



OPERATOR CERTIFICATION PROGRAM ANNUAL REPORT FY2012

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1. AUTHORIZATION

The previously submitted Arizona Attorney General’s certification remains in effect as there have been no statutory and/or regulatory changes made to the program. The Arizona Department of Environmental Quality (ADEQ) has statutory authority to establish and enforce rules relating to operator certification under Arizona Revised Statutes (ARS) § 49-352 and § 49-361.

2. CLASSIFICATION OF SYSTEMS, FACILITIES, AND OPERATORS

At the end of fiscal year 2012 (FY12), there were 1,552 active regulated public water systems in Arizona. Pursuant to R18-4-104(A) of the Arizona Administrative Code (A.A.C.), all public water systems (PWSs) in Arizona must retain the services of a certified operator. In FY12, a total of 48 PWSs either did not properly notify ADEQ of their certified operator with direct responsibility for operating the system (as required by rule), or were operating without a certified operator. This information is presented in Table 1. Compared to FY11, this is a 60 percent increase in the number of public water systems that have not provided the required certified operator information to ADEQ. More specifically, this represents a 33 percent increase in the percentage of community water systems without a certified operator, no change in the percentage of non-transient, non-community water systems without a certified operator, and a 79 percent increase in the percentage of transient, non-community water systems without a certified operator.

In FY12, the Operator Certification Program did not initiate a “reminder letter” notification process for PWSs not listed as having a certified operator of record in ADEQ’s drinking water database (Safe Drinking Water Information System-SDWIS/State). This may partially explain the increase in PWSs operating without a certified operator of record. In early August 2012, 48 reminder letters were issued and by 8/31/12, the Operator Certification Program received a total of five responses leaving 42 PWSs operating without a certified operator in direct responsible charge (a 12% reduction). This new information supports historical findings that in most cases, the lack of a certified operator in SDWIS/State was attributable to inadequate communication on the part of the PWS and/or operator, and not necessarily due to the PWS operating without the required certified operator.

Table 1. FY12 PWSs Without a Certified Operator¹

Criteria	Number
Total number of Community Water Systems (C)	764
Total number of Community Water Systems without a certified operator	12 / < 2%
Total number of Nontransient Noncommunity Water Systems (NTNC)	208
Total number of NTNCs without a certified operator	2 / < 1%
Total number of Transient Noncommunity Water Systems (NC)	579
Total number of NCs without a certified operator	34 / < 6%

1. Either operating without a certified operator or failed to notify ADEQ with the name and grade of the operator

3. OPERATOR QUALIFICATIONS

ADEQ coordinates and manages all drinking water and wastewater operator certifications in the State of Arizona in accordance with A.A.C. Title 18, Chapter 5, Article 1. ADEQ contracts with GateWay Community College (GWCC) to proctor exams provided and graded by the Association of Boards of Certification (ABC). GWCC proctors the majority of operator examinations at their Phoenix campus, but also provides exam opportunities at various locations throughout the state. A minimum score of 70 percent correct on an examination is required to pass and become certified. To determine eligibility for admission to a certification exam, ADEQ takes into account an individual's amount and type of qualifying experience and prior education. A.A.C. R18-5-112(D) sets specific qualifying experience and educational requirements for applicants for certification exams for Grades 1 through 4.

New operators that do not meet the minimum experience and/or educational requirements for a specific grade are not permitted to test for that grade; however, operators in place before these regulations were enacted (i.e., grandfathered operators) were allowed to continue in their current positions as long as the facility did not change operations that would require a higher grade of operator. At the end of FY12, there were four public water systems solely under the supervision of a grandfathered operator. In addition, six active certified operators with grandfathered certificates remain on file. Seventeen certified operators with historic grandfathered certificates have either renewed or upgraded their certifications by successfully passing an operator certification exam.

ADEQ hosted the Association of Boards of Certification's (ABC) Operator Certification Beta Exam Testing from November 2011 through February 2012. ADEQ staff and certified operators acted on the opportunity to preview the standardized exams in an effort to assist ABC in developing updated exams for the certification program. During the Beta Exam Testing period, 598 Beta Tests were taken by more than 500 operators during 51 testing sessions, in seven Arizona locations. The newly developed exams were released in August 2012.

4. ENFORCEMENT

An enforcement action can be taken against a PWS if that facility does not: have a certified operator, the operator does not possess a certificate of the grade and type required for the facility, or the operator does not reside within a 200 mile ground travel radius of the facility. In FY12, enforcement actions, related to certified operators in the form of a Notice of Violation (NOV) or a Notice of Opportunity to Correct (NOC), were taken against six PWSs. The six PWSs were cited for not having a certified operator.

5. CERTIFICATION RENEWAL

Operator certificates are valid for a three-year period and to maintain eligibility for operator certification renewal, an operator must complete at least 30 professional development hours (PDHs) within that three-year period. A total of 1,596 certificates were renewed by the program in FY12.

An operator has 90 days from the date of certificate expiration to submit the required renewal documentation to ADEQ pursuant to A.A.C. R18-5-108. If an operator fails to do so within the required timeframe, the operator must reapply for certification and will be examined as a new applicant.

EPA was directed to promote operator certification as part of the 1996 Amendments to the Safe Drinking Water Act, and subsequently, implemented the Expense Reimbursement Grant (ERG) program. The ERG program provided grants to states to assist operators of systems serving 3,300 or fewer persons to attend training and/or to be reimbursed for the costs of training and certification. ADEQ's overall goal for the ERG program is to enhance the protection of public health through properly trained and certified small system operators. The ERG provided training opportunities for operators from calendar year 2006 through calendar year 2012. Specifically, operators of small public water systems were offered training opportunities, training materials, certification testing fee waivers, and other resources in order to maintain certification, increase certification, and/or increase operational expertise.

For FY12, training through the ERG was offered through three one-day events, five two-day workshops and four three-day workshops held at various locations throughout Arizona. Each workshop provided operators the opportunity to earn a minimum of eight hours, and a maximum of up to 24 hours, of professional development training. Participating operators were also provided with all applicable training and testing materials, and lodging for the two-day and three-day workshops. Other ERG expenditures included a bulk purchase of training CDs and selected water distribution and treatment textbooks. The services of a contracted event coordinator were utilized to organize each workshop event and the event coordinator was also tasked with managing event registration, reservation confirmations, workshop reminders for registered attendees, providing event directions, and distributing workshop agendas. With prior ADEQ approval, the coordinator also secured approved site locations, meeting facilities, lodging, meals, and distributed technical books and materials to attendees.

During FY12, a total of 189 out of 792 eligible operators, or 24 percent, received training by means of the ERG. The breakdown of eligible operators by classification and grade that attended at least one workshop is shown in Table 2.

Table 2. FY12 Eligible ERG Attendees by Classification and Grade

Classification	Grade 1	Grade 2	Grade 3	Grade 4	Total
Water Distribution Operators	45	26	20	11	102
Water Treatment Operators	26	29	14	18	87
TOTAL	71	55	34	29	189

In addition to the 189 eligible operators, a total of 574 additional certified operators, not eligible for reimbursement under the grant, also attended and received training. Ineligible operators were allowed to attend on a first-come, first-served basis as long as there were available seats not filled by eligible operators. These operators were not reimbursed under the ERG for lodging, meals, exams and textbooks. They did, however, receive copies of the presentations and PDHs.

In the rare instance that an eligible operator requires training not provided or covered in a workshop hosted by ADEQ, the training material is evaluated by ADEQ staff for reimbursement on a case-by-case basis with particular emphasis placed on training content and cost.

Including ineligible operators, a total of 763 operators received ERG training during FY12.

Three additional trainings were provided through the Emergency Management Planning (EMP) grant provided by the EPA. Training was provided to facility owners and operators of drinking water and wastewater systems and for entities with public and industrial and critical infrastructure in Arizona communities. The workshops provided updates on protocols and procedures for all federal, state, tribal and local responders to coordinate emergency response statewide. A total of 89 individuals attended the three events.

6. RESOURCES NEEDED TO IMPLEMENT THE PROGRAM

To track operator and certificate status, operator and certification information are maintained in the Safe Water Operator Certification System (SWOCS) database. In addition, information on certified operators for each public water system is also maintained in the Safe Drinking Water Information System (SDWIS/State) database.

The operator certification program currently has three full-time equivalents (FTEs), funded by the federal PWSS grant, to accomplish program objectives. There were no staffing level changes to the program in FY12.

7. STAKEHOLDER INVOLVEMENT

A.A.C. R18-5-103 establishes an operator certification committee of 11 members to make recommendations and to provide ADEQ with technical advice and assistance when requested. Members of this committee include an ADEQ employee, Grade 4 certified operators, professional engineers, municipal officials, water system representatives, and college faculty members in sanitary science. In FY12, the certification committee did not meet as there were no operator certification rule revisions or operational changes proposed or implemented. In addition to the formal stakeholder involvement process, ADEQ solicits feedback from all certified operators at every training event via the use of “Satisfaction Survey” cards. Information collected from each event is used, in part, to evaluate course content/relevance, instructor knowledge and presentation of material, training frequency and geographic location.

8. PROGRAM REVIEW

The ADEQ Drinking Water Section (DWS) conducts an annual internal review of the operator certification program. This review includes tracking requests for reciprocity, early examination requests, and certificate renewal audits. In FY12, ADEQ processed and approved 197 requests for reciprocity. The DWS also processed 308 requests for early examinations with 293 approvals and 15 denials. A total of 1,596 certificates were renewed in FY12 with approximately 10 to 15 percent of all renewal requests audited for PDH verification purposes. There were no implemented changes to the operator certification rules or program operations for FY12.

9. IMPLEMENTATION SCHEDULE UPDATE

All regulations have been implemented; however, modifications to program operations have been made on an as needed basis.

Historically, ADEQ utilized third-party examination contractors to develop and proctor all operator exams. In FY08, ADEQ returned to managing all examination services “in house” while staff undertook a review of all available examination options (e.g., nationalized testing services, continuation of third-party contractors).

In early FY09, ADEQ entered into a contract with the Association of Boards of Certification (ABC) and GateWay Community College (GWCC). ABC currently provides all operator certification exams and grading services while GWCC oversees all exam proctoring services. Since the adoption of this contract, there has been an examination fee of \$77 per exam. The fee was increased to the current rate of \$87 per exam in FY11 due to increases in testing service administrative costs.

In FY12, a total of 2,002 operator examinations were proctored in 65 testing sessions held by GWCC. A breakdown of the examinations conducted by classification and grade are shown on Table 3.

Table 3. Summary of Examination Results from July 1, 2011 through June 30, 2012

Classification	Grade 1	Grade 2	Grade 3	Grade 4	Total
Wastewater Collection Pass	125	83	35	23	266
Wastewater Collection Fail	41	44	24	24	133
Wastewater Collection Total	166	127	59	47	399
Wastewater Collection % Pass	75%	65%	59%	49%	67%
Water Distribution Pass	200	97	43	21	361
Water Distribution Fail	131	101	89	37	358
Water Distribution Total	331	198	132	58	719
Water Distribution % Pass	60%	49%	33%	36%	50%
Water Treatment Pass	94	58	32	14	198
Water Treatment Fail	69	62	24	41	196
Water Treatment Total	163	120	56	55	394
Water Treatment % Pass	58%	48%	57%	25%	50%
Wastewater Treatment Pass	100	67	26	6	199
Wastewater Treatment Fail	127	59	64	41	291
Wastewater Treatment Total	227	126	90	47	490
Wastewater Treatment % Pass	44%	53%	29%	13%	41%
TOTAL EXAMS					2,002
OVERALL % PASS					51%