

CERTIFIED OPERATORS & SAMPLERS



REGULATIONS, ROLES & RESPONSIBILITIES, CONTRACTING

NMED Drinking Water Bureau

UTILITY OPERATOR CERTIFICATION



REGULATIONS

NEW MEXICO ADMINISTRATIVE CODE

TITLE 20 ENVIRONMENTAL PROTECTION

CHAPTER 7 WASTEWATER AND WATER SUPPLY FACILITIES

PART 4 UTILITY OPERATOR CERTIFICATION



20.7.4.1

ISSUING AGENCY:

Water Quality Control Commission.

20.7.4.3

STATUTORY AUTHORITY:

Utility Operators Certification Act,
NMSA 1978, Sections 61-33-1 to 10



20.7.4.20

CERTIFICATION GENERAL PROVISIONS:

A. It is unlawful to operate or allow the operation of a public water supply system...unless the system...is operated by or under the supervision of a certified operator who meets or exceeds the appropriate level of certification required to operate the system....



20.7.4.20

CERTIFICATION GENERAL PROVISIONS:

C. The name(s) of the certified operator(s) employed by a public water supply system...must be on file at all times with the department. A certified operator may be replaced with another certified operator of the required level at any time. The owner shall notify the department in writing of the name of the new certified operator within thirty days after the replacement of the certified operator.



20.7.4.10

LEVELS OF CERTIFICATION FOR OPERATORS OF PUBLIC WATER SUPPLY SYSTEMS....:

A. The levels of general certification for operators of public water supply systems from lowest to highest shall be:

- (1) level 1 water supply (WS1)**
- (2) level 2 water supply (WS2);**
- (3) level 3 water supply (WS3); and**
- (4) level 4 water supply (WS4).**

B. The levels of special certification for operators of public water supply systems from lowest to highest shall be:

- (1) small water (SW); and**
- (2) small water advanced (SWA);**



20.7.4.11

CLASSIFICATION OF PUBLIC WATER SUPPLY SYSTEMS ...:

- A. Public water supply systems are classified based on:
- (1) the size and type of the system;
 - (2) the capacity of the system in terms of size service area and number of users served;
 - (3) the type and character of the water to be treated; and
 - (4) the physical conditions affecting the treatment plants and distribution systems.



20.7.4.12

PUBLIC WATER SUPPLY SYSTEMS:

A. In order to operate the various types of treatment processes at public water supply systems, the indicated level of certification shall be required:



**Type of Treatment Process	Population Served				
	25 to 500	501 to 5,000	5,001 to 10,000	10,001 to 20,000	20,000+
Filtration (sand, gravity)	SWA	WS3	WS3	WS3	WS4
Coagulation, sedimentation, filtration	SWA	WS3	WS3	WS4	WS4
Odor and taste control (activated carbon)	SW	WS2	WS3	WS3	WS4
Chemical addition (stabilization)	SW	WS2	WS2	WS3	WS4
Ion exchange (softening, defluoridation)	SWA	WS2	WS3	WS3	WS4
Chlorination	SW	WS2	WS2	WS3	WS4
Arsenic removal	SWA	WS3	WS3	WS3	WS4
Production, ground water only	SW	WS1	WS2	WS3	WS4

** ABBREVIATED TABLE



Drinking Water Bureau

20.7.4.14

LESSER INCLUDED CERTIFICATIONS:

OPERATOR CERTIFICATION LEVEL	INCLUDES THESE CERTIFICATIONS
SWA	SW
WS1	SW, WST1 & DS1
WS2	SW, WS1, DS1, & DS2
WS3	SW,SWA, WS1,WS2, DS1, DS2 & DS3
WS4	SW,SWA, WS1,WS2, WS3, DS1, DS2 & DS3



20.7.4.15

MINIMUM NUMBER OF CERTIFIED OPERATORS:

- A. A public water supply system shall provide the minimum number of certified operators needed to operate the system to protect human health, public welfare or the environment.
- B. If the department determines a water supply system is in violation of Subsection A of this section, the department may determine the minimum number of certified operators needed for the public water supply system. The determination shall be made in writing and delivered by certified mail. Violation of the department determination shall be considered a violation of the rule.



20.7.4.15

MINIMUM NUMBER OF CERTIFIED OPERATORS:

C. In determining the minimum number of certified operators needed to operate public water supply system in compliance with Subsection A of this section, the department shall consider the following criteria:



20.7.4.15

MINIMUM NUMBER OF CERTIFIED OPERATORS:

- (1) current compliance with applicable state and federal regulations;
- (2) historical compliance with applicable state and federal regulations;
- (3) actual discharge/production compared to design capacity;
- (4) availability of redundant facilities;
- (5) geographic area served by the public wastewater facility or public water supply system;



20.7.4.15

- (6) level of automation;
- (7) staffing plan;
- (8) capacity assessment findings;
- (9) sanitary survey deficiencies;
- (10) mechanical reliability; and
- (11) currency of federally required vulnerability assessments and risk management plans.

[20.7.4.15 NMAC - N, 2/2/09]



20.7.4.22 A

MINIMUM REQUIREMENTS FOR CERTIFICATION:

LEVEL OF CERTIFICATION	EDUCATION	EXPERIENCE (YEARS)	TRAINING CREDITS
SW, SWA, WS1	high school graduation, or general equivalency diploma	1	10
WS2		2	30
WS3		4	50
WS4		1 YEAR as a WS3	80



20.7.4.22 B

Substitutions.

- (1) In no case shall the actual experience be less than one year for any level except as in Subparagraph (d) of Paragraph (2) of Subsection B of this section.
- (2) Education may be substituted for the basic requirements or used for training credits as follows. In no case may the same education serve both as a substitution for experience and as training credits except as provided in this section.



SUBSTITUTIONS

1 YEAR EXPERIENCE	—————>	HIGH SCHOOL GRADUATION OR GED (EXCEPT WS4)
1 YEAR (30 SEMESTER HOURS) NON-RELATED FIELD	—————>	6 MONTHS EXPERIENCE
1 YEAR (APPROVED VOCATIONAL SCHOOL (WATER FIELD))	—————>	1 YEAR EXPERIENCE



SUBSTITUTIONS

2-YR ASSOCIATES DEGREE (APPROVED SCHOOL (WATER FIELD) & 6 MONTHS EXPERIENCE	→	ANY LEVEL UP TO AND INCLUDING WS2
2-YR ASSOCIATES DEGREE (APPROVED SCHOOL (WATER FIELD) & 12 MONTHS EXPERIENCE	→	REQUIREMENTS OF WS3

20.7.4.22 B



SUBSTITUTIONS

3-YRS EXPERIENCE + HS OR GED DIPLOMA + 15 SEMESTER HOURS COLLEGE (WATER FIELD)	→	ANY LEVEL UP TO AND INCLUDING WS3
BACHELOR'S DEGREE (WATER FIELD) + 2 YRS EXPERIENCE	→	ANY LEVEL UP TO AND INCLUDING WS3
FULL TIME WATER LAB EXPERIENCE	→	25% OF ACTUAL OPERATOR EXPERIENCE



New Mexico Water Sampling Technician Certification

Became Effective January 1, 2008.

In order to perform the various types of water sampling at public water supply systems after January 1, 2008, the indicated level of certification shall be required:

Type of Water Sampling	Population Served				
	25 to 500	501 to 5,000	5,001 to 10,000	10,001 to 20,000	20,000 +
Microbiology (WST1)	SW or WST1	WST1	WST1	WST1	WST1
Chemical and Radiological (WST2)	WST2	WST2	WST2	WST2	WST2





HT. J. RICHARDSON
Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

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RON CURRY
Secretary
JON GOLDSTEIN
Deputy Secretary

February 5, 2008

Re: New Mexico Environment Department Enforcement of Subsection C of 20.7.4.12 NMAC and Subsection C of 20.7.4.13 NMAC.

To Whom It May Concern:

The Surface Water Quality Bureau ("Bureau") of the New Mexico Environment Department ("Department") manages the Utility Operator Certification Program. The Bureau and the Department have enforcement authority over all sections of 20.7.4 NMAC - Utility Operator Certification.

As part of the Utility Operator Certification Program, the Bureau is responsible for preparing and administering certification examinations. Subsection C of 20.7.4.12 NMAC mandates that a specific level of certification shall be required "to perform the various types of water sampling at public water supply systems after January 1, 2008." Subsection C of 20.7.4.13 NMAC contains an identical requirement for performance of wastewater analysis at public wastewater facilities.

Because the required examinations that would allow operators to comply with these sections have not been completed by the Bureau, the Department hereby promises to refrain from taking any enforcement action against any individual or entity under Subsection C of 20.7.4.12 NMAC or Subsection C of 20.7.4.13 NMAC until at least January 2009, or such time as the examinations have been prepared and administered, whichever is later.

Sincerely,

Jon Goldstein
Deputy Secretary



New Mexico Water Sampling Technician Certification Requirements

Water Systems Operator certification
can be substituted

OPERATOR CERTIFICATION LEVEL	INCLUDES THESE CERTIFICATIONS
SW	WST1
SWA	WST1
WS1	WST1
WS2	WST1, WST2
WS3	WST1, WST2
WS4	WST1, WST2



New Mexico Water Sampling Technician Certification Requirements

Water Sample Technician 1 requires:

High school diploma or GED

5 training credits

Renewal—5 training credits

Water Sample Technician 2 requires:

High school diploma or GED

10 training credits

Renewal—10 training credits



20.7.4.21

REQUIREMENTS FOR APPLICATION FOR CERTIFICATION:

A. Each applicant for certification as a certified operator shall:

- (1) complete an application on forms furnished by the department; applications shall be submitted to the department not later than thirty days prior to the date of the examination;
- (2) submit evidence that the applicant has reached the age of majority;
- (3) pay a nonrefundable examination application fee, in advance, to the department; the examination application fee for certification



Fee Schedule

Type of Certification	Examination Fees (20.7.4.21)	Renewal Fees (20.7.4.25)
SW	\$25.00	\$20.00
SWA	\$25.00	\$20.00
Water Sampling Tech. 1	\$25.00	\$25.00
Water Sampling Tech. 2	\$25.00	\$25.00
Level 1	\$30.00	\$25.00
Level 2	\$30.00	\$25.00
Level 3	\$30.00	\$30.00
Level 4	\$30.00	\$30.00



20.7.4.21

- (4) successfully meet the educational, experience and training requirements stipulated in 20.7.4.22 NMAC; all training programs must be approved by the department, and the department shall assign the number of training credits for each approved training program; and
- (5) successfully pass the written examination for the level of certification being applied for.



20.7.4.21

B. Written examinations for certification shall be scheduled at such times and locations as the department deems appropriate. Written examinations shall be used in determining skill, knowledge, ability and judgment of the applicant. All written examinations will be graded and the applicants notified of the results. Examination papers will not be returned to the applicant, but may be reviewed by the applicant at the department.



20.7.4.25 A

RENEWAL OF CERTIFICATES:

All initial certifications shall expire on the last day of the certificate holder's birth month following the third anniversary of certification. All renewals shall be for three years. A renewal fee will be payable to the department for each renewal. Renewal fees shall be paid for each individual certification and shall be in accordance with the following fee schedule.



20.7.4.25 B

RENEWAL OF CERTIFICATES:

The department shall mail each holder of a certificate a renewal notice at least thirty days prior to the expiration date, mailed to his last address of record.

Failure to receive such notice shall not relieve the holder of his responsibility to apply for renewal prior to the expiration date.



C. Each certificate issued under 20.7.4.24 NMAC must be renewed at three-year intervals.

D. Renewal will require that each certificate holder be credited with having obtained thirty training credits in the three-year period preceding the date on which renewal application is due,

The thirty training credits must include at least ten training credits for approved training in the operation and maintenance of the same type of public water supply system or public wastewater facility as each certificate being renewed.



20.7.4.26

LAPSED CERTIFICATES:

- A. Certificates, which have not been renewed in accordance with 20.7.4.25 NMAC, will be considered lapsed and invalid.
- B. Lapsed certificates may be reinstated without penalty upon application within thirty days of the date of expiration. A lapsed certificate which has not been reinstated within the thirty-day period may be reinstated within one year of expiration date upon reapplication and payment of a \$10.00 per month penalty fee for each month or portion thereof beyond the expiration date. Reinstatement of lapsed certificate will also require satisfaction of all the renewal requirements of 20.7.4.25 NMAC.



20.7.4.26

LAPSED CERTIFICATES:

C. If a lapsed certificate has not been reinstated within one year of its expiration date, re-examination will be required for reinstatement.

All applicants for re-examination must meet the requirements of 20.7.4.21 and 20.7.4.22 NMAC of this part.



20.7.4.27 SUSPENSION AND REVOCATION:

- A. The department may suspend or revoke any or all certificate(s) held by a certified operator as provided for in Section 61-33-7 of the act.

- B. In the event of a contemplated suspension or revocation of a certificate, the department shall notify the certificate holder by registered mail of the reason for such action. Within 20 days after receipt of the notice, the certificate holder may request in writing that a hearing be held by the department.



20.7.4.27 SUSPENSION AND REVOCATION:

- C. When the department contemplates the suspension or revocation of a certificate, the department shall serve upon the certificate holder a written notice containing a statement:
- D. If the certificate holder does not mail a request for a hearing within the time and in the manner required by this section, the department may take the action contemplated in the notice and such action shall be final and not subject to judicial review.



20.7.4.27 SUSPENSION AND REVOCATION:

- E. If the certificate holder does mail a request for a hearing as required by this section, the department shall, within twenty days of receipt of such request, notify the certificate holder of the time and place of hearing, the name or names of the person or persons who shall conduct the hearing for the department and the statutes and regulations authorizing the department to take the contemplated action, which hearing shall be held not more than sixty nor less than fifteen days from the date of service of such notice.
- F. Re-issuance of a revoked certificate shall be accomplished by reapplication as provided for in an original certificate. Any person whose certificate is revoked shall be ineligible for admission to any examination for certification for the entire period of revocation as set by the department.



WATER SYSTEM OPERATOR ROLES & RESPONSIBILITIES



BEST PRACTICE GUIDE

Water System Operator Roles and Responsibilities: A Best Practices Guide



Introduction

<i>Purpose</i>	<p>This Guide will help you better understand:</p> <ul style="list-style-type: none">• Your roles and responsibilities in delivering safe drinking water to your system's customers.• Additional responsibilities, which can vary depending on your system size, characteristics (e.g., complexity of treatment), managerial structure, and regulatory requirements. <p>All system operators share several key responsibilities that are critical to meeting your ultimate goal - providing an adequate and safe supply of drinking water.</p>
<i>Target Audience</i>	<p>This Guide is intended for operators and owners of all public water systems serving fewer than 10,000 persons.</p>

System Operation

Keep all system components (i.e., source, treatment, storage, and distribution) functioning efficiently and effectively.

General Responsibilities

- ✦ Monitor chemical feed and other system components.
- ✦ Monitor effectiveness of treatment.
- ✦ Prepare and maintain records of meter readings, tests, equipment, chemical use, correspondence, and customer complaint log.
- ✦ Develop a maintenance plan for the treatment plant and distribution system.
- ✦ Regularly read meters and gauges, making adjustments as needed.

System Operation

- ✦ Periodically flush distribution system using hydrants and blow-off valves.
- ✦ Conduct preventive and routine maintenance on facilities and equipment.
- ✦ Periodically assess efficiency of system components (e.g., pumps and valves).
- ✦ Conduct frequent system and security inspections.
- ✦ Update system maps when a significant change to the distribution system has been made.
- ✦ Make all process control/system integrity decisions necessary to maintain the quality and quantity of water delivered to customers.
- ✦ Attend training to meet state primacy agency's continuing education requirements.
- ✦ Create and follow standard operating procedures (SOPs).

Regulatory Compliance

Comply with all relevant regulations to protect your customers' health.

General Responsibilities

- Develop and maintain a sampling plan, designed to protect the system, that covers all monitoring requirements.
- Collect or oversee collection of samples.
- Conduct routine inspections of wells or surface water sources and watersheds to identify potential sources of contamination.
- Address any problems quickly and ensure that all required follow-up steps are taken (e.g., additional sampling, public notification, sanitary survey or other compliance inspection).
- File all required reports and maintain records.
- Resolve any compliance problems, in consultation with regulators, and gather information on upcoming regulations. Increase awareness of tools, reference materials, and other state and federal resources.

Communication

Maintain a positive relationship with customers, regulators, and the system decision makers and keep them informed of your efforts to provide high quality drinking water.

General Responsibilities

- Report analytical results to regulators as required.
- Participate in the development and delivery of Consumer Confidence Reports (CCRs).
- Maintain, respond to, resolve, and keep a record of customer complaints.
- Communicate with the owner, manager, or board about technical and financial needs of your system (this includes training for recertification). Records should also be kept of any communication with decision makers.
- Inform the state of the results of technical improvements and their impact on the system.
- Inform the owner, manager, or board of any key findings from routine inspections and scheduled maintenance. Provide input for planning and preparing of equipment replacement.
- Develop and maintain a plan for monitoring system process controls and meet all related goals, in consultation with the system owner, manager, or board.

System Security

Protect your system against natural disasters and vandalism.

General Responsibilities

- ✦ Develop a plan to protect your facilities in case of an emergency, including updating your policies and procedures manual with security-related information.
- ✦ Inspect critical facilities and components, including door locks and fencing, as part of daily inspections.
- ✦ Store chemicals in locked areas with proper safety equipment.
- ✦ Maintain a list of written contacts for use in an emergency and make sure you know whom to contact in the event of an emergency.
- ✦ Exercise valves on a routine basis and make sure there are enough valves, in appropriate locations, to isolate parts of the system in the event of contamination.
- ✦ Attend security-related training if it is available.
- ✦ Educate other staff on emergency procedures and keep contact information up to date.