

# Water Authority Position Description

## WATER QUALITY LAB/ANALYST

Status	Position Code	Level	Date
APPROVED	WQLA	M26	May 2018

Job descriptions are intended to present a general list of the tasks/duties performed by employees within this job Classification. Job Descriptions are not intended to reflect all duties performed within the job.

### POSITION SUMMARY

COLLECT, PERFORM, ANALYZE AND REPORT RESULTS OF WASTEWATER/WATER SAMPLE TESTS INCLUDING CHEMICAL, PHYSICAL AND MICROBIOLOGICAL WATER QUALITY TESTS. PERFORM A VARIETY OF SCIENTIFIC AND SUPPORT TASKS RELATED TO ASSIGNED AREAS OF RESPONSIBILITY.

### MIN EDUCATION & EXPERIENCE REQ

BACHELOR'S DEGREE WITH MAJOR COURSE WORK IN PHYSICAL OR LIFE SCIENCE, CHEMISTRY, MICROBIOLOGY, BIOLOGY OR A RELATED FIELD, PLUS THREE (3) YEARS OF LABORATORY ANALYSIS EXPERIENCE.

### ADDITIONAL REQUIREMENTS

POSSESSION OF A VALID NEW MEXICO DRIVER'S LICENSE  
 POSSESSION OF, OR ABILITY TO OBTAIN AND MAINTAIN A VALID AUTHORITY OPERATOR PERMIT (AOP)  
 ACHIEVE AND MAINTAIN ALL DEMONSTRATIONS OF CAPABILITIES (DOC'S) AS REQUIRED BY LABORATORY POLICY  
 WHEN ASSIGNED TO THE PROCESS LABORATORY AT THE SURFACE WATER TREATMENT PLANT MUST POSSESS A STATE WATER OPERATOR CERTIFICATE LEVEL III  
 ACHIEVE AND MAINTAIN NEW MEXICO ENVIRONMENT DEPARTMENT WASTEWATER LABORATORY TECHNICIAN CERTIFICATION LEVEL III WITHIN (6) MONTHS

### SUPERVISION RECEIVED/EXERCISED

RECEIVE DIRECTION FROM THE WATER QUALITY LABORATORY SUPERVISOR AND HIGHER LEVEL MANAGEMENT STAFF.

MAY EXERCISE TECHNICAL AND FUNCTIONAL LEAD OVER LABORATORY TECHNICAL OR SUPPORT STAFF.

### ESSENTIAL FUNCTIONS

1. COLLECT, ANALYZE AND REPORT RESULTS OF WATER AND WASTE WATER SAMPLES INCLUDING MICROBIOLOGICAL, GRAVIMETRIC, CLASSICAL CHEMICAL AND INSTRUMENTAL ANALYSES IN ACCORDANCE WITH THE PROVISIONS AND REQUIREMENTS OF LABORATORY PROCEDURES, AND MEETING ASSIGNED STANDARDS FOR PRODUCTIVITY.
2. IDENTIFY, TROUBLESHOOT, RESOLVE AND DOCUMENT INSTRUMENT AND METHOD PERFORMANCE PROBLEMS.
3. INTERPRET AND ANALYZE TEST RESULTS. PREPARE ANALYTICAL REPORTS ON FINDINGS. SUBMIT REPORTS TO APPROPRIATE HIGHER LEVEL LABORATORY STAFF. PREPARE, REVIEW AND REPORT STATISTICAL SUMMARIES AND ANALYSES OF SAMPLE AND QUALITY CONTROL DATA.
4. INSTALL, OPERATE, CALIBRATE, MAINTAIN, AND TROUBLESHOOT A VARIETY OF LABORATORY TESTING TOOLS AND EQUIPMENT INCLUDING MICROSCOPES, ANALYTICAL BALANCES, FLASKS, INCUBATORS, DISTILLATION UNITS, SPECTROMETERS, AUTOCLAVES AND VARIOUS CHEMICAL TESTING INSTRUMENTS.
5. PERFORM ASSIGNED AND SUPPORT DUTIES AS NECESSARY IN SUPPORT OF PRODUCTION ANALYSES, INCLUDING REAGENT PREPARATION, METHOD DEVELOPMENT AND METHOD VALIDATION.
6. SERVE AS A TECHNICAL RESOURCE FOR SUBJECT AREAS OF DEMONSTRATED PROFICIENCY, INCLUDING PROVIDING KNOWLEDGE TRANSFER AND PRACTICAL TRAINING FOR LABORATORY STAFF AND SERVING AS A RESOURCE TO ADDRESS ANALYTICAL ISSUES WITH LABORATORY CLIENTS.
7. PERFORM BASIC LABORATORY MAINTENANCE DUTIES INCLUDING ORGANIZING ASSIGNED WORK AREAS, STORING LABORATORY EQUIPMENT, MAINTAINING INVENTORIES OF CONSUMABLES, CLEANING AND PREPARATION OF GLASSWARE, AND CLEANING COUNTER TOPS.
8. PREPARE, REVIEW, AND MAINTAIN A VARIETY OF DOCUMENTS AND RECORDS, INCLUDING ELECTRONIC RECORDS, REGARDING WATER QUALITY LABORATORY ANALYSIS PROCEDURES AND TESTING RESULTS.
9. MONITOR INVENTORIES OF LABORATORY SUPPLIES AND EQUIPMENT. RECOMMEND PURCHASE OF SUPPLIES AND EQUIPMENT AS NEEDED TO MAINTAIN PRODUCTION CAPACITIES.
10. MAINTAIN A SAFE WORK ENVIRONMENT AND CONSISTENTLY DEMONSTRATE SAFE WORKPLACE BEHAVIORS.
11. RECOMMEND CHANGES AND IMPROVEMENTS TO LABORATORY PROCEDURES TO IMPROVE THE QUALITY AND PRODUCTIVITY OF LABORATORY OPERATIONS AND TO INCORPORATE STATE-OF-THE-SCIENCE PRACTICES.

#### **SUPPLEMENTAL FUNCTIONS**

1. ATTEND AND PARTICIPATE IN PROFESSIONAL GROUP MEETINGS. STAY ABREAST OF NEW TRENDS IN THE FIELD OF WATER QUALITY LABORATORY TESTING AND ANALYSIS.
2. PERFORM RELATED DUTIES AND RESPONSIBILITIES AS REQUIRED.

**PREFERRED KNOWLEDGE**

BASIC PRINCIPLES AND PRACTICES OF CHEMISTRY  
BASIC PRINCIPLES AND PRACTICES OF BIOLOGY  
METHODS AND TECHNIQUES OF LABORATORY TESTING AND ANALYSIS, QUANTITATIVE  
METHODS, CONTAMINATION CONTROL AND GOOD LABORATORY PRACTICES  
THEORETICAL PRINCIPLES AND APPLIED PRACTICE OF LABORATORY QUALITY  
ASSURANCE  
OCCUPATIONAL HAZARDS AND STANDARD SAFETY PRECAUTIONS AS RELATED  
TO LABORATORY TESTING  
PRINCIPLES AND PROCEDURES OF RECORD KEEPING  
PRINCIPLES OF BUSINESS WRITING AND BASIC REPORT PREPARATION  
PRINCIPLES AND APPLICATIONS OF MATHEMATICS AND STATISTICS  
PERTINENT FEDERAL, STATE AND LOCAL CODES, LAWS AND REGULATIONS

**PREFERRED SKILL/ABILITY**

DEVELOP PROFICIENCY IN NEWLY ASSIGNED DISCIPLINES AND METHODS  
PERFORM CHEMICAL, PHYSICAL AND MICROBIOLOGICAL WATER/WASTEWATER TESTING  
IN ACCORDANCE WITH QUALITY REQUIREMENTS  
INTERPRET AND ANALYZE TEST RESULTS AND PREPARE REPORTS ON FINDINGS  
UTILIZE AND MAINTAIN A VARIETY OF LABORATORY TESTING TOOLS AND EQUIPMENT  
ENSURE THE ADHERENCE TO ESTABLISHED LABORATORY TESTING PROCEDURES AND  
REGULATIONS  
PROFICIENTLY USE MICROSOFT OFFICE APPLICATIONS (WORD, EXCEL, POWERPOINT  
AND OUTLOOK)  
GENERATE AND MAINTAIN ACCURATE RECORDS OF LABORATORY TEST RESULTS AND  
RELATED LABORATORY ACTIVITIES  
COMMUNICATE CLEARLY AND CONCISELY, BOTH ORALLY AND IN WRITING  
ESTABLISH AND MAINTAIN EFFECTIVE WORKING RELATIONSHIPS WITH THOSE  
CONTACTED IN THE COURSE OF WORK

**WORKING CONDITIONS**

LABORATORY ENVIRONMENT; TRAVEL FROM SITE TO SITE; EXPOSURE TO NOISE,  
DUST, GREASE, SMOKE, FUMES, GASES, HAZARDOUS CHEMICALS, WORK IN OR WITH  
WATER, WASTEWATER AND OTHER MATRICES.

**PHYSICAL REQUIREMENTS**

MAINTAIN PHYSICAL CONDITION APPROPRIATE TO THE PERFORMANCE OF ASSIGNED  
DUTIES AND RESPONSIBILITIES SUCH AS: SITTING, WALKING OR STANDING FOR  
PROLONGED PERIODS OF TIME; MODERATE OR LIGHT LIFTING.  
MAINTAIN EFFECTIVE AUDIO-VISUAL DISCRIMINATION AND PERCEPTION NEEDED FOR  
MAKING OBSERVATIONS AND COMPARISONS, COMMUNICATING WITH OTHERS, READING,  
WRITING AND OPERATING ASSIGNED EQUIPMENT.