

ENVIRONMENTAL TRAINING

PROGRAMS

IN

NEW ENGLAND

**United States
Environmental
Protection Agency
Region I**



ENVIRONMENTAL TRAINING

PROGRAMS

IN

NEW ENGLAND

U. S. ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND REGIONAL OFFICE, BOSTON, MASS.

ENVIRONMENTAL TRAINING PROGRAMS

NEW ENGLAND

Elaine E. Pickle

Karen A. Cioffi

Water Programs Manpower Office

Water Programs Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

John A. S. McGlennon

Regional Administrator

October 1976

There has been a great deal of interest in preparing people for employment in occupations directly related to the betterment of the environment. This publication has two objectives: one is to acquaint the reader with what is currently being done to train people in pollution control (water and wastewater treatment); the second objective is to provide guidance to those who might be interested in beginning a new pollution control training program.

Included is a list of high school, vocational school, undergraduate, and graduate programs in each state. We have also included federal training grants currently in operation, funded by the Environmental Protection Agency and the Comprehensive Employment and Training Act. For your convenience we have identified correspondence courses and self-paced instruction for water and wastewater treatment plant operators.

If you are interested in beginning a program to train water supply or wastewater treatment personnel, you can contact the Environmental Protection Agency, Region I, or your State Environmental Agency.

We sincerely hope that this publication will provide some assistance to you. It is our intention to update this reference on a yearly basis. Please feel free to offer any suggestions or information you would like to have included.

CORRESPONDENCE COURSES

<u>CORRESPONDENCE COURSES</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/ OR DEGREE</u>
Operation of Wastewater Treatment Plants	Dr. Kenneth Kerri Dept. of Civil Eng. California State Univ., 6000 Jay Street Sacramento, CA 95819	Estimated 100-150 hours Certificate
Operation & Maintenance of Waste Water Collection Systems	Dr. Kenneth Kerri Dept. of Civil Eng. California State Univ., Sacramento 6000 Jay Street Sacramento, CA 95819	Estimated 100-150 hours Certificate
Correspondence Course Manual for Wastewater Plant Operators	Clemson Correspondence 401 Rhodes Center Clemson University Clemson, S.C. 29631	Covers South Carolina Certification Levels A-D
Correspondence Course Manual for Water Plant Operators	Clemson Correspondence 401 Rhodes Center Clemson University Clemson, S.C. 29631	Covers South Carolina Certification Levels C&D
Supervisory Management in the Water/Wastewater Field	Self-Study Course Coordinator c/o Clark E. DeHaven Director of Executive Prog. 432 Eppley Center Michigan State University East Lansing, Michigan 48824	Certificate

CONNECTICUT

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/ OR DEGREE</u>
Environmental Safety & Health I,II	Fairfield University	Two semesters
Water Ecology (emphasis on water, wastewater, treatment systems, and drinking water)	Farmington High School	One course/day
Environmental Engineering(emphasis on water, air, soil, noise, and solid waste)	University of Hartford	Certificate after Bachelor of Science
Bachelor of Science in Civil Engineering	University of Hartford	Advance Eng. Bachelor's day or evening
Environmental Science & Tech. (emphasis on wastewater, water, air, environmental management, and solid waste)	Hartford Graduate Center	Master of Science
Wastewater Treatment Plant Oper. Training Course in Process Control Techniques	Connecticut Dept. of Environmental Protection Hartford	6 weeks EPA funded
Environmental Science (emphasis on air, hydrology, water, safety engineering)	Middlesex Community College Middletown	Associate in Science in ES
Environmental Quality(emphasis on air, water pollution)	Yale University New Haven	Bachelor in Engineering & Applied Science
Forestry & Env. Studies (management, water resources, and air)	Yale University New Haven	Ph.D
Chemical Engineering Technology (environmental science option)	Norwalk State Technical College	Associate in Science in ES

CONNECTICUT

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Ecology (emphasis on local analysis of water bodies, lab analysis, and problems with wastewater treatment and solid wastes)	Seymour Senior High School	½ year course day
Environmental Engineering (emphasis on land, air, water)	University of CT Graduate School at Storrs	Ph.D
Civil Engineering (emphasis on soil, water, wastewater, and solid wastes)	University of CT Graduate School at Storrs	Master of Science in CE Bachelor of Science in CE
Civil Engineering Technology	Waterbury State Technical College	Associate in Science in CE
Environmental Studies (includes water and air quality control)	University of New Haven West Haven	Bachelor of Science in ES Day or evening
Master of Science in Env. Studies (emphasis in water treatment, wastewater treatment, and air pollution)	University of New Haven West Haven	Master of Science in ES
Environmental Health Technology (solid waste, water pollution control, air pollution)	Northwestern CT Community College in Winsted	Associate in Science
School/Community Environmental Knowledge Workshop	Eastern CT State College Willimantic, CT	3 hours of graduate or undergraduate credit or audit one week/full time

MAINE

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Wastewater Treatment Plant Operator Training in Process Control Techniques	Maine Department of Environmental Protection Augusta	6 weeks
Environmental Control Technology (includes wastewater treatment, industrial waste treatment, and sanitary chemistry)	Eastern Maine Vocational Technical School Bangor	Associate in Applied Science
Environmental Problems (water, air, wastewater, energy)	Cony High School	Fifteen weeks/ evenings, adults
Environmental Studies Program (environmental problems, field ecology)	University of ME at Fort Kent	Bachelor of Science in ES
Environmental Studies	University of ME at Machias	Bachelor of Science in ES
Civil Engineering	University of ME at Orono	Bachelor of Science in CE
Conservation Courses on Land, Air, and Water	Oxford Hill High	Day courses
Wastewater Treatment Technology	Southern Maine Vocational Technical Institute New England Regional Waste Water Institute South Portland	9 month spec. wastewater oper. short courses/ mobile unit
Environmental Studies (consists of pollution control, lakes, streams)	Nasson College Springvale	Bachelor of Science; also in summers
Environmental Sciences (environmental pollution, environmental chemistry, water pollution)	Unity College Unity	Bachelor of Science in ES

MAINE

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/ OR DEGREE</u>
Environmental Planning	Unity College Unity	Associate in Applied Science
Environment Club	Waterville Senior High	extra curricular activity
Development and Implementation of Competency Based Modular Training	ME Wastewater Control Assn. Winthrop, ME	held at ME Voc. Tech. Schools in Auburn, Bangor, Waterville, Presque Isle, South Portland, Calais
Marine Science, Forestry, and Ecology on a 40 acre tract of land on the York River	York High School	Day

MASSACHUSETTS

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Civil Engineering(Environmental) with emphasis on air, ocean, wastewater, water, solid waste	University of Mass. Amherst	Bachelor of Science/day
Civil Engineering	Northeastern University Boston & Burlington	Master of Science Bachelor of Science, Ph.D
Civil Engineering Technology (emphasis on wastewater systems, water supply, and field work)	Wentworth Institute Boston	Associate in Engineering
Environmental Science(lab field work, water, air, noise, pollution, and soil chemistry)	Brookline High School	One course/day
Environmental Chemistry	Mass. Maritime Academy Buzzards Bay	One course/eve.
Marine Pollution Abatement (sewage, garbage, air, oil, and hazardous materials)	Mass. Maritime Academy Buzzards Bay	Bachelor of Science/day
Ph.D in Environmental Chemistry & Water Resources(emphasis on env. biology, env. systems, env. eng., air resources, and industrial hygiene)	Harvard University Cambridge	Ph.D
Masters in Environmental & Sanitary Engineering(emphasis on env. systems, air resources industrial hygiene)	Harvard University Cambridge	Masters in Env. & Sanitary Eng. 1 yr. full time
Civil Engineering(emphasis on water resources, water quality, hydrology, and env. management)	Massachusetts Institute of Technology (MIT) Cambridge	Master of Science in CE; Bachelor of Science in CE Ph.D
Environmental Engineering(train students in water, air, and natural resources)	MIT Cambridge	Environmental Engineering Degree Graduate Program

MASSACHUSETTS

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Environmental Science(career goals toward sanitary eng., pollution research and control)	Fairhaven High School	One course/day
Environmental Science(emphasis on water pollution, land use, and energy)	Greenfield High School	One course/day
Environmental Science(emphasis on sanitary engineering, chemistry of air, water, ecological methods, and land-use planning)	Greenfield Community College Greenfield	Associate in Science/day
Environmental Technology Program (train students for employment in water, wastewater, and wetlands management)	Essex Agricultural & Technical Institute	Associate in Applied Science
Environmental Technology Program (train students for employment in water, air, wastewater, solid waste, and noise abatement)	Northern Essex Community College in Haverhill	Associate in Science/day
CETA Wastewater Treatment Plant Operator Training Program	Northern Essex Community College in Haverhill	July - December
Environmental Science Technology (environmental pollution, env. microbiology, field training, chemistry)	Holyoke Community College	Associate of Science in CE
Master of Science in Environmental Studies(emphasis in laboratory, water, wastewater, air, solid waste)	University of Lowell Lowell	Later afternoon evening, Master of Science
Mass.Division of Water Pollution Control, Basic and Advanced Wastewater Treatment Plant Operator Training	University of Lowell Lowell	Evening

MASSACHUSETTS

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Mass. Division of Water Pollution Control Innovative Lab Techniques in Wastewater Treatment, using the TOC analyzer for advanced wastewater treatment plant operators	University of Lowell Lowell	Funded by EPA
Civil Engineering(environmental)	University of Lowell Lowell	Bachelor of Science/day
Civil Engineering(emphasis on wastewater, water, plant design)	Tufts University Medford	Bachelor of Science in CE Master of Science in CE
Water Ecology(emphasis on physical and biological processes involved with water bodies)	Algonquin Reg. High Northborough	Day
Civil Engineering(emphasis on sanitary engineering and soil)	Southeastern University North Dartmouth	Bachelor of Science in CE
Environmental Science(lab samples, water, air pollution, soil analysis, and field work)	Peabody Veterans Memorial High School Peabody	One course/day
Environmental Science(emphasis on air, water, pesticides, lab technology)	Berkshire Community College Pittsfield	Associate in Science
CETA Wastewater Treatment Plant Operator Training Program	Springfield Technical Community College Springfield	40 weeks full included is 6 weeks on-the job training
Environmental Technology(with options in water, wastewater, air, and solid waste)	Springfield Technical Community College Springfield	Associate in Env. Technology

MASSACHUSETTS

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Occupational Safety & Health Short Courses Maintenance Course for Wastewater Treatment Plant Personnel	Springfield Technical Community College Springfield	8 - 12 hour courses 16 3-hour sessions
Occupational Safety & Health Tech. (focus on managerial, supervision, and employee training)	Springfield Technical Community College Springfield	Associate in Science in OSHT
Environmental Engineering & Science(emphasis on wastewater, sanitary engineering, lab, water, and plant design)	Worcester Poly Tech. Worcester	Bachelor of Science
Civil Engineering(environmental control) with emphasis on wastewater, sanitary engineering, lab, water, and plant design)	Worcester Poly Tech. Worcester	Bachelor of Science, Master Science, day or evening
Environmental Science(emphasis on land, air, water)	Worcester Poly Tech. Worcester	Bachelor of Science
Environmental Affairs(emphasis on wastewater, water resources)	Clark University Worcester	Master of Arts Bachelor of Arts
Civil Engineering(emphasis on water, wastewater, soil)	Worcester Junior College Worcester	Associate in Science in CE

NEW HAMPSHIRE

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/ OR DEGREE</u>
Land Management	NH Vocational Technical Institute in Berlin	Associate in Applied Science
Land Surveying	NH Vocational Technical Institute in Berlin	Associate in Applied Science
Soil, Freshwater, and Terrestrial Ecology and Env. Pollution	Newfound Memorial High Bristol	Day 9 weeks
Wastewater Treatment Plant Operator Training in Process Control Techniques	NH Water Supply & Pollution Control Commission Concord, NH	6 weeks EPA funded
Water and Wastewater Treatment Plant Operator Training in Laboratory Testing & Techniques	NH Water Supply & Pollution Control Commission Concord, NH	10 weeks EPA funded
Civil Engineering(emphasis on water, wastewater, and soil)	University of NH Durham	Bachelor of Science in CE
Environmental Engineering Option (emphasis on water, air, and land resources)	University of NH Durham	Bachelor of Science
Environmental Studies(emphasis on resource management, air, energy, water, forestry, and wildlife)	New England College Henniker	Bachelor of Science in ES Day or evening
Ecology I, II(emphasis on field trips, testing)excellent program	Manchester High West (funded under HEW,OE Grant)	Day
Groundwater Pollution Ecology Freshwater Ecology Environmental Studies Center	Plymouth State College	Evening Day Day extra curricular activity, Bachelor in Science

RHODE ISLAND

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Civil Engineering Technology	Roger Williams College Bristol	Associate or Bachelor in Eng. Technology
Urban and Environmental Planning (emphasis on environmental eng. problems in pollution, water supply, and sewage)	Roger Williams College Bristol	Bachelor of Science/day or evening
Civil Engineering(environmental) emphasis on water, solid waste, air, sewage, sanitary chemisty)	University of Rhode Island Kingston	Bachelor of Science, Master of Science in CE Ph.D
RI Dept. of Health "Wastewater Treatment Plant Operator Training Course In Process Control Tech- niques"	Lincoln Davies Vocational Technical School Lincoln	6 weeks EPA funded
Presentation & Evaluation of Middle Management Home Study Correspondence Course	University of Rhode Island Kingston	1 evening/23 weeks
Ecology(emphasis on freshwater, terrestrial, air pollution, and environmental health)	Toll Gate High Warwick	½ year One course/day
Marine & Environmental Studies	Toll Gate High Warwick	1 year

VERMONT

<u>TYPE OF EDUCATIONAL PROGRAM</u>	<u>SPONSORING AGENCY</u>	<u>DURATION AND/OR DEGREE</u>
Environmental Studies(train students in water pollution control, env. engineering)	Southern VT College Bennington	Associate in Science in ES
Civil Engineering(environmental engineering)emphasis on water, wastewater, air pollution, and solid wastes)	University of Vermont Burlington	Bachelor in Science in CE Master of Science in CE
Environmental Studies(emphasis on water, environmental science, lab, environmental management)	Johnson State College Johnson	Bachelor in Science in ES
Wastewater Treatment Plant Operator Training in Process Control Techniques	Vermont Agency of Env. Conservation Montpelier	6 weeks EPA funded
Regionalized Training of Sewage Treatment Plant Operators thru mini courses, modules	Vermont Agency of Env. Conservation Montpelier	11 short courses 4 hours each
Civil Engineering(emphasis on water, wastewater, and soil)	VT Technical College Randolph Center, VT	Associate in Applied Science in Engineering

STATE WATER SUPPLY AGENCIES

George J. Coogan, Director
Division of Water Supply
Dept. of Environmental Quality Engineering
600 Washington Street, Room 320
Boston, MA 02111
617-727-2692

John Hagopian, Principal Sanitary Engineer
Rhode Island Department of Health
75 Davis Street, Health Building
Providence, RI 02908
401-277-2234

Donald C. Hoxie, Director
Division of Environmental Engineering
State Of Maine Department of Human Services
Augusta, ME 04333
207-289-3826

Stephen W. Leavenworth, P.E.
Associate Sanitary Engineer
New Hampshire Water Supply &
Pollution Control Commission
Prescott Park, 105 Loudon Road
Concord, NH 03301
603-271-3139

Kenneth M. Stone, Chief
Sanitary Engineering
Vermont Department of Health
Division of Environmental Health
60 Main Street
Burlington, VT 05401
802-862-5701

Richard S. Woodhull, Chief
Water Supplies Section
Connecticut Dept. of Health
79 Elm Street
Hartford, CT 06115
203-566-3130

STATE WASTEWATER AGENCIES

Jim Agan
Environmental Conservation
Environmental Engineering Division
State Office Building
Montpelier, VT 05602
802-223-8610

Jim Fester
Principal Sanitary Engineer
Division of Water Supply & Pollution Control
Health Dept. Building
Providence, RI 02908
401-277-2234

Roy Fredricksen
Principal Sanitary Engineer
Connecticut Dept. of Environmental Protection
State Office Building
Hartford, CT 06115
203-641-2409

Richard Grossman
Associate Sanitary Engineer
New Hampshire Water Supply &
Pollution Control Commission
105 Loudon Road
Concord, NH 03301
603-271-2586

Thomas McMahon, Director
Division of Water Pollution Control
100 Cambridge Street
Boston, MA 02203
617-727-3855

Alfred E. Peloquin
Executive Secretary
New England Interstate Water
Pollution Control Commission
607 Boylston Street
Boston, MA 02116
617-261-3758

Kenneth W. Shirkey
Maine Dept. of Environmental Protection
Ray Office Building
Hospital Street
Augusta, ME 04333
207-289-2591