



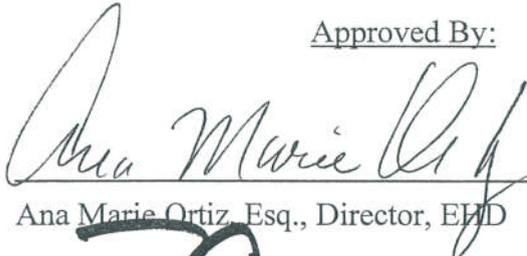
New Mexico Environment Department
Environmental Health Division
Swimming Pool Program



STATE OF NEW MEXICO
POOL OPERATOR CERTIFICATION PROCEDURE

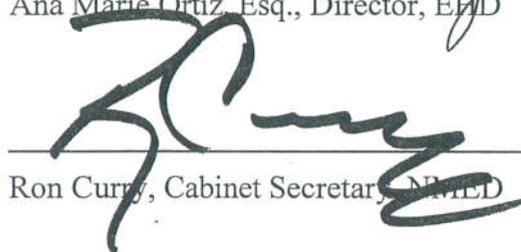
March 6, 2008

Approved By:



Ana Marie Ortiz, Esq., Director, EHD

3/12/08
Date



Ron Curry, Cabinet Secretary, NMED

3/11/08
Date

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1.0 INTRODUCTION

This document provides a standardized procedure for the consistent implementation of the Pool Operator Certification (“POC”) Program. The document specifies a “Job Task Analysis” and the “MUST KNOW” items for the operators of public pools, spas and baths, procedure for individuals to obtain pool operator certification, the requirements and procedures for the Department’s approval of pool operator training courses and instructors and their duties and obligations. (See *Appendices A and B*)

2.0 PURPOSE & GOALS

This plan is developed by the Pool Program for the operation and administration of the Pool Operator Certification Program. The purpose of this plan is to:

- Utilize a holistic approach to implement the Certified Operator Program including training, testing, and certification;
- Assure that the regulatory requirements of pool operator certification are met;
- Facilitate direct oversight and to increase compliance by public pools; and
- Assure that the Pool Program is effective in its efforts to protect public health and safety.
- Ensure that operator training courses and instructors are appropriately approved by the Department to provide the best certification courses for pool operators throughout New Mexico

3.0 PROGRAM AUTHORITY

The POC Program is authorized by the Certified Operator Requirements codified in the New Mexico Administrative Code (NMAC) in Title 7, Chapter 18, Part 2, Section 13 (7.18.2.13 NMAC) of the Public Swimming Pools, Spas, and Baths Regulations (“NM Pool Rules”). The NM Pool Regulations were codified pursuant to the Environmental Improvement Act, NMSA 1978, § 74-1-7.A(10).

4.0 DEFINITIONS/ACRONYMS

“POC”: Pool Operator Certification

“ERP”:	Emergency Response Plan
“O/M”:	Operation and Maintenance
“NSPF®”:	National Swimming Pool Foundation®
“ASPSA™”:	American Swimming Pool and Spa Association™
“APSP™”:	Association of Pool and Spa Professionals™
“NRPA”:	National Recreation and Parks Association
“CPO®/CPOI®”:	Certified Pool Operator and Certified Pool Operator Instructor are registered trademarks of the National Swimming Pool Foundation®.
“LAFT™”:	Licensed Aquatic Facility Technician and Basic Licensed Aquatic Facility Technician are trademarks of the American Swimming Pool and Spa Association™ (ASPSA).
“AFO:	Aquatic Facility Operator Certification Course developed by the National Recreation and Park Association’s (NRPA), National Aquatic Center.
“APSP Service Technician Certification”:	A three-level program (TECH I, TECH II and CERTIFIED) offered by the Association of Pool and Spa Professionals™.
“Department”:	means the New Mexico Environment Department (“NMED”).
“NMAC”:	means the New Mexico Administrative Code.
“Approved”:	means accepted in writing by the Department. (7.18.2.7.D NMAC)
“Certified Operator”:	means a person who has complied with all applicable requirements for certification as a pool operator as specified in the New Mexico Swimming Pool Regulations. (7.18.2.7.P NMAC)

“Approved Training
Course” or
“Department Approved
Operator
Certification
Training”:

means approved education or classroom instruction in the field of public pool, spa, or bathhouse operations, which upon successful completion (including passing an exam) will qualify a person to be a “Certified Operator”, as the term is defined in 7.18.2.7.P NMAC.

“Instructor” or
“Department
-approved
Instructor”:

means any person approved in writing by the Department to provide an approved Operator Certification Training in the State of New Mexico. This includes Department employees authorized to be instructors.

5.0 CERTIFICATION- GENERAL REGULATORY PROVISIONS

7.18.2.13.A NMAC states: “All public pools, spas, and baths shall have a certified operator on staff or by contract who is available on a daily basis. Pools, spas, and baths, will have two years from the effective date of this rule [3/30/05] to come into compliance with the certified operator requirements.” This rule applies unless amended by subsequent NMAC regulations.

7.18.2.13.B NMAC states: “Operators of public pools shall be thoroughly knowledgeable of public pool operation best practices, laws, rules, and shall be certified through a department approved training course in swimming pool sanitation and safety.”

7.18.2.13.C NMAC states: “The department may grant certification following presentation and confirmation of certification from other approved organizations.”

7.18.2.20 NMAC authorizes the Department to revoke a pool operator’s certification for cause.

To implement the certified operator requirement in 7.18.2.13 NMAC, the Department has developed this certification procedure, which establishes criteria for the approval of operator certification training courses and their instructors, and for the approval of certifying organizations that offer training courses in pool sanitation and safety.

6.0 CERTIFICATION REQUIREMENTS AND PROCEDURES

7.18.2.7.P NMAC defines a Certified Operator as: “a person who has complied with all applicable requirements for certification as a pool operator specified in this regulation.”

Applicable requirements to be a Certified Operator in New Mexico include acquiring approved education or classroom instruction in the field of public pool, spa, or bath operations, which upon successful completion would qualify a person to be a “Certified Operator.” Approved education or classroom instruction shall be provided by authorized Department employees, Department-approved instructors, and by Department-approved training organizations. To obtain approved education and fulfill the applicable requirements, each applicant for pool operator certification shall:

- A. Submit an application on forms furnished by the Department, the Department-approved instructor, or training course. Applications shall be submitted to the instructor on or before the date of the training. The Department’s forms will be posted on its website.
- B. Pay the applicable fee, in advance, to the instructor.
- C. Attend a Department-approved operator certification training course in its entirety and complete all assignments, including course and instructor evaluations, required by the instructor.
- D. Successfully pass an operator certification examination of the Department-approved training course, which shall be developed, conducted, proctored, and graded in accordance with Sections 7.0.C and 8.0 of this document.

7.0 APPROVAL PROCEDURES AND REQUIREMENTS FOR INSTRUCTORS AND TRAINING ORGANIZATIONS

The Department has conducted a Job Task Analysis and identified the “MUST KNOW” items for a pool operator (*See Appendix A*). The Operator Job Task Analysis represents major responsibilities of the operator of a typical pool or spa. It is not an exhaustive listing of all the tasks that an operator may have to undertake, nor is it intended to cover every type of pool or spa operating scenario. The Operator Job Task Analysis was used to develop the “MUST KNOW” items, which represents the basic elements of pool sanitation and safety and sets the baseline for the instructor and/or training organization.

The Department has reviewed the course materials, training curriculum outlines, instructor certification procedures and instructor requirements of four national training organizations. Based upon these reviews, the Department has determined that these

certification procedures, training curriculum, the “MUST KNOW” items, course materials, and instructor requirements meet the criteria set forth in this POC document, therefore meeting the Certified Operator requirements of 7.18.2.13 NMAC. The Department recognizes the following as “approved training courses” for operator certification and their organizations as “approved certifying organizations”:

- Certified Pool Operator® certification course (two-day) offered by the National Swimming Pool Foundation®;
- Licensed Aquatic Facility Technician Program™ (two-day) and the Basic Licensed Aquatic Facility Technician Program™ (one-day) offered by the American Swimming Pool and Spa Association™.
- Aquatic Facility Operator™ Certification Course (two-day) developed by the National Recreation and Parks Association.
- APSP™ Service Technician Certification Courses (TECH I, TECH II and CERTIFIED) offered by the Association of Pool and Spa Professionals™.

Accordingly, the pool operator certification courses and pool operator instructor certification courses/requirements offered by the above organizations qualify as approved training courses. Furthermore, the above training organizations qualify as approved certifying organizations specified in Subsections C & D of 7.18.2.13 NMAC. However, persons with instructor licenses or certifications from these approved certifying organizations must follow the guidelines provided in this section and the POC document, and must also individually obtain approval from the Department to be considered “Department-approved Instructors.”

Pool operator instructor certification and pool operator training certifications issued by training organizations other than those listed in this POC document will be evaluated and, if acceptable, approved on a case-by-case basis by the Department.

To receive and maintain approval for a training course and as a Department-Approved Instructor, the instructor must agree to perform and be bound by the following duties and obligations:

- A. Hold a current certification or license as a NSPF® Certified Pool-Spa Operator Instructor®, an ASPSA™ Licensed Aquatic Facility Technician Instructor, an NRPA Aquatic Facility Operator Instructor™, or an APSP™ Instructor. Pool operator instructor certifications and pool operator training certifications issued by training organizations other than

those listed in this POC document will be evaluated and, if acceptable, approved on a case-by-case basis by the Department.

- B. Teach a training session that is at least eight (8) hours in length (one-day) and includes, at a minimum, the topics identified as “MUST KNOW” items as set forth in Appendix A. The training course curriculum, training session agenda and the exam must be reviewed and approved in writing by the Department to ensure that all requirements set forth in this POC document will be met. Once approved, the instructor shall teach the complete course curriculum and follow the training session agenda and must not deviate from or make any changes without first obtaining written approval from the Department. Individual instructors, who received instructor certification from an approved certifying organizations may teach courses offered by their respective approved certifying organization or develop and teach their own training course. Any training course customized and developed by an instructor must meet all the requirements set forth in this document, including the exam session procedures, and also must be pre-approved in writing by the Department. Department approvals shall be valid for three (3) years and can be renewed if all conditions are met and a suspension or revocation of such approvals by the Department has not occurred.

- C. Develop, conduct, proctor, and grade a certification exam consisting of at least forty (40) questions in the multiple-choice format, designed to test the skill, knowledge, ability and judgment of the applicant on a broad range of topics related to pool sanitation and safety. The exam shall have no optional questions and most questions shall be completely independent of each other or start with new given data. The exam shall not be graded on a curve. The minimum passing score of the certification exam shall be seventy percent (70%). The instructor shall be responsible for conducting the exam in an ethical and professional manner and in accordance with Section 8.0, Exam Session Procedures of this document.

- D. Schedule courses without conflicts with other Department-approved pool operator training courses and notify the Department in advance of all scheduled classes and class cancellations.

- E. Permit evaluation and reasonable inspection (by Department representatives) of the instructor’s classroom and exam sessions, including instructor/course evaluations, and to conduct student surveys to ensure quality control, ethics, and professionalism.

- F. Maintain a complete record of each training course including the course dates, training location, training course evaluations, and a list of all students attending. Additionally, the instructor shall be responsible for providing to the Department, within fourteen (14) calendar days of conducting the training course, a list of persons who successfully completed the course, passed the certification examination, and thus became eligible to receive an operator certification from the Department. The information must be provided in writing and shall include the name, mailing address, contact phone number, employer's name (or the name of the organization the student is affiliated with), contact email of the person taking the training course and whether the person was being recertified or receiving certification for the first time. The instructor's name, course date and location shall also be provided. If the Department requests additional information, it shall be provided by the instructor.
- G. Hold recertification classes as approved by the Department for previously trained certified operators whose certifications have expired. Such classes shall involve at least a half-day (4 hours) of instruction followed by an exam.
- H. In addition to complying with A through G above, to obtain approval as a Department-approved instructor, interested persons must submit:
- i. Resume/Curriculum Vitae of the instructor(s), and guest speakers (if any);
 - ii. A copy of the instructor's license or certification (CPOI®, LAFT™ Instructor, AFO™ Instructor, APSP™ Instructor, or another Department-approved training organization), which must be current (expired licenses/certifications are not acceptable);
 - iii. Course curriculum/outline and training session agenda;
 - iv. A copy of the textbook, materials, handouts, and power-points; and
 - v. Any additional documentation and/or materials pertaining to the training or as requested by the Department.

Based upon the "MUST KNOW" items and the procedures set forth in this POC document, the Department will evaluate and either approve or reject the training course submittals made by each instructor. The Department will maintain a current list of approved instructors and their course schedules and training locations on its website. The Department reserves the right to cancel or revoke an instructor's approval for cause, which includes, but is not limited to, failure to follow the exam session procedures, unethical or unprofessional conduct, deviations from the approved course curriculum

and/or training session agenda, or failure to report operator certification training results. Revocation or cancellation of an instructor's approval shall be effective immediately. No instructor may teach a pool operator certification training course within the jurisdiction of the State of New Mexico without first obtaining written approval from the Department.

In addition, authorized Department employees will develop and provide training to operators of public pools at various locations in the state. This training will be conducted in accordance with the policies and procedures set forth in this POC document and shall be scheduled at such times and locations as the Department deems necessary. Schedules and locations will be posted on the Department's website.

8.0 EXAM SESSION PROCEDURES

All instructors and training organizations/training providers shall conduct the exam session per the procedures outlined below:

- A. Verify the examinees' identification using only a valid photo ID—state issued ID, driver's license, or U.S. passport—prior to beginning the exam. No other forms of identification shall be accepted. No person shall be allowed to take an exam without a valid photo ID.
- B. The following items shall be provided by the instructors and must remain in the examination room:
 - i. Exam Booklet
 - ii. Scratch Paper (upon request)
 - iii. #2 Pencils

Note: All examinees are responsible for bringing their own calculators, including batteries.

- C. The following items shall **not** be allowed in the room during the exam:
 - i. Personal Pagers or PDAs
 - ii. Cell Phones
 - iii. Any device with text messaging capability
 - iv. Cameras or photographic equipment of any kind
 - v. Scanners or reproducing equipment of any kind
 - vi. Programmable calculators, desktop, or laptop computers
 - vii. Materials and notebooks, except those specifically allowed
 - viii. Any other materials disallowed by the instructor/proctor.

Note: Any prohibited item (item C above) shall be kept with the instructor/proctor and returned at the end of the exam.

- D. Exam Sessions shall be no longer than three (3) hours in length and shall be conducted on the same day as the end of the training course, unless otherwise allowed by the approved certifying organizations' written policies and procedures or otherwise approved in writing by the Department. Online exams are prohibited.
- E. While the exam is in session, examinees shall not talk to each other, pass notes, scratch pads, loose papers or calculators back and forth, or copy from each others' exam materials. No discussions or collaborations of any kind between examinees shall be allowed. Examinees shall not be allowed to copy the exam questions for any future use. Any violation of either one of these requirements shall lead to immediate dismissal from the class/exam room and forfeiture of any class/exam fees.
- F. To prevent discussions and collaborations, only one examinee shall be allowed to take a break and leave the exam room at any given time. The instructor/proctor may, at their discretion, restrict the duration of breaks to enforce this requirement. Under no circumstances shall any examinee be allowed to take exam materials outside the exam room. Examinees shall not leave the designated restroom and break areas unless they have completed their exam and handed their materials to the instructor/proctor.
- G. At the conclusion of the exam, examinees shall return all exam materials provided to them and shall provide a signature on the sign out sheet concluding their exam session.

Note: Failure to comply with any of the above items in the exam sessions procedures may result in the immediate failure of the examinee and any other actions that may be necessary. Failure of the training providers to enforce any of the rules may result in revocation of their approval status.

9.0 ISSUANCE OF CERTIFICATION

Upon successful completion of the approved education (including passing the applicable exam) from a Department-approved training provider or instructor and thus having met the applicable requirements to be a Certified Operator, the applicant shall receive a certificate from the approved certifying organization or Department-approved instructor or training provider. The certificate shall indicate the name of the applicant who successfully completed the training, name of the certifying organization, instructor name, the name, date, and length of the training course, and the expiration date of the certificate.

Pursuant to 7.18.2.13.D NMAC "Certifications shall expire three years following date of issue or on the expiration date for certifications issued by other approved certifying organizations."

10.0 RE-CERTIFICATION PROCEDURE

Recertification training courses shall be at least one half-day (4 hours) and only for previously trained certified operators whose certifications have expired. Such classes shall involve at least a half-day (4 hours) of instruction followed by an exam. Only persons previously certified by any Department-approved instructor/approved certifying organization may take a recertification training course. Recertification training courses must be taken within ninety (90) days from the date of expiration of the previously issued operator certificate. If not, the individual's operator certificate shall be considered to have lapsed and the individual required to undertake a new operator certification training course through a Department-approved instructor or approved certifying organization.

11.0 REVOCATION OF POOL OPERATOR CERTIFICATION

Pursuant to 7.18.2.20 NMAC the Department may revoke a person's pool operator certification for cause.

If the approved certifying organization, which issued the Operator's Certificate, decides to terminate the Certificate, then the person's Operator Certification will be considered revoked. Any person whose operator certification has been revoked may make a written application for re-instatement per the procedures outlined in 7.18.2.18.B NMAC.

Prior to any revocation the Department shall notify the certified operator and provide an opportunity for a hearing pursuant to 7.18.2.20.B NMAC.

APPENDIX A: OPERATOR JOB TASK ANALYSIS & MUST KNOW ITEMS

A detailed “Job Task List” and the corresponding “MUST KNOW” items for each task are listed first. In addition, a summary of the JOB TASKS and the MUST KNOW items has been provided at the end.

I. Job Task List

1. Conduct routine daily inspections and cleanup at opening and closing: Inspect grounds and gates, safety equipment, pump and chemical rooms, and auxiliary equipment; clean deck drains, pool/spa walls and bottom, gutters, skimmer baskets, hair and lint strainer; check water temperature, automatic water level control devices, main drain and all inlet and outlet fittings, vacuum outlet cover, pool/spa walls and ceilings for mold, stains and algae, pool water level for proper skimming operations, pump for unusual sounds or vibrations; and check heaters, heat exchangers, blowers, air handling, vacuum systems, and exhaust fans for proper operation.

Must Know: Basic pool areas, components, equipment (including safety equipment) and their relative locations, equipment-related daily inspection and servicing items, normal operational characteristics and unusual conditions, noise, sounds, and vibration levels

2. Record pressure and vacuum gauges; perform daily flow-rate checks and backwash filters, if needed:

Must Know: Principles of filtration and circulation, including how to calculate the average depth, surface area, volume, turnover rate, filter sizing and filter media rate, pump sizing and total dynamic head; concepts of pressure drop, normal operating ranges, and how to read gauges and interpret results; proper filter cleaning and replacement disposal procedures; how to read and maintain manual or digital flow meters; backwash cycles and the locations, flow directions and operating sequence of valves

3. Read automated controllers and adjust to maintain proper disinfectant levels; check and refill chemical feeder reservoir levels:

Must Know: Principles of automated controls; technique for measurement and calibration of controller readings and their relationship with pool water chemistry; relationship between variations in pH, chemical feeds, and disinfectant levels; to check and calibrate chemical feed systems; relation between variations in pH and disinfectant levels with bather load and environmental factors, such as sunlight; understand and interpret alarms and warning signals

4. Monitor water quality and make adjustments: Determine testing frequency and the method of testing and conduct testing to ensure proper water chemistry, pH, and disinfection levels. Adjust, as necessary, and/or take appropriate measures to maintain proper water chemistry and disinfection levels. Check readout of pH probe and chemical controllers, clean, and adjust as necessary. Perform breakpoint chlorination (or bromination) on the pool, if necessary.

Must Know: Pool water chemistry, temperature, pH, and disinfectant levels required by regulations; principles of free, combined and available chlorine, calcium hardness, total dissolved solids, and total alkalinity; principles and methods of disinfection, stabilizers, and disinfection by-products; how to calculate the amounts of chemicals required to bring the pool water within acceptable regulatory range; principles of breakpoint chlorination and quantities of chlorine (or bromine) needed.

5. Perform preventative, corrective, and seasonal maintenance: Develop and update a maintenance plan with a checklist which identifies the periodic inspection, servicing, and component replacement procedures (including frequency) for all equipment. Tag all valves and post a valve sequence chart for easy reference. Perform a full or partial winterization program, which includes disassembling (and reassembling), inventorying and storing equipment, and disconnecting and draining water lines, for protection of the facility. Perform preventative maintenance and take corrective actions as necessary. Estimate quantities of supplies, and equipment. Assist facility managers prepare budgets, maintain vendor lists, and obtain price quotes.

Must Know: Understand and interpret equipment O/M manuals and to develop preventative and seasonal maintenance checklists.

6. Responding to aquatic incidents and emergency situations: Handle water emergencies, fecal accidents, sudden illnesses, natural disasters, and facility emergencies (fires, chemical explosions, etc.); prepare for emergencies by checking and replacing equipment; place hazard warning labels

Must Know: Maintain a detailed emergency response plan (ERP), which includes locations of telephones, rescue equipment, first aid supplies, protective equipment, and emergency eyewash; fecal accident follow-up procedures; to complete aquatic incident reports and follow-up documentation

II. Summary of Job Tasks

1. Perform routine inspections and make adjustments to ensure proper water quality, circulation and filtration, disinfection, chemical feed, heating and air circulation.

2. Perform routine (daily), preventive (monthly, quarterly, or annual), seasonal (startup and shutdown), and corrective maintenance.
3. Perform chemical tests, and monitor and interpret results.
4. Monitor and operate chemical feeders, valves, controllers, fittings, and equipment.
5. Read and calibrate measurement devices, maintain records and report to higher authorities.
6. Respond to emergency situations.
7. Perform inventory management functions, such as estimating and purchasing pool supplies and equipment, scheduling, budgeting and forecasting.

III. Summary of "MUST KNOW" items

1. Pool-spa safety procedures and equipment
2. Basic Pool Math
3. Filtration and Recirculation
4. Disinfection, Water Quality and Adjustment
5. Operations, Maintenance & Troubleshooting
6. New Mexico Public Swimming Pool Regulations

APPENDIX B: SAMPLE INSTRUCTOR APPROVAL LETTER

Month XX, 200X

Mr./Ms. XXXX
Training Organization
XXXX XXX
City, State Zip

Dear Instructor/Training Organization:

The New Mexico Environment Department (“NMED” or “Department”) has reviewed the course outline, course textbook (handouts and power-point presentation), training session agenda, instructor requirements (or instructor resumes) of your training course/training organizations. Based on the information provided your training course is hereby granted approval as a training course which fulfills the applicable requirements in 7.18.2.7.P NMAC to be a Certified Operator of Swimming Pools and Spas in New Mexico.

Please note that this approval is contingent upon you complying with all the applicable terms and conditions outlined in the most recent version of the State of New Mexico, Pool Operator Certification Procedure. These include maintaining your Instructor Certification with the (name of organization that provided instructor certification) and submitting to the Department a complete certification record which, in addition to the instructor name(s), course date and location of the training, includes the name, mailing address, and email addresses of all persons who successfully completed your training course.

If you have any questions, please contact me at (505) 476-8600.

Sincerely,

Raj Solomon, P.E.
Pool Program Manager
New Mexico Environment Department
525 Camino De Los Marquez, Suite 1
Santa Fe, NM 87505