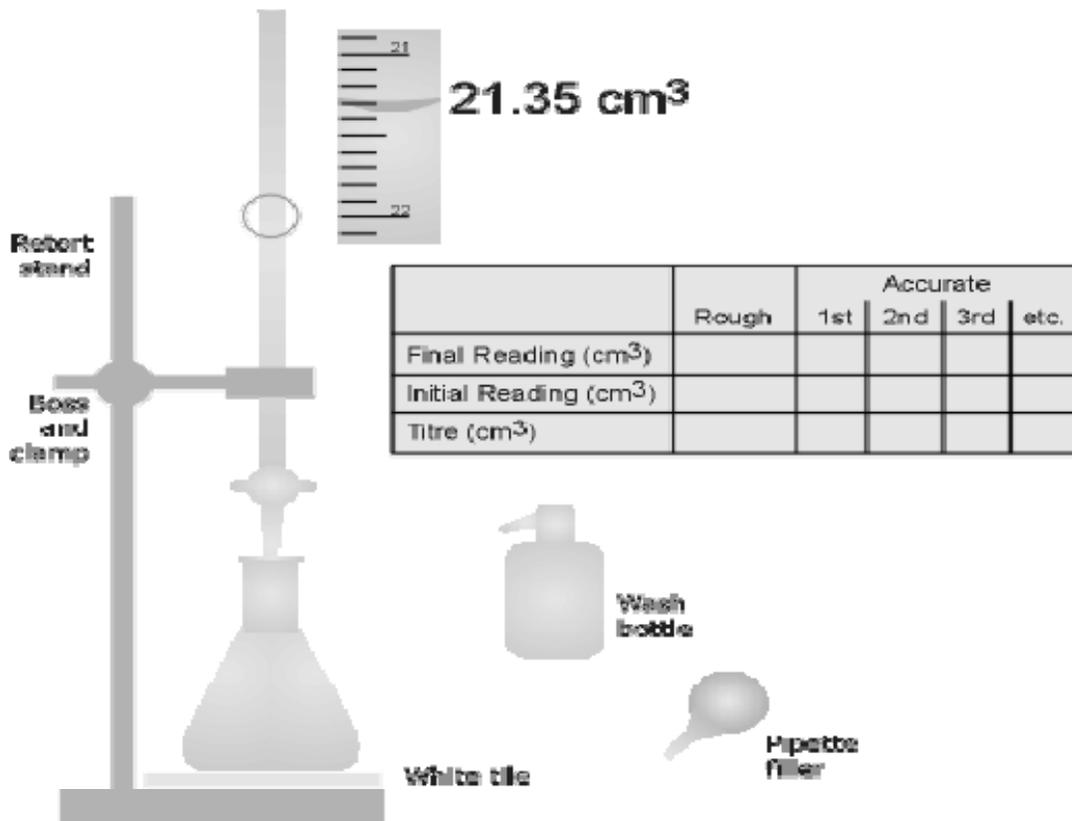




# NEW MEXICO WASTEWATER LABORATORY CERTIFICATION STUDY GUIDE



## UTILITY OPERATORS CERTIFICATION PROGRAM

SURFACE WATER QUALITY BUREAU

New Mexico Environment Department

P.O. Box 26110

Santa Fe, New Mexico USA 87502

[www.nmenv.state.nm.us/swqb/uocp](http://www.nmenv.state.nm.us/swqb/uocp)



NEW MEXICO  
WASTEWATER LABORATORY  
CERTIFICATION STUDY GUIDE  
*Version I*

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For The  
**UTILITY OPERATORS CERTIFICATION PROGRAM**  
SURFACE WATER QUALITY BUREAU  
New Mexico Environment Department  
P.O. Box 26110  
Santa Fe, New Mexico USA 87502



# INTRODUCTION

This "WASTEWATER LABORATORY CERTIFICATION STUDY GUIDE" has been created as a tool to assist Laboratory Technicians in New Mexico in preparation for taking the New Mexico Wastewater Laboratory Technician Level 1, 2 and 3 certification examinations. This guide is not intended to be a complete reference manual for technical information. Its purpose is to guide the reader to study material for each of the major subject areas for each of the classes. There is no implied claim that this study guide covers every possible point on which an technician may be tested. However, it is intended to be comprehensive in its coverage of the essential information for each examination.

This study guide is divided into eighteen chapters. Each chapter in the study guide has basic and advanced information intended to help the individual prepare for the certification examination.

The certification exams use several texts as reference manuals for exam topics. Each chapter of the study guide contains references to specific chapters of these manuals for those who wish to access more information on the topics covered in that particular section.

References: Standard Methods 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup>.  
Operation of Wastewater Treatment Plants, Volumes 1, 2 Sacramento

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**NEW MEXICO ENVIRONMENT DEPARTMENT  
SURFACE WATER QUALITY BUREAU  
UTILITY OPERATORS CERTIFICATION PROGRAM**

The New Mexico Water Quality Control Commission, through the New Mexico Environment Department (NMED), grants certification for competency to the operators of water and wastewater systems. The Utility Operators Certification Program (UOCP) conducts the testing for certification. Certain requirements must be met before an operator is eligible to take a certification examination.

An operator begins the process by completing a test application from the UOCP. Applications will only be accepted if they are submitted at least 30 days prior to the exam date. A certification officer will review each application to determine if the operator is eligible to take the requested examination. An application must be submitted every time a test is taken. Examinations are given several times a year at various locations around the state. A **fee** of **\$25.00** for the WWLT1 and a **fee** of **\$30.00** for the WWLT2 and WWLT3 examinations must be paid to **NMED Utility Operators Certification Program**. A check or money order for the proper amount **must** accompany each exam application.

Certificates must be renewed every three years. The renewal date will be the last day of the certificate holder's birthmonth following the third anniversary of the certificate. The UOCP also handles renewal of certificates. The **fee** for renewal is determined by an applicant's level of proficiency as listed in the currently effect Fee Schedule for **each** certificate.

The Utility Operators Certification Program maintains training credits for certified personnel only. Each Laboratory Technician must keep a record of all training credits earned. A record of current training credits may be obtained on the Online Database once an certified technician logs in. Anyone who intends to apply for New Mexico certification must include documentation of training credits when the application is submitted. Certified laboratory technicians that are taking higher level exams may also have to submit training credit documentation to update training record files at the UOCP.

All correspondence, including applications, should be mailed to:

**NMED – Surface Water Quality Bureau  
Utility Operators Certification Program  
P.O. Box 26110  
Santa Fe, New Mexico USA 87502**

Please feel free to call the Utility Operators Certification Program to request information on exam application forms, exam dates and locations, or certification and renewal. The telephone number for the office is **(505) 827-2804**.

# IMPORTANT FACTS ABOUT OPERATOR CERTIFICATION

An operator, as defined by NM Water Quality Control Commission Regulations, is "any person employed by the owner as the person responsible for the operation of all or any portion of a water supply system or wastewater facility. Not included in this definition are such persons as directors of public works, city engineers, city managers, or other officials or persons whose duties do not include actual operation or direct supervision of water supply systems or wastewater facilities."

Under the Utility Operator Certification Act, "a certified operator is a person who is certified by the commission as being qualified to supervise or operate one of the classifications of water supply systems or wastewater facilities". Experience is "actual work experience, full or part-time, in the fields of public water supply or public wastewater treatment. Work experience in a related field may be accepted at the discretion of the commission". Any claim of related experience will be reviewed by the WQCC or its advisory body, the Utility Operators Certification Advisory Board.

The Advisory Board is an appointed "seven-member board from the certified water systems operators and wastewater facility operators to function with the commission to establish qualifications of operators, classify systems, adopt regulations and advise the administration of the Utility Operators Certification Act."

Experience that includes operation, maintenance or repair of water treatment and water distribution systems is accepted based on whether it is full or part-time. The Advisory Board will review and approve experience in other related fields, such as commercial plumbing or utility construction. Credit for part-time experience will be based on the percentage of time devoted to actual operation or maintenance. Full time water or wastewater laboratory experience may be counted as operator experience at a rate of 25% of actual experience. The credit for this experience will be determined by review of the Advisory Board.

## BASIC CERTIFICATION REQUIREMENTS

There are three basic requirements a laboratory technician must meet to qualify for New Mexico certification. All certified laboratory technician must have at least one year of actual experience in a laboratory or performing laboratory analysis. All levels of certification require high school graduation or GED (see substitutions.) All levels of certification require a certain number of training credits in laboratory education or related fields.

BASIC CERTIFICATION REQUIREMENTS			
	Experience	Training Credits	Education
Class 1	1 year*	10	HS Grad or GED*
Class 2	2 years*	30	HS Grad or GED*
Class 3	4 years*	50	HS Grad or GED*

\* - See Substitutions

## SUBSTITUTIONS

One year of additional experience may be substituted for the high school graduation or GED requirement for all classes **except** Class 4. Education may be substituted for experience or training credits in some cases. The education must be in water or wastewater related field. One year of vocational education can be substituted for up to one year of experience. Associates and Bachelor's degrees in a related field may be substituted for up to three years of experience and 50 training credit hours, depending on the amount of actual experience. The criteria for substitution of education for experience are as follows:

No more than one year (30 semester hours) of successfully completed college education in a **non-related field** may be substituted for an additional **six months** of the required experience.

**One year** of approved vocational school in the water and/or wastewater field may be substituted for only **one additional year** of the required experience.

An **associate's degree** for a two-year program in an approved school in the water and/or wastewater field and **six months** of actual experience in that field (which may be accrued before, during, or after the school program) may be substituted for the requirements of any level up to and including **Class 2**. An **associate's degree** for a two-year program in an approved school in the water and/or wastewater field and **twelve months** of actual experience in that field (which may be accrued before, during, or after the school program) may be substituted for the requirements of any level up to and including **Class 3**.

Completion of at least **three years** of actual experience in the water and/or wastewater field plus **high school graduation** or equivalent, plus **15 semester hours** of successfully completed college education directly related to the water or wastewater field may be substituted for any level up to and including **Class 3**.

A **bachelor's degree** for a major directly related to the water or wastewater field plus **two years** of actual experience in that field may be substituted for any level up to and including **Class 3**.