

DELTA COLLEGE  
COUNSELING/ADVISING CAREER SERVICES  
**ENVIRONMENTAL TECHNICIAN**

Salary Range: \$24,540 - \$63,570 annually

Personal Interests: Interest in protecting the environment, attention to detail and an investigative mind

Work Environment: Indoors and outdoors, primarily multiple locations

**Description**

Environmental science technicians perform field tests to monitor environmental resources and determine sources of pollution. They collect samples of gases, soil, water and other materials for testing; may recommend remediation treatment to resolve pollution problems. Another title for this position is *Hazardous Waste Management Specialist*. They protect people and the environment by investigating the occurrence of hazardous waste, designing remediation (cleanup) plans, and cleaning up and disposing of hazardous waste.

Some of the important occupation-specific tasks environmental science technicians may perform include: collecting samples to conduct tests on pollutant levels; performing chemical and physical laboratory and field tests on collected samples to assess compliance with pollution standards; examining and analyzing material for presence and concentration of contaminants; weighing, measuring and analyzing collected sample particles to determine concentration of pollutants; and calculating amounts of pollutant in samples using formulas. Environmental technicians also determine the types of chemicals to use in destroying harmful organisms and removing impurities from purification systems. They set up equipment to collect pollutants from sites and record test data and prepare reports, summaries, and charts that interpret test results and recommend changes.

**Working Conditions**

Professional and technical workers usually work as part of a team in industry or government agencies. Those working in consulting, design, or research spend much of their time in offices or laboratories, which are comfortable, modern and well-equipped. Professionals often have management or supervisory responsibilities.

Work at industrial or cleanup sites often resembles heavy construction. Heavy equipment and hazardous wastes can create a dangerous work environment. Work may be done in hot, cold, or bad weather. Most workers in this industry work a 5-day, 40-hour week. However, when hazardous spills occur or deadlines approach, longer hours may be necessary. Management staff, unlike other workers who punch a time clock, may be on call 24-hours a day. Workers in this industry must travel to various job sites.

**Training, Other Qualifications**

With the successful completion of the associate degree program at Delta College, you can be prepared for employment as a hazardous materials technician, safety technician, solid waste technician, recycling technician, or as a team member in environmental consulting firms. Environmental engineers, pollution control chemists, staff toxicologists, soil engineers, hydrologists and hazardous-waste management specialists need at least a bachelor degree for entering these

occupations. Areas of expertise such as hydrology or subsurface hydrology may require a master or doctoral degree.

### **Job Outlook**

Nationally, employment of environmental science and protection technicians should grow as fast as the average; these workers will be needed to help regulate waste products; to collect air, water, and soil samples for measuring levels of pollutants; to monitor compliance with environmental regulations; and to clean up contaminated sites.

Job opportunities in Michigan are expected to grow faster than the average for all jobs. Most position openings will be due to rapid growth in the industry.

It is not known how many people work in the hazardous waste industry in Michigan. Michigan does have a larger share of these workers than most states because it has a special cleanup fund in addition to the federal funds. Industrial redevelopment has added to the number of sites which require cleanup. Almost all industries generate some waste, which require special handling and disposal.

### **Earnings**

Earnings of hazardous waste industry workers depend on education, experience, field of specialization, and job responsibilities. Engineering consulting firms and cleanup contractors usually pay more than government, but require more experience.

Nationally, earnings of environmental engineering technicians in May 2004 were \$38,550 annually.

In the state of Michigan, the average earnings for May 2006 were \$47,200 annually. Average earnings for selected areas in Michigan for May 2006 were:

<b>Area</b>	<b>Annual Average</b>
Ann Arbor	\$52,400
Detroit - Warren	\$46,830
Grand Rapids	\$49,510

### **Related Occupations**

Soil Scientists, Environmental Compliance Inspectors, Chemical Technicians, Occupational Health and Safety Specialists, Asbestos Workers, and Water/Wastewater Treatment Technicians and Specialists.

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Sources: Occupational Outlook Handbook, MI Occupational Information System, Delta College Catalog, The Occupational Information Network, and Encyclopedia of Careers and Vocational Guidance.

Career Center, D 132  
 Bay City/Saginaw: (989) 686-9072  
 Midland/Auburn: (989) 495-4000, Ext. 9072  
 Frankenmuth, Birch Run, Reese & Vassar: (989) 758-3400, Ext. 9072  
<http://www.delta.edu/careercenter>

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