APPENDIX G CEU COURSE GUIDANCE LISTS

IDNR Approved CEU Course Guidance Lists 10/22/03

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. 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.
- D. The lowa 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:

Aeration Yes No Arsenic Removal Yes No Aquifer Storage and Recovery Yes Yes Pacteriological Sampling Procedures Yes Yes Yes Pacteriological Sampling Procedures Yes No Coagulation and Flocculation; Chemistry, Treatment Options, Process Control Yes No Coagulation and Flocculation; Chemistry, Treatment Options, Process Control Yes No Corrosion Control Yes Yes Yes Yes October Control Yes Yes Yes Person Control Yes Yes Yes Yes October Control Yes No October Storage Storage And Handling Yes No October Storage Storage Storage And Handling Yes No October Storage Stora	Public Water Supply Operators Only	WT	WD
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Process/Quality Control Topics Approved Specifically for:

Wastewater Treatment Operators Only	WWT	*WWC
Advanced/Tertiary Processes such as Nutrient Removal, Ammonia Removal, Ultra-solids	Yes	No
Removal		
Alternative Technologies	Yes	No
Biological Treatment by Attached Growth, Fixed Film Systems such as Trickling Filters,	Yes	No
RBCs, Equipment, Process Control		
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),	Yes	No
Trickling Filter/Solid Contact (TF/SC) Biosolids Disposal/Land Application, Regulations, Equipment, Process Control, Records,	Yes	No
Monitoring Monitoring	Y es	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		No
Control	Yes	110
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)	No	Yes	No	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	