What is an Environmental Technician?

Environmental technology is a career field that utilizes the principles of science, engineering, communication, and economics to protect and enhance safety, health, and natural resources.

What is a *technician*? A technician is a person who applies scientific, technical, and communication skills and knowledge to specific tasks.

Three general categories of jobs environmental technicians perform are described below. For a more in-depth look at the many types of jobs environmental technicians perform, please see the Advanced Technology Environmental Education Center (ATEEC) website at http://www.ateec.org/



1. Environmental or Engineering Consulting Firms

Consulting firms provide environmental services for many different types of clients such as industry and government.

Often industries' hire consulting firms to perform the tasks listed above under "Industry." Often these are smaller firms who don't have a full-time environmental technician on staff.

Consulting firms often specialize in certain combinations of services. You can check the websites of different consulting firms to see the types of services different companies offer.

Environmental consulting firms provide many services such as:

Groundwater monitoring
Stream Restoration
Classification of wastes for RCRA approved disposal
Stack Testing for air emission compliance
Soil and surface water sampling and monitoring.
Under Ground Storage Tank (UST) evaluation.
Permit writing and consulting for air and water discharges, hazardous
waste paperwork

"Third Party" services, where required by law



If a company purchases new land, or plans changes in its facilities or processes, the Environmental Technician may be called upon for investigations and advice.

2. Industry

The environmental technician is primarily responsible for ensuring that the company is in compliance with all air, water, waste and other environmental regulations. This can involve

- inspections
- sampling wastes, water and soil,
- analyzing these materials, and/or
- filling out government paperwork,
- hiring consultants for specific jobs.

Often the job of Environmental Technician may involve doing double duty as an <u>Environmental Health</u> and Safety Manager.

3. Environmental Laboratory

Environmental laboratories are hired to analyze soil, air, water, and other types of samples for a wide variety of clients. The environmental technician may be involved in:

Preparing samples for analysis

> Performing quality control activities such as

Monitoring equipment and instrument operating ranges
Performing instrument system suitability
Collecting required control samples
Comparing results to performance standards
Plot control charts

Performing laboratory analyses

Following established methodology & equipment operating instructions
Preparing equipment, reagents and standards
Performing physical tests
Centrifuging or titrating samples
Performing quantitative measurements
Performing dilutions
Interfacing with computer
Performing plate counts



Computer Skills: Using computer software is often a part of an environmental technician's job. So, a Good working knowledge of general computer programs such as Word, PowerPoint, Excell, Access, etc. is important.

For more information about BCTC's Environmental Science Technology Program,

visit the EST web site at: http://www.bluegrass.kctcs.edu/natural_sciences/est/

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