](http://www.envirolink.org)

## Useful EH&S Websites

National Safety Council [www.nsc.org](http://www.nsc.org)  
Occupational Health and Safety [www.osh.net](http://www.osh.net)  
National Environmental Health Association  
[www.neha.org](http://www.neha.org)  
Hazardous Materials Training and Research Institute [www.hmtri.org](http://www.hmtri.org)  
Community & College Consortium for Health & Safety Training [www.hmtri.org/ccchst\\_index](http://www.hmtri.org/ccchst_index)  
U.S. Environmental Laws  
[www.hmtri.org/ccchst/links/laws](http://www.hmtri.org/ccchst/links/laws)

## Contact Us

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