

Alabama Operator Certification Program



Fiscal Year 2004 Annual Report

**Prepared by the
Alabama Department of Environmental Management
Loans And Operator Certification Section**

For EPA Region IV

As of September 30, 2004

Introduction

The certification program for water and wastewater operators in Alabama regulates all water and wastewater treatment plants, water distribution systems, and public wastewater collection systems. Its purpose is to provide a program for the certification of the competency of operators to operate such plants and systems. This insures that public health is protected and the environmental impacts are positive.

This report will give information about the program by detailing the classification of systems and operators, describing operator qualifications and certificate renewal requirements, reporting on enforcement actions taken in fiscal year 2004, and listing stakeholder involvement.

Authorization

Section 22-25 of the Code of Alabama gives the Alabama Department of Environmental Management the legal authority to establish the operator certification program. The Department promulgated regulations concerning operator certification that were last revised January 28, 2003.

Classification of Systems, Facilities, and Operators

Some 640 public water systems and 683 wastewater treatment systems are required to employ certified operators. As of the date of this report, no systems were known to be in noncompliance.

Appendix 1 summarizes the various classifications assigned to water and wastewater systems in Alabama, and the requirements for certification.

Operator Qualifications

ADEM contracts with the Association of Boards of Certification to supply and score validated examinations for certification.

The State of Alabama does not utilize a grandparenting option for certification.

The State of Alabama has no temporary or provisional certification options in its program.

Associated Boards of Certification (ABC) Tests are currently in use by the State of Alabama. The tests are composed of ABC validated questions that are reviewed by the Department prior to being placed on the exams. In addition, an ABC Item Bank Review was held at ADEM on June 17, 2004, in which representatives from various systems, instructors, and operators reviewed an ABC bank of questions. This review was beneficial in assisting ABC with the development of operator exams specific to Alabama. Four water/wastewater examinations

were held at various locations around the state to help minimize travel for operators and their systems. Fiscal Year 2004 saw 278 wastewater applicants with 111 passing and 322 water applicants with 153 passing - a passing rate of 44% for all applicants. Four examinations have been scheduled for FY 2005.

Enforcement

Four draft enforcement orders were issued to certified operators near the close of fiscal year 2004 for violations of the Department's Administrative Code. All four cases are expected to be resolved during FY 2005.

A Notice of Violation (NOV) was issued to a water operator for failing to maintain a staffing log. The violation was corrected by the operator.

Several other enforcement cases were under investigation at the close of FY 2004. If violations are discovered, appropriate action will be taken during FY 2005.

As of the close of FY 2004, all wastewater and water facilities were staffed with certified operators as required by the ADEM Administrative Code.

The ADEM Administrative Code authorizes the use of various enforcement vehicles to ensure compliance. Unilateral administrative orders, consent orders, civil penalties, and certification suspension or revocation are tools available to Department compliance staff.

Certification Renewal

Certification renewal is required every three years. All certified operators must demonstrate continuing education activities and document these activities along with the renewal application and fee. Operators with one certificate must demonstrate 24 continuing education hours (CEH) of actual training. Operators that are dual certified must demonstrate a total of 30 CEH of training. Of these, 15 CEH must be obtained for each certificate held. An operator may carry over into the next three-year renewal period a maximum of 10 CEH of training for each certificate.

Alabama's continuing education program is carried out by private companies and non-profit organizations that work with ADEM to provide training for operators throughout the state. The non-profit organizations include the Alabama Water and Wastewater Institute (AWWI), Alabama Rural Water Association (ARWA), Alabama Water Pollution Control Association (AWPCA), and Alabama Water Environment Association (AWEA). Each of these groups has instructors that teach continuing education courses throughout the state. Class rosters of training courses are sent to ADEM and kept on file.

Over two hundred training courses were taught in Alabama during FY2004. The Department applied for and received an EPA grant for operator training (non-ERG funds). Through this grant the following courses were funded and co-sponsored by ADEM:

- Alabama Rural Water Association (ARWA): 90 Wastewater I and I-C and Water I and II certification courses;
- Alabama Water and Wastewater Institute (AWWI): 62 Water III and IV and Wastewater II, III, and IV certification courses;
- Alabama Water and Pollution Control Association (AWPCA): 24 Water and Wastewater continuing education courses; and,
- Alabama Water Environment Association (AWEA): Approximately 25 Water and Wastewater continuing education courses.

Private companies throughout the state teach additional courses after approval of the activity by ADEM. The Department has approved the following correspondence and online training courses for certification and continuing education credit:

California State University, Office of Water Programs

www.owp.csus.edu

Operation of Wastewater Treatment Plants, Vol. 1

Operation of Wastewater Treatment Plants, Vol. 2

Water Treatment Plant Operation, Vol. 1

Water Treatment Plant Operation, Vol. 2

Advanced Waste Treatment

Water Distribution Operation & Maintenance

Small Water System Operation & Maintenance

Utility Management

Small Wastewater System Operation & Maintenance, Vol. 1

Small Wastewater System Operation & Maintenance, Vol. 2

Industrial Waste Treatment, Vol. 1

Industrial Waste Treatment, Vol. 2

Operations and Maintenance of Wastewater Collection Systems, Vol. 1

Operations and Maintenance of Wastewater Collection Systems, Vol. 2

Treatment of Metal Wastestreams

Pretreatment Facility Inspection

Technical Learning College

www.tlch20.com

Groundwater Production

Respirator Protection Training

Excavation & Trenching
Hazard Communication
Laboratory Safety
SDWA Rules
Distribution Basics
Water and Wastewater Sampling
Water Treatment

H20-ED

www.h20-ed.com

Safe Drinking Water Act
Disinfection

360Water.com

www.360water.com

Fundamentals of Coagulation and Flocculation
Drinking Water Precipitation Softening
Basic Safety Fundamentals for the Water & Distribution System Operator
Cross Connection Control
Introduction to Distribution System Piping and Valving
Media Filtration for Drinking Water
Water Quality Management
Introduction to Membrane Operations for Small Utilities
Membrane Unit Operations
System Design and Flow Configurations for Membrane Operations
Terms & Equations for Membrane Operations
Lockout Tagout
Accident Investigation
Confined Space Entry
Blood Borne Pathogens
Oxygen Measurements
Pretreatment Regulations
Solids Analysis
United States Water and Wastewater Utility Industry
United States Water and Wastewater Utility Industry- Federal State and Local Control
Ultraviolet Disinfection
Math 1
Wastewater Treatment Theory 1&2
Biochemical Oxygen Demand and Carbonaceous BOD Demand

How To Perform Fecal Coliform Analytical Test for Wastewater Treatment Plant Effluent
Trickling Filters
Activated Sludge
Leadership and How to Affect Change in Public Organizations
Hydraulics 1- Closed Conduit Hydraulics
Roots In Sewers
How To Perform Total Coliform Analytical Test For Drinking Water Quality
Microscopic Examination of Activated Sludge
Drinking Water Disinfection
Math Class 2- Activated Sludge Plant # 1
Math Class 3- Activated Sludge Plant #2
Math Class 4- Activated Sludge Plant #2
Wastewater Treatment Theory Class 3
Wastewater Treatment Theory Class 4

CEU Plan

www.ceuplan.com

On-Site Sodium Hypochlorite Generation Conversion
Hazardous Material Effect to Human Health
HIV in Wastewater: Presence and Risk
Chemical Feed Systems
Wastewater Sludge Treatment
Sludge Digestion and Solids Handling
Oxidation in Water & wastewater Treatment
Bio-Augmentation of the Treatment Process
Geology for Treatment Plant Operators
Basic Chemistry for Water Treatment
Mathematics of the Treatment Process
Basic Computers
Blueprints
Disinfection By-Products
Personal Sampling for Air Contaminants
Sampling for Surface Contamination
Technical Equipment
Heat Stress
Back Injuries
Government Rules & Procedures
Chemical Protective Clothing & Respiratory Protection
NPDES Compliance Training
Water Treatment and Distribution Systems
Wastewater Treatment Processes

Waterborne Pathogens
Cryptosporidium
Pipes, Valves & Fittings
Understanding Pumping Stations
Treatment Processes
Sludge Digestion and Solids Handling
Sludge Digestion and Beneficial Use
Water Treatment Techniques-Complete
Water Treatment Techniques-Filtration
Water Treatment Techniques-Clarification
Water Treatment Techniques-Distillation
Water Treatment Techniques-Ion Exchange
Water Treatment Techniques-Membrane Separation
ORP-Wastewater Nutrients Removal Process
Wastewater Formulas
Collection Math
Distribution Math
Using Excel in Treatment Plant
Wastewater Operational Tools
SRT in Nutrient Removal
Toxic & Hazardous Material Handling Procedures
Basic Microbiology
Parasites Part 1-Helminths
Activated Sludge IV: Process Control & Troubleshooting
Laboratory Safety
Wastewater Treatment Package Plants
UV Pilot Testing
Activated Sludge V: troubleshooting Part 2
Activated Sludge-Complete Course
UV Disinfection-Sizing of UV System using Bioassay
History of Ultraviolet Disinfection

WEF

www.wef.org

Operations Training: Wastewater Treatment
Pumps
Activated Sludge
Sludge Handling

David H. Paul, Inc.

www.dhptraining.com

Reverse Osmosis Water Treatment
Advanced Reverse Osmosis Water Treatment
High Purity Water Treatment
Advanced High Purity Water Treatment

Montana University System Water Center

www.water.montana.edu/training/gwb/

Operator Basics Training Series: Groundwater Systems

AWWA Online Institute

www.awwa.org/learnonline

Fundamentals of Chemistry for Water Professionals
Coagulation, Flocculation- Sedimentation Basics
Filtration Basics
Disinfection Basics
Hydraulics,
Distribution System Materials-Equipment
Water Main Installation
Distribution Service
Basic Math
Applied Math
Water System Mechanical Equipment
Occupational Safety Courses- ALL
Environmental Compliance Courses-ALL

Mountain Empire Community College

<http://water.me.vccs.edu/>

Degree Program and CEU

Approved Environment, Inc.

www.approvedce.com

Activated Sludge I-II
Industrial Waste Treatment I-II

Tickling Filters & RBCS
Wastewater Preliminary Treatment
Primary Treatment
Final Effluent I-II
Solids Handling Alternatives
Solids Dewatering
Sludge Digestion
Sludge Stabilization-Sludge Conditioning
Air Stripping & Carbon Adsorption
Filtration
Safety
Laboratory Terms
Equipment & Sampling
Lab Procedures for Plant Control
BOD, DO, & COD
Ammonia, PH & Chlorine

In fiscal year 2004, Alabama processed a total of 1063 wastewater and water certificate renewals.

The Department continues to provide an Operator Training Web page. The address is: <http://www.adem.state.al.us/WaterDivision/OperatorCert/OPMain%20Info.htm>. The site consists of ADEM Division 10 Regulations, exam application, renewal form, trainee application, an operator training calendar, the certification exam schedule and locations, frequently asked questions of the certification and training program, and links to other operator training web sites.

Resources Needed to Implement the Program

Currently, the Loans and Operator Certification program receives funding from renewal and examination fees, administrative funds from the EPA operator training grant, and administrative funds associated with the SRF program. The Department applied for and received an Expense Reimbursement Grant from EPA in the amount of \$11,000 in FY 2002. This grant money was used to offset the renewal and examination expenses of operators from drinking water systems serving less than or equal to 3,300 persons. This grant was closed in FY 2004 after all funds were expended for this purpose. There is no immediate need for increased funding to fulfill the Department's responsibilities in the certification program.

Stakeholder Involvement

All organizations that provide training and continuing education for operators hold annual conferences that are attended by ADEM certification coordinators. These meetings give operators the opportunity to learn about any changes in the certification program while they are earning continuing education hours. Operators can meet the coordinators and ask questions as

well as offer suggestions to improve the program. The Department published one operator certification newsletter in FY 2004 (see Appendix 2).

Program Review and Implementation

During the meetings mentioned above, representatives from various systems, instructors and operators gave feedback on the Operator Certification Program. An advisory committee meeting was held on March 17, 2004. As a result of the meeting, several rule changes were proposed (see Appendix 3). It is expected that these changes will be approved and implemented in FY 2005.

Implementation Schedule Update

The certification program was fully implemented prior to the start of FY 2004.

Appendix 1: Summary of ADEM Certification Requirements

Wastewater treatment plants, water treatment plants, water distribution systems, and public wastewater collections systems are classified by grades in accordance with the following:

<u>GRADE</u>	<u>DESCRIPTION</u>	<u>SIZE</u>
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WASTEWATER TREATMENT PLANTS

I	Wastewater treatment lagoon	> 0.025 MGD
II	Trickling filter and/or biological contactor process plant	0 to .999 MGD
	Activated sludge process plant	0 to .499 MGD
III	Trickling filter and/or biological contactor process plant	1.000 to 10.000 MGD
	Activated sludge process plant	0.500 to 5.000 MGD
IV	Trickling filter and/or biological contact process plant	>10.000 MGD
	Activated sludge process plant	>5.000 MGD

PUBLIC WASTEWATER COLLECTION SYSTEMS

I (C)	Public wastewater collection systems	ALL
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<u>GRADE</u>	<u>DESCRIPTION</u>	<u>SIZE</u>
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WATER TREATMENT PLANTS

II	Basic groundwater treatment plants	ALL
III	Basic surface water treatment plant	ALL

	Advanced groundwater treatment plant	ALL
IV	Advanced surface water treatment plant	ALL

WATER DISTRIBUTION SYSTEMS

I	Water distribution system	ALL
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Any water or wastewater treatment plant having a combination of treatment processes, which are in different grades, are classified according to the process associated with the higher grade.

All water treatment plants, wastewater treatment plants, water distributions systems, and public wastewater collection systems are required to be operated by a certified operator in accordance with the following:

1. All Grade III and IV surface water treatment plants must have a certified operator of the same grade or higher present at the plant during operation. All Grade III advanced groundwater plants must have a certified operator of the same grade or higher present as directed by the facilities' operating permit. A permanent record of daily operator staffing shall be maintained at all Grade III and IV facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature.
2. All Grade III wastewater treatment plants must have a certified operator of the same grade or higher present at the plant for a minimum of one 8-hour workshift during the daytime hours of plant operation, five days a week. For all other days of plant operation, at a minimum, a certified operator Grade II or higher must operate the facility one 8-hour workshift during the daytime hours. A permanent record of daily operator staffing shall be maintained at all Grade III facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature. Upon demonstration and approval of a facility's ability to be remotely monitored, the Department may waive all or part of the staffing requirements in excess of the five 8-hour shifts by a Grade III or higher.
3. All Grade IV wastewater treatment plants must have a certified operator of the same grade present at the plant for a minimum of one 8 hour workshift during the daytime hours of plant operation. For all other times of operation, as a minimum, a certified operator Grade II or higher may operate the facility if the Grade IV operator is available on call within 30 minutes of the plant site. A permanent record of daily operator staffing shall be maintained at all Grade IV facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature.
4. All Grade I water distribution systems, Grade I wastewater treatment plants, public wastewater or collection systems, and Grade II water and wastewater treatment plants must

have a certified operator of the same grade or higher present at the plant or system at all times necessary to ensure its safe, efficient, and proper operation. A permanent record of daily operator staffing shall be maintained at all Grade I & II wastewater treatment plants and at all Grade II water treatment plants or well sites. This record must contain the operator's name, time of arrival and departure, and the operator's signature. All Grade I water distribution systems, Grade I wastewater treatment plants, public wastewater or collection systems, and Grade II water and wastewater treatment plants must be visited, as a minimum, once per week by a certified operator.

5. A certified operator may maintain supervision over more than one plant or system if he can provide written assurance to ADEM, that he can provide supervision adequate to ensure the safe, efficient and proper operation of all plants and systems supervised.

Supervision must be limited to a system classified at or lower than the grade of the operator. Operator qualifications are established on the basis of work experience and are evaluated prior to the examination process. Eligibility requirements vary for each examination. The requirements are as follows:

1. For a Grade I water distribution system, at least twelve months working experience in a Grade I water distribution system. Credit for a maximum of six months of working experience may be allowed for the completion of or attendance at approved training programs, classes or seminars;
2. For a Grade I wastewater treatment plant or Grade I (C) public wastewater collection system, at least twelve months working experience in a Grade I wastewater treatment plant, or Grade I (C) public wastewater collection system, respectively. Credit for a maximum of six months of working experience may be allowed for the completion of or attendance at approved training programs, classes, or seminars;
3. For a Grade II water treatment plant, at least eighteen months treatment experience in a Grade II water treatment plant, or twenty-four months of combined experience in a Grade I water distribution system at a Grade II water treatment plant. Credit for a maximum of nine months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes or seminars.
4. For a Grade II wastewater treatment plant, at least eighteen months treatment experience in a Grade II wastewater treatment plant or twenty-four months of combined experience in a Grade I or II wastewater treatment plant. Credit for a maximum of nine months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes, or seminars.

5. For a Grade III water treatment plant, at least twenty-four months treatment experience in a Grade III water treatment plant or thirty-six months of combined treatment experience in a Grade II or III water treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes or seminars.
6. For a Grade III wastewater treatment plant, at least twenty-four months treatment experience in a Grade III wastewater treatment plant or thirty-six months of combined treatment experience in a Grade II or III wastewater treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes or seminars.
7. For a Grade IV water treatment plant, at least twenty-four months treatment experience in a Grade IV water treatment plant or thirty-six months of combined treatment experience in a Grade III or IV water treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes or seminars.
8. For a Grade IV wastewater treatment plant, at least twenty-four months treatment experience in a Grade IV wastewater treatment plant or thirty-six months of combined treated experience in a Grade III or IV wastewater treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed for the completion of or attendance at approved training programs, classes or seminars.



LOANS AND OPERATOR
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OPERATOR CERTIFICATION EXAMINATION REQUIREMENTS

WATER

- Grade I-12 months experience/Up to 6 months substitution for training courses.
- Grade II-18 months experience (Grade II plant) 24 months experience (Grade I or II combined)/Up to 9 months substitution for training courses.
- Grade III-24 months experience (Grade III) 36 months experience (Grade II or III combined)/Up to 12 months substitution for training courses.
- Grade IV-24 months experience (Grade IV) 36 months experience (Grade III or IV combined)/Up to 12 months substitution for training courses.

WASTEWATER

- Grade I-12 months experience/Up to 6 months substitution for training courses.
- Grade IC-12 months experience/Up to 6 months substitution for training courses.
- Grade II-18 months experience (Grade II plant) 24 months experience (Grade I or II combined)/Up to 9 months substitution for training courses.
- Grade III-24 months experience (Grade III) 36 months experience (Grade II or III combined) /Up to 12 months substitution for training courses.
- Grade IV-24 months experience (Grade IV) 36 months experience (Grade III or IV combined)/Up to 12 months substitution for training courses.

15 hours of approved training courses = 3 months experience

Working experience is based on a 40 work week.

LOANS AND OPERATOR CERTIFICATION UPDATE

EDITION 4 MARCH 2004

WHAT MAKES A CERTIFIED OPERATOR IMPORTANT?

By Aubrey White

As an operator of a water or wastewater system, you hear it all the time. "Why do you need more staffing?" "Why does it cost so much to run the treatment plant?" "Can't we just get one of our office workers certified?" These questions reflect a lack of understanding of how important certified operators are, and how being an operator is more than just passing a test.

Fifty years ago the role of an operator was very different. Often nothing more than a laborer or – in larger systems – a plumber or electrician, operators in those days did little more than make sure the pumps ran and sewage didn't seep into basements. With implementation of the Clean Water Act and the Safe Drinking Water Act, however, the skills and knowledge required for an operator increased dramatically. Today, operators must possess a working knowledge of various environmental laws and regulations. They must have the patience and social skills needed to interact with customers and concerned citizens. Often the job of dealing with environmental groups, media, and elected officials falls to the certified operator. Finally, the traditional skills of keeping complex pumping and treatment systems running is far more difficult today than in the past. It is not uncommon for operators to have experience in computer programming, electronics, and engineering technology.

One of the biggest problems facing operators today is that the local decision makers (board members, managers, and elected officials) often fail to recognize the dedication and expertise that most operators display every day in their jobs. Public utilities are no match for new city parks, resurfaced roads, or even new police cars when it comes to accolades from the public. In many towns, the treatment plant has the highest technology in everyday use but few know about it.

How can we overcome the image most people have of water and wastewater operators? Is there anything an operator can do to convey the importance of what they do? Indeed, there are several things you can do to better educate the public and decision makers:



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CONGRATULATIONS!
TO OUR NEW CERTIFIED OPERATORS

Mr. Danny Amason	Water Grade I	Mr. Eric Farley	Water Grade IV
Mr. Lawrence Aspinwall	Water Grade III	Mr. Ramon Feazell Jr.	Water Grade IV
Mr. Kevin Baker	Water Grade I	Mr. Matt Findley	Wastewater Grade IC
Mr. Eric Barlow	Wastewater Grade IC	Mr. Kristopher Findley	Wastewater Grade III
Mr. Joshua Baxley	Water Grade I	Mr. Willie Franklin	Wastewater Grade IV
Mr. James Beauchamp	Wastewater Grade III	Mr. Perry Freeman	Water Grade II
Mr. Brian Beavers	Wastewater Grade I	Mr. Art Freeman	Wastewater Grade II
Mr. Bryan Belk	Water Grade III	Mr. Gary French	Wastewater Grade IC
Mr. Michael Bice	Wastewater Grade IV	Mr. Robert Furtado II	Water Grade II
Mr. Kevin Blackwood	Water Grade I	Mr. James Garner	Water Grade I
Mr. Steven Blankenship	Water Grade I	Mr. Darron Gray	Water Grade I
Mr. Christopher Brackeen	Water Grade I	Mr. Michael Hall	Wastewater Grade IC
Mr. John Bramblett	Water Grade IV	Mr. Shawn Haller	Wastewater Grade II
Ms. Wendy Bray	Wastewater Grade IV	Mr. Heath Harris	Wastewater Grade IC
Ms. Kimberly Browder	Wastewater Grade II	Mr. Frank Henley	Water Grade II
Mr. Ted Butler	Wastewater Grade IC	Mr. Chadwick Hennis	Water Grade III
Mr. Jim Caudle	Wastewater Grade III	Mr. Mark Henson	Water Grade I
Mr. Gregory Chappell	Water Grade II	Mr. Robert Hill	Wastewater Grade IV
Mr. Roy Coley	Wastewater Grade I	Mr. William Hill	Water Grade I
Mr. Joe Collier	Water Grade I	Mr. Daniel Holland	Water Grade III
Mr. John Connelly Jr.	Wastewater Grade IC	Ms. Sondra Hood	Wastewater Grade IC
Mr. Johnny Corkerin	Water Grade I	Mr. Steven Horshok	Wastewater Grade IC
Mr. Johnny Corkerin	Wastewater Grade I	Mr. Stephen Howard	Wastewater Grade III
Mr. James Cornelius	Water Grade II	Mr. Matthew Irons	Wastewater Grade IV
Mr. Collin Daly	Water Grade I	Mr. Carey Jackson III	Water Grade I
Mr. Christopher Davis	Wastewater Grade IV	Mr. Steven James	Water Grade III
Mr. Robert Davis	Water Grade II	Mr. Jeffery Jefferson	Wastewater Grade IC
Mr. Kevin Davis	Wastewater Grade III	Mr. Richard Jones	Water Grade II
Mr. Dwight Dearmon	Water Grade III	Mr. David Kulavich	Wastewater Grade III
Mr. Heracio Delgado	Wastewater Grade II	Mr. William Linville	Water Grade III
Mr. Kenneth Deramus	Wastewater Grade IV	Mr. Daryl Long	Water Grade II
Mr. Jomo Dixon	Water Grade IV	Mr. Rodney Lowe	Wastewater Grade IC
Mr. Robert Dixon	Water Grade I	Mr. Robert Lumpkin Sr.	Wastewater Grade IV
Mr. Jeffery Donald	Water Grade II	Mr. Max Maddox	Water Grade III
Mr. Willie Eaton Jr.	Water Grade IV	Mr. Jason McClure	Wastewater Grade II
Mr. Joe Ellenburg	Water Grade I	Mr. David McCombs	Wastewater Grade IV

- 1. Be an expert on what you do.** It may sound strange, but it is important that you know your job better than anyone else. Your superiors will learn to trust your judgment, and you will quickly develop a reputation as a professional. Along these same lines, become familiar with the jobs that others in your system perform and how you fit in the overall operation. On the best football teams, the backs, receivers, and linemen know what the others are doing at all times – the same goes for quality utility personnel.
- 2. Project a professional image.** If you act like an unskilled laborer, that is exactly how the public will treat you. A positive attitude, coupled with a genuine enthusiasm for your job will go a long way towards elevating your status as a professional.
- 3. Educate the decision makers.** Generally, those in charge want to know at least the basics of how water and wastewater systems operate – and no one is better suited to educating them than you. Whenever possible take time to explain operational changes or needs, especially when an increase in funding is required.
- 4. Become an ambassador to your community.** It can be of great benefit to you to share your knowledge with citizens in the area. Building friendly relations with local environmental groups, members of the media, and even schools can be of tremendous benefit to you personally as well your employer. Encourage guided tours of your facilities, especially when new or upgraded facilities are placed in service.

These are just a few tips that have been helpful to other operators. I'm sure you can think of many more that will help you to build strong relationships with local leaders and citizens. As your job grows more and more complex, it is important for the profession to show that being a certified operator is more than just having a certificate on the wall.

Aubrey White is Chief of the Loans and Operator Certification Section. Have an idea for future articles? Send your suggestions to him via email at ahw@adem.state.al.us.

2003 EXAMINATION RESULTS

<u>DATE</u>	<u>LOCATION</u>	<u>PASSED</u>	<u>APPLICANTS</u>	<u>PASSING%</u>
<u>3/4/2003</u>	<u>ARWA</u>	<u>68</u>	<u>167</u>	<u>40.72%</u>
<u>5/13/2003</u>	<u>HUNTSVILLE</u>	<u>48</u>	<u>119</u>	<u>40.34%</u>
<u>7/1/2003</u>	<u>AWPCA</u>	<u>44</u>	<u>142</u>	<u>30.99%</u>
<u>10/16/2003</u>	<u>Mobile</u>	<u>80</u>	<u>152</u>	<u>52.63%</u>

2004 OPERATOR CERTIFICATION EXAM SCHEDULE

<u>MARCH</u>	<u>16</u>	<u>MONTGOMERY-(ARWA ANNUAL CONFERENCE)</u>
<u>JUNE</u>	<u>10</u>	<u>HUNTSVILLE</u>
<u>AUGUST</u>	<u>3</u>	<u>MOBILE-(AWPCA ANNUAL CONFERENCE)</u>
<u>NOVEMBER</u>	<u>16</u>	<u>BIRMINGHAM</u>

6. Approved Training Course				DO NOT WRITE IN THIS COLUMN
Subject and Type (Specify Water or Wastewater)	Instructor	Dates	Hours Completed	
Total Number Of Months in Each Section				

Do you have a high school diploma or GED? Yes _____ No _____
 Please list the school or institution where you received the diploma or GED? _____

Please list date of Graduation or date you received your GED? _____

Division 10 Regulations require that you have a High School Diploma or GED in order to be eligible to take the Water or Wastewater Certification Examination.

7. Experience Record

Beginning with your present position, list and describe only positions which relate to water or wastewater system operations. Water and wastewater experience must be listed separately and designated as such. In describing your work be specific as to duties, responsibilities and number of persons you supervised, if any. Stress only work experience related to the license for which you are applying.
 (IF ADDITIONAL SPACE IS NEEDED, ATTACH SUPPLEMENTAL SHEETS)

Name and Address of Employer	List Your Job Duties (Must Be Completed)
Title of Present or Last Position Grade System/Plant	
Dates of Employment (Month & Year) Time Employed From: To: Yrs. Mos.	
<input type="checkbox"/> Full Time <input type="checkbox"/> Part Time If part time, give number of Hrs. worked per Week.	

Name and Address of Employer	List Your Job Duties (Must Be Completed)
Title of Present or Last Position Grade System/Plant	
Dates of Employment (Month & Year) Time Employed From: To: Yrs. Mos.	
<input type="checkbox"/> Full Time <input type="checkbox"/> Part Time If part time, give number of Hrs. worked per Week.	

Name and Address of Employer	List Your Job Duties (Must Be Completed)
Title of Present or Last Position Grade System/Plant	
Dates of Employment (Month & Year) Time Employed From: To: Yrs. Mos.	
<input type="checkbox"/> Full Time <input type="checkbox"/> Part Time If part time, give number of Hrs. worked per Week.	

DO NOT WRITE BELOW THIS LINE

Total Acceptable Experience	_____ Months
Total Required for Grade	_____ Months
Balance	_____ Months
Date Eligible for Certification	_____

CONGRATULATIONS!
 TO OUR NEW CERTIFIED OPERATORS

Mr. Leon McCord III	Wastewater Grade IC	Mr. Bruce Taylor Jr.	Wastewater Grade IV
Mr. Tim McCoy	Wastewater Grade IV	Mr. Bruce Taylor Jr.	Wastewater Grade II
Mr. Randall McCoy	Water Grade I	Mr. Jerry Terrell	Wastewater Grade II
Mr. Fred McCoy	Wastewater Grade IV	Mr. Gregory Thompson Jr.	Wastewater Grade III
Mr. James Morgan	Wastewater Grade II	Mr. Jerry Tillman	Wastewater Grade IC
Mr. Wade Morrison	Water Grade IV	Mr. Joseph Turner	Water Grade I
Mr. Dave Mulder	Water Grade I	Mr. John Vaughn Jr.	Water Grade III
Mr. Herschel Norramore	Wastewater Grade I	Ms. Vickie Watkins	Water Grade II
Mr. Christopher Patterson	Wastewater Grade IV	Mr. James Weaver	Wastewater Grade IC
Mr. Sammy Perrin	Water Grade III	Mr. Matthew Welch	Wastewater Grade IC
Ms. Lynn Phillips	Water Grade II	Mr. Dewey Willard	Water Grade III
Mr. John Pratt	Wastewater Grade III	Mr. Aaron Wilson	Water Grade IV
Mr. Thomas Read Jr.	Wastewater Grade IV	Mr. James Wood	Wastewater Grade II
Mr. Timothy Rigby	Water Grade IV	Mr. Ronald Woodard	Wastewater Grade I
Mr. Scotty Roberts	Wastewater Grade II	Mr. Timothy Yelverton	Wastewater Grade IC
Mr. Derek Robinson	Water Grade I	Mr. Brent Zeanah	Water Grade I
Mr. Kenneth Samples	Water Grade I		
Mr. Gregory Sandlin	Water Grade I		
Mr. Jonathon Sawyer	Wastewater Grade I		
Mr. Jonathan Scott	Wastewater Grade III		
Mr. Tommy Segars	Wastewater Grade IC		
Mr. Terry Sellers	Water Grade IV		
Ms. Lisa Skelton	Wastewater grade IC		
Ms. Jeaniece Slater	Water Grade I		
Mr. Chad Smith	Water Grade III		
Mr. Adam Smith	Wastewater Grade II		
Mr. Rufus Smith Jr.	Wastewater Grade IC		
Mr. Larry Smith	Water Grade II		
Mt. Joseph Sprigg	Water Grade III		
Mr. David Stafford	Water Grade II		
Mr. David Stafford	Wastewater Grade III		
Mrs. Shannon Starling	Wastewater Grade IV		
Mr. Jamey Sullivan	Wastewater Grade II		
Mr. Anthony Tatham	Water Grade II		
Mr. Charles Tatum	Wastewater Grade IC		
Mr. Jason Taylor	Wastewater Grade II		

OPERATORS LISTED ON THESE PAGES BECAME CERTIFIED DURING THE JULY AND OCTOBER EXAMINATIONS IN 2003.



THE FOLLOWING PEOPLE PASSED A CERTIFICATION EXAM IN MAY 2003 AND WERE NOT INCLUDED IN THE LAST EDITION OF THE LOANS AND OPERATOR CERTIFICATION UPDATE

David McCall	Water Grade II
Harold Hubbard Jr.	Water Grade III

DO YOU KNOW WHEN YOUR CERTIFICATION EXPIRES?

Wastewater and Water certifications expire three years from the date of issuance. Renewals are sent 120 days prior to your expiration date. If you haven't received yours, or it has been misplaced and it is nearing your renewal date, contact the Loans and Operator Certification Section to have a duplicate renewal form issued or you can download one through our web site. Some things to remember about the renewal process.



- * It is the responsibility of the operator to know his or her expiration date.
- * The renewal fee is \$25.00.
- * Continuing education hours required: 1 certification - 24 hours / 2 certificates - 30 hours (15 per certificate)
- * The late fee is \$50.00 in addition to the renewal fee.
- * A renewal form must be received by ADEM at least 30 days before the certificate expiration date or it is considered late.
- * A certification may be renewed up to 180 days after the expiration date.
- * An operator whose certification has expired CANNOT be the operator of record for a system and CANNOT work a shift as the only operator on duty. There is no grace period for the system.
- * 180 days after the expiration an operator must retest to be certified.
- * An operator can be subject to disciplinary actions if he or she is found to be operating with an expired certification.

ONLINE RENEWALS ARE NOW AVAILABLE



If you would like to renew your certification online, you may do so at www.adem.state.al.us. Be prepared to pay for your renewal with VISA or Mastercard.

THE CLEAN WATERSHED NEEDS SURVEY IS COMING SOON!

The 2004 Clean Watershed Needs Survey is tentatively scheduled to begin June, 2004. The purpose of the CWNS is to assess construction costs for needed wastewater collection and treatment projects. Conducted every 4 years, this national survey is summarized and submitted to the U.S. Congress where it plays an essential role in determining federal fund allocations to the states. This means that complete and proper documentation of needs enables Alabama to receive its fair share of federal grant funds. We need your help in gathering data, so please look for more information in the coming months to make this year's survey another success.



STATE OF ALABAMA WATER AND WASTEWATER OPERATOR CERTIFICATION APPLICATION

Any applicant wishing to take an examination for certification shall complete this form and ensure that it is received in the office of the Operator Certification Program no later than 30 days preceding the date of the examination. **Failure to comply with this deadline will result in rescheduling for the next available exam.** A sixty dollar (\$60.00) **non-refundable** application fee must accompany the completed application to allow processing. Checks must be made payable to ADEM-Operator Certification.

MAIL APPLICATION TO
WATER & WASTEWATER
OPERATOR CERTIFICATION
PROGRAM:
Department of Environmental
Management
P. O. Box 301463
Montgomery, Alabama 36130-1463

THIS AREA FOR OFFICE USE ONLY

Approved _____ Disapproved _____
Date Reviewed _____ By _____
Eligibility Date _____
Exam Date _____
Exam Results _____
Certificate No. _____
Issue Date _____
Renewal Date _____

I, the undersigned, do hereby affirm and swear, under oath, that I am the said applicant; that all statements made in this application are true and correct to the best of my knowledge and belief. I further affirm that I am familiar with the Operator Certification Law (22-25-1 through 15) and ADEM Regulation 335-10, and I understand that in receiving a certificate from the Department of Environmental Management, I bind myself to be governed by these requirements. Further, I voluntarily consent to a thorough investigation of my employment and other activities for the purpose of verifying my qualifications for the certificate requested.

Date _____
(Signature of Applicant)

APPLICATION FOR: (Circle One) Water Grade I II III IV Wastewater Grade IC I II III IV

(USE TYPEWRITER OR PRINT PLAINLY USING BLACK INK)
APPLICATION MUST BE FILLED OUT COMPLETELY AND PROPERLY OR IT WILL NOT BE PROCESSED

APPLICATION FOR: (check one) EXAMINATION () RECIPROCAL ()

IF APPLYING FOR AN EXAMINATION, LIST THE EXAM DATE YOU PREFER _____

1. Name Mr. () Ms. () _____
(First) (Middle) (Last) (Home Telephone)

2. Home Address _____
(Street Number and Name) (Work Telephone)

(City) (State) (Zip) (County)

3. Employer (Name of System) _____ PWSID # _____ NPDES # _____

Address _____

4. Present Certification Water/Grade _____ Operator # _____ Expires _____
Wastewater/Grade _____ Operator # _____ Expires _____

5. Date of Birth _____ Place of Birth _____ SS Number* _____

*The disclosure by the applicant of his/her Social Security Number is mandatory and is used solely for the purpose of record keeping. ADEM requires this disclosure by virtue of regulations which are in accord with Sec. 7(a)(2)(a) of P.L. 93-579 which allows this disclosure solely for record keeping purposes. **Complete the back of this application fully to allow a full evaluation of the application.**

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – OPERATOR CERTIFICATION PROGRAM

DIVISION 335-10-1
CLASSIFICATION OF WATER AND WASTEWATER TREATMENT PLANTS,
WATER DISTRIBUTION SYSTEMS, AND PUBLIC WASTEWATER
COLLECTION SYSTEM;
CERTIFICATION OF OPERATORS

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335-10-1-.01 Purpose. The purpose of this Chapter is to protect the public health and welfare and prevent pollution by classifying all water and wastewater treatment plants, water distribution systems, and public wastewater collection systems, and by establishing a program for the certification of the competency of operators to operate such plants and systems.

Author: Joe Alan Power, [Aubrey White](#).

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25, 1994; effective July 1, 1994; [XXXX XX, 2004](#).

335-10-1-.02 Definitions. For the purposes of this Chapter, the following words and phrases, unless a different meaning is plainly required by the context, shall have the following meanings:

335-10-1-.02

(a) "activated sludge process plant" means a wastewater treatment plant employing a biological wastewater treatment process in which a mixture of wastewater and a coagulum or gel composed of bacteria and other microorganisms is agitated and aerated in the presence of a sufficient concentration of dissolved oxygen so that the gel can sorb dissolved and finely divided organic particles from the wastewater. The gel or sludge is subsequently separated by sedimentation and is wasted or returned to the aeration process as required. Activated sludge consists of, but is not limited to, the following:

1. Conventional activated sludge;
2. Extended aeration;
3. Complete-mix aerated lagoon; and
4. Contact stabilization.

(b) "advanced groundwater treatment plant" means a water treatment plant employing any treatment of greater technical sophistication than aeration, disinfection, corrosion control, pressure filtration and fluoridation for the treatment of water from a well or spring.

~~(c) "advanced surface water treatment plant" means a water treatment plant employing treatment processes which exceed in technical sophistication those included in subparagraph (f) of this Rule for the treatment of surface water supplies.~~

~~(d) "advanced waste treatment" means a level of treatment greater than that provided by secondary treatment greater than that provided by secondary treatment plus nitrification. Examples include, but are not limited to, effluent filtration, nutrient removal, chemical treatment and carbon sorption.~~

(e c) "basic groundwater treatment plant" means a water treatment plant employing treatment for corrosion control, disinfection, pressure filtration and/or fluoridation for treatment of water from a well or spring.

(f d) "~~basic~~ surface water treatment plants" means a water treatment plant ~~employing conventional coagulation, sedimentation, filtration (rates not to exceed two gallons per minutes per square foot) and disinfection~~ designed and operated for the treatment of surface water supplies. This definition also includes treatment plants which have groundwater under the influence of surface water as the source.

(g e) "certification" means the certificate of competency issued by the Director stating that the operator has met the requirements for the specified operator classification of the certification program.

(h f) "Department" means the Alabama Department of Environmental Management established by Code of Alabama 1975, § 22-22A-4.

(i g) "Director" means the Director of the Alabama Department of Environmental Management, appointed pursuant to Code of Alabama 1975 §22-22A-4.

(j h) "operator" means the person on duty who has direct responsibility for the operation of a water treatment plant, water distribution system or wastewater treatment plant. A person shall be deemed to have direct responsibility for the operation of a water treatment plant, water distribution system or wastewater treatment plant if he in fact supervises or directs the operation of a water treatment plant, water distribution system or wastewater treatment plant, or makes process control decisions.

(i) "operator intern" means a person who has successfully passed the operator examination but has not yet obtained the necessary experience to become certified.

(k j) "person" means a natural person.

~~(l) "primary treatment plant" means a wastewater treatment plant employing a process designed to remove from the wastewater organic and inorganic settleable solids by the physical process of sedimentation.~~

(k) "process control decision" means a decision regarding the daily operational activities of a water system or wastewater system that will directly impact the quality and/or quantity of drinking water or treated wastewater.

(m l) "public wastewater collection system" means the system of pipes, structures, and facilities through which wastewater, municipal sewage, or wastes, of a liquid nature is received, collected, stored, transported, or delivered into a wastewater treatment plant.

(n m) "restricted certificate" means an operator certificate issued without examination which is valid only for a particular plant or system and cannot be transferred to another plant.

(o n) "trickling filter and/or biological contactor process plant" means a wastewater treatment plant employing a treatment process whereby the wastewater is passed over a medium upon which grows bacteria and other microorganisms that sorb and oxidize soluble and finely dissolved organic

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matter. Subsequent sedimentation separates the resulting settleable solids from the process effluent.

(~~p~~ o) "Wastewater treatment lagoon" means a wastewater treatment plant employing an excavation designed and constructed to receive raw or pretreated wastewater in which stabilization is accomplished by several natural and photosynthetic (algal) self-purification phenomena with or without supplemental aeration. Wastewater treatment lagoon consists of, but is not limited to the following:

1. Non-aerated;
2. Partial mix;
3. Hydrograph control release (HCR);
4. Aquaculture and constructed wetlands.

(~~e~~ p) "wastewater treatment plant" means the facility or group of units used for the treatment of wastewater from public wastewater collection systems and for the reduction or handling of solids removed from such wastewater.

(~~f~~ q) "water distribution system" means that portion of the water supply system in which water is conveyed from the water treatment plant or other supply point to the premises of the consumer.

(~~s~~ r) "water treatment plant" means that portion of the water supply system which in some way alters the physical, chemical or bacteriological quality of the water.

(~~t~~ s) "water supply system" means the system of pipes, structures and facilities through which a public water supply is obtained, treated and sold or distributed for human consumption for household use and which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

(~~w~~ t) "working experience" means experience that is gained from actual hands-on operation of a water or wastewater treatment plant, water distribution system or public wastewater collection system. [Excluded from this definition is work of a clerical or administrative nature.](#)

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25, 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, [XXXX XX, 2004](#).

335-10-1-.03 Classification of ~~Water and Wastewater Treatment Plants, Water Distribution Systems, and Public Wastewater Collection Systems.~~

(1) Wastewater treatment plants, water treatment plants, water distribution systems, and public wastewater collection systems are classified by grades in accordance with the following:

<u>GRADE</u>	<u>DESCRIPTION</u>	<u>SIZE</u>
WASTEWATER TREATMENT PLANTS		
I	Wastewater treatment lagoon	0.025 MGD <u>ALL</u> > 0.025 MGD
II	Trickling filter and/or biological contactor process plant Activated sludge process plant	0 to .999 MGD 0 to .499 <u>.999</u>
III	Trickling filter and/or biological contactor process plant Activated sludge process plant	1.000 to 1.000 <u>15.000</u> MGD 0.500 <u>1.000</u> to 5.000 MGD
WASTEWATER TREATMENT PLANTS		
IV	Trickling filter and/or biological contactor process plant Activated sludge process plant	> 1.000 <u>15.000</u> MGD >5.000 MGD

PUBLIC WASTEWATER COLLECTION SYSTEMS

I (C)	Public wastewater collection systems	ALL
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WATER TREATMENT PLANTS

II	Basic groundwater treatment plants	ALL
III	Basic surface water treatment plant Advanced groundwater treatment plants	ALL ALL
IV	Advanced s Surface water treatment plants	ALL

WATER DISTRIBUTION SYSTEMS

I	Water distribution system	ALL
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335-10-1-.03

(2) Any water or wastewater treatment plant having a combination of treatment processes which are in different grades shall be classified according to the process associated with the higher grade.

(3) The Director may change the classification of a particular water distribution system, water treatment plant or wastewater treatment plant when there are unusual factors affecting the quality of the source, the complexity of treatment or distribution, ~~or~~ potential health hazards, or compliance history. Upon changing the classification, the Director shall notify the owner of the affected water distribution system, water treatment plant or wastewater treatment plant of the change in classification and shall give the owner a reasonable time to comply with the requirements this Chapter.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; January 23, 2003, XXXX XX, 2004.

335-10-1-.04 ~~Water and Wastewater Treatment Plants, Water Distribution Systems, and Public Wastewater Collection Systems Required to Have Certified Operators~~ Staffing Requirements.

(1) All water treatment plants, wastewater treatment plants, water distribution systems, and public wastewater collection systems are required to be operated by an operator certified in accordance with the provisions of this Chapter as competent to ~~supervise~~ operate the classification of plants or systems to which the plant or system ~~operated~~ is classified.

(2) All Grade ~~III and~~ IV surface water treatment plants must have a certified operator of the same grade ~~or higher~~ present at the plant during operation. All Grade III advanced groundwater plants must have a certified operator of the same grade or higher present as directed by the ~~facilities~~ operator's operating permit. A permanent record of daily operator staffing shall be maintained at all Grade III and IV facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature.

(3) All Grade III wastewater treatment plants must have a certified operator of the same grade or higher present at the plant for a minimum of one 8-hour work shift during the daytime hours of plant operation, five days a week. For all other days of plant operation, at a minimum, a certified operator Grade II or higher must operate the facility one 8-hour work shift during the daytime hours. A permanent record of daily operator staffing shall be maintained at all Grade III facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature. Upon demonstration and approval of a facility's ability to

be remotely monitored, the Department may waive all or part of the staffing requirements in excess of the five 8-hour shifts by a Grade III or higher.

(4) All Grade IV wastewater treatment plants must have a certified operator of the same grade present at the plant for a minimum of one 8 hour work shift during the daytime hours of plant operation. For all other times of operation, as a minimum, a certified operator Grade II or higher may operate the facility if the Grade IV operator is available on call within 30 minutes of the plant site. A permanent record of daily operator staffing shall be maintained at all Grade IV facilities. This record must contain the operator's name, time of arrival and departure, and the operator's signature.

(5) All Grade I water distribution systems, Grade I wastewater treatment plants, public wastewater or collection systems, and Grade II water and wastewater treatment plants must have a certified operator of the same grade or higher present at the plant or system at all times necessary to ensure its safe, efficient, and proper operation. A permanent record of daily operator staffing shall be maintained at all Grade I & II wastewater treatment plants and at all Grade II water treatment plants or well sites. This record must contain the operator's name, time of arrival and departure, and the operator's signature. All Grade I water distribution systems, Grade I wastewater treatment plants, public wastewater ~~or~~ collection systems, and Grade II water and wastewater treatment plants must be visited, as a minimum, once per week by a certified operator unless the facility's operating permit calls for more frequent site visits.

(6) A certified operator may ~~maintain supervision over~~ operate more than one plant or system only if he ~~can~~ provides written assurance to the Department, in such form as the Department may provide, that he can ~~provide supervision adequate to~~ ensure the safe, efficient and proper operation of all plants and systems ~~supervised he operates~~. Supervision Operation must be limited to a plants or systems classified at or lower than the grade of the operator. All staffing requirements applicable to the systems or plants to be operated must be followed.

(7) Any Water Grade III operator employed at surface water treatment plant on the effective date of this Rule may request that the Department issue a Restricted Water Grade IV certificate with the same expiration date as the current certificate. All such requests must be received by the Department no later than one year after the effective date of this Rule.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, XXXX XX, 2004.

335-10-1-.05

335-10-1-.05 Reciprocal Certificates. Certificates may be issued in a comparable classification to a person who holds a current certificate from another state by examination, provided the requirements of that state are comparable to or higher than those of the Department. Reciprocity will only be granted to operators applying from states which ~~have a reciprocal agreement~~ reciprocate with the Department. The issuance of a reciprocal certificate is contingent upon submission of an application to the Department, nonrefundable fees required by Rule 335-1-6-.06, a copy of the present certificate and other supporting documentation required by the Department.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, XXXX XX, 2004.

335-10-1-.06 Certification by Examination. Persons not entitled to certification under Rule 335-10-1-.05 shall be issued a certificate indicating the classification of water treatment plant, wastewater treatment plant, public wastewater collection system, or water distribution system which the person is qualified to ~~supervise operate~~ upon ~~qualifying for and passing an examination~~ fulfilling the two-step application process as ~~provided outlined~~ by Rules 335-10-1-.07 and 335-10-1-.08.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000, XXXX XX, 2004.

335-10-1-.07 Examinations. The first step in the certification process is the written examination. A person wishing to apply for examination must submit a complete application to the Department, together with the appropriate fees required by Rule 335-1-1-.06. The applicant must have a high school diploma or a general equivalency diploma (GED).

(1) Examinations shall reflect the minimum knowledge and skills required to competently operate the various classifications of water treatment plants, wastewater treatment plants, water distribution systems, and public wastewater collection systems.

(2) The Department shall hold at least one examination each year for the purpose of examining candidates for certification, at a time and place designated by the Department. The Department reserves the right to limit the number of examinees for each scheduled exam based on space limitations. The examinees will be scheduled on a first-come first-serve basis.

(3) The minimum passing grade shall be seventy percent. Each applicant shall be notified in writing of the results of his examination. All examinations shall remain the property of the Department.

(4) Upon passing the examination, the operator intern must obtain the necessary working experience as detailed in 335-10-1-.08 in order to become certified. If the necessary working experience is not obtained within five years of passing the examination, the operator intern must retest.

(5) The application and fees for examination must be received by the Department no later than 30 days prior to the examination.

Author: Aubrey White

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: XXXX XX, 2004

335-10-1- .07 .08 Qualification for Examination Certification. ~~A person~~ An operator intern wishing to ~~take an examination~~ apply for certification must submit a complete application to the Department, together with the appropriate fees required by Rule 335-1-1-.06. ~~The applicant must have a high school diploma or a general equivalency diploma (GED), in addition to the experience required to take an examination. The application must be received by the Department 30 days prior to the date of examination.~~ The applicant must ~~meet~~ obtain the following ~~additional qualifications~~ working experience prior to ~~the date~~ submittal of the examination application ~~unless otherwise provided:~~

~~(a) The applicant shall have acquired the following experience:~~

~~1. (a)~~ For a Grade I water distribution system, at least twelve months working experience in a Grade I or higher water ~~distribution~~ system. Credit for a maximum of six months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes or seminars;

~~2. (b)~~ For a Grade I wastewater treatment plant or Grade I (C) public wastewater collection system, at least twelve months working experience in a Grade I or higher wastewater treatment plant, or Grade I (C) public wastewater collection system, ~~respectively~~. Credit for a maximum of six months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes, or seminars;

~~3.~~ (c) For a Grade II water treatment plant, at least eighteen months working experience in a Grade II or higher water treatment plant, or twenty-four months of combined experience in a Grade I water distribution system ~~at~~ or a Grade II, III, or IV water treatment plant. Credit for a maximum of nine months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes or seminars.

~~4.~~ (d) For a Grade II wastewater treatment plant, at least eighteen months working experience in a Grade II or higher wastewater treatment plant or twenty-four months of combined experience in a Grade I, II, III, or IV wastewater treatment plant. Credit for a maximum of nine months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes, or seminars.

~~5.~~ (e) For a Grade III advanced groundwater treatment plant, at least twenty-four months treatment experience in a Grade III advanced groundwater treatment plant or thirty-six months of combined working experience in a Grade II, III or ~~III~~ IV water treatment plant. Credit for a maximum of twelve months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes or seminars.

~~6.~~ (f) For a Grade III wastewater treatment plant, at least twenty-four months working experience in a Grade III or higher wastewater treatment plant or thirty-six months of combined working experience in a Grade II, III or ~~III~~ IV wastewater treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes or seminars.

~~7.~~ (g) For a Grade IV water treatment plant, at least twenty-four months treatment experience in a Grade IV water treatment plant ~~or thirty-six months of combined working experience in a Grade III or IV surface water treatment plant~~. Credit for a maximum of twelve months of working experience may be allowed by the Department for the completion of, or attendance at, Department approved training programs, classes or seminars.

~~8.~~ (h) For a Grade IV wastewater treatment plant, at least twenty-four months working experience in a Grade IV wastewater treatment plant or thirty-six months of combined working experience in a Grade III or IV wastewater treatment plant. Credit for a maximum of twelve months of treatment experience may be allowed by the Department for the completion of,

or attendance at Department approved training programs, classes or seminars.

~~9. (i) For the purposes of calculating working experience, Experience requirements are based on a 40 hour work week. 1900 hours of applicable experience equals twelve months. Substitution for required experience with approved training programs, classes or seminars is as follows (limited by requirements of each grade level in this chapter):~~

(j) Substitution for required experience with approved training programs, classes or seminars is as follows (limited by requirements of each grade level in this chapter):

15 Hours.....	3 months experience
30 Hours.....	6 months experience
45 Hours.....	9 months experience
60 Hours.....	12 months experience

(k) All working experience claimed in the application must be verified in writing by the operator intern's direct supervisor or another certified operator familiar with the operator intern's experience.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, XXXX XX, 2004.

~~335-10-1-.08 — Examinations.~~

~~(1) Examinations shall reflect the minimum knowledge and skills required to competently operate the various classifications of water treatment plants, wastewater treatment plants, water distribution systems, and public wastewater collection systems.~~

~~(2) The Department shall hold at least one examination each year for the purpose of examining candidates for certification, at a time and place designated by the Department. The department reserves the right to 335-10-1-.08~~

~~limit the number of examinees for each scheduled exam based on space limitations. The examinees will be scheduled on a first come first serve basis.~~

~~(3) The minimum passing grade shall be seventy percent. Each applicant shall be notified in writing of the results of his examination. All examinations shall remain the property of the Department.~~

~~**Author:** Joe Alan Power, Aubrey White.~~

~~**Statutory Authority:** Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.~~

~~**History:** September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003.~~

335-10-1-.09 Re-examination.

(1) A person who fails to pass one examination for a particular classification of water treatment plant, water distribution system, wastewater treatment plant, or public wastewater collection system may take another regularly scheduled examination for the same classification of plant or system provided a new application is submitted together with fees in accordance with Rule 335-10-1-.~~06~~ 07.

(2) A person who fails to pass two examinations for a particular classification of water treatment plant, water distribution system, ~~or~~ wastewater treatment plant, or public wastewater collection system may take another regularly scheduled examination for the same classification of plant or system provided a new application is submitted together with fees in accordance with Rule 335-10-1-.~~06~~-07 and provided that he submits adequate proof that he has successfully completed 8 hours of additional training programs as approved by the Department.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000, XXXX XX, 2004.

335-10-1-.10 Continuing Education Requirement for Renewal.

(1) All certified operators must demonstrate continuing education activities and file these activities along with the renewal application and nonrefundable fee for certification renewal. Training activities must be attended within the three year period prior to the expiration date except for carry over credit.

(2) Operators with one water certificate must demonstrate 24 continuing education hours (CEH) of actual training in the water field. Wastewater operators with one certificate must demonstrate 24 CEH training in the wastewater field. Training activities can only be counted once. Operators with more than one certificate must obtain 15 CEH of training in the proper field for each certificate for the renewal period. An operator can only hold one water and one wastewater certificate.

(3) A maximum of 10 CEH of training per certificate may be carried over into the next three year renewal period.

(4) Continuing education training shall include, but not be limited to:

(a) Association and/or Department sponsored short-courses, and seminars;

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(b) Successfully completing or auditing college sponsored courses, and seminars;

(c) Approved correspondence and online courses;

(d) Management and supervision courses;

(e) In-house or regional courses taught by experienced certified operators or experienced instructors;

(f) Teaching or instructing as described in (a) through (e) above.

(g) All such activities as described in (a) through (f) above must be relevant to water and wastewater treatment, distribution and collection systems and may include safety and/or managerial content. Documentation of class attendance must be obtained from the instructor and retained until the next renewal period.

(5) The conversion to CEH units from other units is as follows:

1 College semester hour of credit	45 CEH
1 College quarter hour of credit	30 CEH
1 College Audit hour	1/3 of above
1 Continuing Education Unit (CEU)	10 CEH
1 Hour teaching or instructing	2 CEH
1 Hour of acceptable training	1 CEH

(6) Effective January 1, 2007, one half of the required CEH courses must be of a technical nature. Acceptable coursework would include topics directly related to the operation, maintenance, and regulation of water and wastewater systems. Excluded from eligibility would be safety, management, computer, and administrative courses.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, [XXXX XX, 2004](#).

335-10-1-.11 Certificate Expiration and Renewal.

(1) Certificates issued under Rule 335-10-1-.05, or 335-10-1-.06 shall remain in effect three years unless revoked or suspended by the Director as provided in Rule 335-10-1-.12.

(2) A complete application for certificate renewal should be received by the Department at least thirty days prior to the expiration date of the certificate sought to be renewed. Failure to submit an application for

certificate renewal as provided in this paragraph may result in a lapse of an operator's certification and may make it unlawful for such operator to continue to operate a water treatment plant, water distribution system, wastewater treatment plant, or public wastewater collection system until a renewal certificate is issued.

(3) Operators who fail to submit a renewal application 30 calendar days prior to certificate expiration date may file a late application and pay a \$590.00 late fee over and above the certification fee. All late applications must be received by the Department within 180 calendar days of the certificate expiration date. ~~Certificates issued based on acceptable late application may have the issuance and renewal date based on the certificate due for renewal.~~

(4) An application for certificate renewal shall be on a form prescribed by the Department. An application shall not be complete without payment of fees required by Rule 335-1-6-.06.

(5) The Director may non-renew a certificate for cause, including violations of this Chapter.

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, XXXX XX, 2004.

335-10-1-.12 Revocation of Certificate. Following a hearing before the Director or his designated representative, the Director may revoke or suspend a certificate if it is found that the operator:

(a) Has practiced fraud or deception in obtaining the certificate or in the performance of his duties as an operator;

(b) Has not used reasonable care, judgement, or the application of his knowledge or ability in the performance of his duties;

(c) Is incompetent or unable to perform his duties as an operator; ~~or~~

(d) Has knowingly submitted incorrect or falsified operational data;

(e) Has consistently failed to submit operational data as required by the department; ~~or~~

(f) Has violated the requirements of this Chapter.

335-10-1-.12

Author: Joe Alan Power, Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; January 23, 2003, [XXXX XX, 2004](#).

335-10-1-.13 **Violations.** The Department may initiate proceedings to enforce the requirements of Code of Alabama 1975, §§22-25-1 to 22-25-15, any rule in this chapter or any condition of any certification or provision of any order. Such proceedings may include:

- (a) The issuance of a notice of violations;
- (b) The issuance of an administrative order directing compliance;
- (c) The issuance of an administrative order assessing a civil penalty of not less than \$100.00 for each violation and each day of continued violation and not more than \$25,000.00 for each violation and each day of continued violation.
- (d) The commencement of a civil action to enjoin any threatened or continuing violation;
- (e) The commencement of a civil action to assess a civil penalty of not less than \$100.00 for each violation and each day of continued violation and not more than \$25,000.00 for each violation and each day of continued violation.
- (f) The commencement of a criminal action after written notice of the violation.

Author: Joe Alan Power, [Aubrey White](#).

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: September 18, 1986. **Amended:** May 25 1994; effective: July 1, 1994; June 7, 2000; [XXXX XX, 2004](#).

335-10-1-.14 Certification Required for Operation. Wastewater treatment plants, water treatment plants, water distribution systems, and public wastewater collection systems classified in 335-10-1-.03 must be operated by an operator holding a valid certificate of the same grade or higher. Any person without a valid certificate can only work under the direct supervision of a properly certified operator, and may not work a shift as specified in 335-10-1-.04 unless a properly certified operator is present to supervise the work at all times.

Author: Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: XXXX XX, 2004.

335-10-1-15 **Process Control Decisions.** Process control decisions at wastewater treatment plants, water treatment plants, water distribution systems and public wastewater collection systems classified in 335-10-1-.03 must be made or supervised by a properly certified operator.

Author: Aubrey White.

Statutory Authority: Code of Alabama 1975, §§22-22A-5, 22-22A-6, 22-22A-8, 22-25-11, 22-25-13.

History: XXXX XX, 2004.