

APPENDIX G
CEU COURSE GUIDANCE LISTS
IDNR Approved CEU Course Guidance Lists
6/15/2005

The following is a list of approved and disapproved training topics prepared by IDNR in cooperation with the Iowa Joint Operator Certification and Training Coordination Committee for Certified Water and Wastewater Operators. The topics listed as approved (Yes) are considered to be directly related to the subject matter of the particular certificates indicated; Drinking Water Treatment (WT), Water Distribution (WD), Wastewater Treatment (WWT) and Wastewater Collection (WWC).

- A. Continuing Education Units (CEUs) must be directly related to the subject matter of the operator certificate to which the credit is being applied.
- B. IDNR has determined that courses / topics listed as approved on the attached *IDNR Approved CEU Course Guidance Lists* are related to the subject matter and "Need To Know" for the operator certificates indicated.
- C. "CEU credit for Safety Training is limited to 20% of the CEU requirement."
- D. It is the operator's responsibility to confirm that a course is eligible for CEU credit towards renewal of an Iowa operator certificate. If you plan to take or are taking a course that may not qualify for CEU credit, you should ask the instructor or training provider for clarification.
- E. The Iowa Department of Natural Resources (IDNR) expects all operators to take balanced CEU training that is directly related to improving their knowledge, skills and abilities, including training on new or innovative technology. The department will not accept CEU credit for repeating any course in the same two-year certification period (renewal cycle).

The content of a course is determined by its agenda topics. For example, Regional operator meetings attended in two consecutive years would both count towards meeting the CEU requirement since the agendas are different. However, repeating a course on proper filter operation, where the agenda topics and course content are basically the same, would not count toward meeting the CEU requirement during a single renewal period.

Exceptions may be made for single topics in a multi-topic program or, as an example, separate 1-day courses on "Corrosion Control", one for drinking water and one for wastewater. For questions about other exceptions on CEU credit contact the IDNR at 515-725-0284 or e-mail at laurie.sharp@dnr.state.ia.us .

Process/Quality Control Topics Approved Specifically for:

Public Water Supply Operators Only	WT	WD
Aeration	Yes	No
Arsenic Removal	Yes	No
Aquifer Storage and Recovery	Yes	Yes
Bacteriological Sampling Procedures	Yes	Yes
Chemical Storage and Handling	Yes	No
Coagulation and Flocculation; Chemistry, Treatment Options, Process Control	Yes	No
Consumer Confidence Report Training	Yes	Yes
Corrosion Control	Yes	Yes
Cross-connection, Backflow Prevention	Yes	Yes
Dechlorination	No	Yes
Disinfection; Chemistry, Agents, Efficacy, Equipment, Process Control	Yes	No
Disinfection of New Mains and Repairs	No	Yes
Disinfection of Water Storage Facilities	Yes	No
Distribution System; Mains, Taps, Maintenance, Repairs	No	Yes
Drinking Water Standards and Regulations	Yes	Yes
Filtration; Media, Equipment, Process Control, Optimization	Yes	No
Fire Flow Testing	No	Yes
Flow Measurement; Open Channel, Pipeline, Equipment, Calibration	Yes	No
Fluoridation	Yes	No
Flushing, Pigging, and Swabbing	No	Yes
Groundwater Basics; Aquifers	Yes	Yes
Hydrants, Valves, Exercising Programs	No	Yes
Iron and Manganese Removal; Occurrence, Chemistry, Treatment Options	Yes	No
Leak Detection/Water Audits	No	Yes
Mapping, Locating, Tracer Wire	No	Yes
Membrane Processes; Micro-filtration, Reverse Osmosis (RO), Electro Dialysis Reversal (EDR)	Yes	No
Metering; Types, Sizing, Maintenance, Testing, Automated Meter Reading (AMR)	No	Yes
Nitrate Removal	Yes	No
Ozonation	Yes	No
Pesticide and Herbicide Reduction	Yes	No
Process Optimization and Upgrade	Yes	No
Residuals Disposal	Yes	No
Sampling and Testing for Process Control	Yes	No
Sedimentation/Clarification; Equipment, Process Control	Yes	No
Service Line Thawing	No	Yes
Services Lines and Curb Box Maintenance	No	Yes
Softening by Cation Exchange; Chemistry, Treatment Options, Process Control	Yes	No
Softening by Chemical Precipitation; Chemistry, Treatment Options, Process Control	Yes	No
Storage; Coatings, Inspection, Maintenance and Repair	No	Yes
Storage; Plant and Distribution System	Yes	No
Surface Water Treatment Problems	Yes	No
Taste and Odor Control	Yes	No
Trenchless Construction; Pipe Bursting	No	Yes
Water Source Characteristics	Yes	Yes
Well Drilling and Development	Yes	Yes
Well Maintenance and Rehabilitation	Yes	Yes
Well Operation, Yield, Drawdown, Etc.	Yes	Yes
Wellhead and Surface Water Protection	No	Yes
Zebra Mussel Control	Yes	No

Process/Quality Control Topics Approved Specifically for:

Wastewater Treatment Operators Only	WWT	*WWC
Advanced/Tertiary Processes such as Nutrient Removal, Ammonia Removal, Ultra-solids Removal	Yes	No
Alternative Technologies	Yes	No
Biological Treatment by Attached Growth, Fixed Film Systems such as Trickling Filters, RBCs, Equipment, Process Control	Yes	No
Biological Treatment by Suspended Growth Systems such as Activated Sludge, SBRs, Equipment, Process Control	Yes	No
Biological Treatment by Coupled Systems such as Trickling Filter/Activated Sludge (TF/AS), Trickling Filter/Solid Contact (TF/SC)	Yes	No
Biosolids Disposal/Land Application, Regulations, Equipment, Process Control, Records, Monitoring	Yes	No
Corrosion Control	Yes	Yes
Cross-connection, Backflow Prevention	Yes	Yes
Disinfection;	Yes	No
Flow Measurement; Open Channel, Pipeline, Equipment, Calibration	Yes	Yes
Flushing, Pigging, and Swabbing	No(*yes)	Yes
Grease Removal and Disposal; Equipment, Process Control	Yes	No
Grit Removal and Disposal; Equipment, Process Control	Yes	No
Inflow / Infiltration in Sanitary Sewers	No(*yes)	Yes
Industrial Wastes, Pretreatment	Yes	Yes
Lagoons; Facultative, Anaerobic, Aerated, Function, Process Control	Yes	No
Lift Stations	No(*yes)	Yes
Odor Control	Yes	Yes
Overflows and Bypass Control	No(*yes)	Yes
Process Optimization and Upgrade	Yes	No
Sampling and Testing	Yes	Yes
Sand Filters	Yes	No
Screens, Grinders; Equipment, Process Control	Yes	No
Sedimentation; Equipment, Process Control	Yes	No
Service Lines and Connections	No(*yes)	Yes
Sewers and Manholes; Materials, Maintenance, Tapping, Repairs	No(*yes)	Yes
Sewer and Manholes; Inspection, televising (TV), Cleaning	No(*yes)	Yes
Sludge Treatment; Anaerobic, Aerobic, Thickening, Dewatering, Equipment, Process Control	Yes	No
Sources and Characteristics	Yes	Yes
Trenchless Technologies, Pipe Bursting	No(*yes)	Yes
Wetlands for Wastewater Treatment	Yes	No

Note: (*yes) indicates that as long as WWC certification is voluntary, all Approved topics on both the WWT and WWC lists are eligible for CEU credit for either WWT or WWC certification and upgrade.

General Topics Approved for All Classifications: WT, WD, WWT and WWC.

Basic Electricity	Math for Operations
Basic Hydraulics	Microbiology
Blowers, Compressors, Generators, HVAC	Motor Control Centers
Chemical Feed Systems	Pipes, Valves, Fittings
Chemistry	Programmable Logic Controllers (PLCs)
Computer Use in O&M	Pumping Stations
Electrical Controls/SCADA	Pumps and Motors
Instrumentation	Standby Facilities

Topics Approved for Only Specific WT, WD, WWT, or WWC Classifications

Safety in O & M	WT	WD	WWT	WWC
Backhoe Operator	No	Yes	Yes	Yes
Blood-borne Pathogens	No	No	Yes	Yes
Chains, Slings, Wire Rope	Yes	Yes	Yes	Yes
Chlorine Safety	Yes	Yes	Yes	No
Confined Space Awareness	Yes	Yes	Yes	Yes
Excavations, Competent Person	No	Yes	Yes	Yes
Excavations, Trenching/Shoring	No	Yes	Yes	Yes
Haz. Com./Right-to-Know	Yes	Yes	Yes	Yes
Iowa One Call	No	Yes	No	Yes
Lab Safety	Yes	No	Yes	No
Ladder Safety	Yes	Yes	Yes	Yes
Lockout/Tagout	Yes	Yes	Yes	Yes
Personal Protective Equipment	Yes	Yes	Yes	Yes
Respiratory Protection	Yes	No	Yes	Yes
Safe Handling of Materials	Yes	Yes	Yes	Yes
Traffic Control/Work Zone Safety	No	Yes	Yes	Yes
Administration / Management				
Capacity Management O&M (CMOM)	No	No	Yes	Yes
Compliance—Regs, Permits, SDWA, CWA, IDNR Update	Yes	Yes	Yes	Yes
Construction/Inspection/Design Build	Yes	Yes	Yes	Yes
Customer Relations, P.R., Media, Public Notification	Yes	Yes	Yes	Yes
Customer Water Quality Inquiries	Yes	Yes	No	No
Emergency, Security, Vulnerability	Yes	Yes	Yes	Yes
Energy Efficiency	Yes	Yes	Yes	Yes
Finance, Budget, Viability, Rates	Yes	Yes	Yes	Yes
Financing Programs, Federal and State	Yes	Yes	Yes	Yes
Inflow / Infiltration in Sanitary Sewers	No	No	Yes	Yes
Industrial Wastes, Pretreatment	No	No	Yes	Yes
Legal Issues for Water Utilities	Yes	Yes	No	No
Operator Certification	Yes	Yes	Yes	Yes
Planning	Yes	Yes	Yes	Yes
Point of Use, Point of Entry Devices	Yes	Yes	No	No
Quality Circles, Continuous Process Improvement	Yes	Yes	Yes	Yes
Records and Reports, CCR	Yes	Yes	Yes	Yes
Sanitary Surveys, Inspections	Yes	Yes	Yes	Yes
Service Shutoff	Yes	Yes	No	No
Statistical Process Control Techniques	Yes	Yes	Yes	Yes
Telecom on Water Towers	Yes	Yes	No	No
Utility Locating, Geographic Information Systems (GIS)	Yes	Yes	Yes	Yes
Water Conservation	Yes	Yes	No	No
Watershed Protection, Surface and Groundwater	Yes	Yes	No	No

Topics Not Approved for Any Classification

General

All Math as Math	Basic Computer
Autobody Painting	Chain Saw; Fork Lift

Personal Health & Safety

AIDS	First Aid
Alcohol	OSHA
Back Power	Safety and Health Plans
CPR	Slips, Trips, Falls
Defensive Driving	Traffic Control (general)
Drugs	Workplace Safety
Ear, Eye	Workplace Violence
Fire Safety in the Workplace	

Administration / Management

Conflict Management	Right-to-Know
Diversity	Risk Management
Exam Prep and Taking Practice Exams	Sexual Harassment
IPERS	Stress Management
Leadership	Storm water Separation and Control
Motivational	Time Management
Orientation	Unions
Public Hearings	Workers' Comp.
Pending Legislation	Workers' Rights