# Certification Programs For Water and Wastewater System Operators



Department of Environmental Quality



A Joint Report of the Department of Environmental Quality (DEQ) and the Department of Human Services Drinking Water Program (DHS-DWP)

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This report has been prepared by the Department of Human Services Drinking Water Program (DHS-DWP) and the Department of Environmental Quality (DEQ) in accordance with the requirements of ORS 448.409. The report describes the activities of DHS-DWP and DEQ under their respective water and wastewater operator certification programs from January 1, 2001 to December 31, 2002.

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# **Executive Summary**

Oregon law requires owners of drinking water and wastewater systems (public and private) to have their systems under responsible control and direction of certified operators. Trained and certified operators are necessary to ensure that the systems are not managed in a manner that could adversely affect public health or water quality. Certified operators also improve facility operation and compliance, protect the public's investment in the facilities, and instill public confidence in the safety and certainty of services. The Department of Human Services Drinking Water Program (DHS-DWP) administers the certification program for drinking water system operators, and the Department of Environmental Quality (DEQ) administers the program for domestic wastewater system operators. DHS-DWP and DEQ coordinate activities when it is beneficial to their respective certification programs.

This report includes an overview of program activities and accomplishments. Several initiatives have been undertaken to improve program efficiency, including the use of standardized tests and increased use of electronic communication and data base systems. Other program highlights for 2001 and 2002 are noted below.

#### **DHS-DWP**

HB 2239 was passed by the 2001 legislature in order to bring the certification program into compliance with EPA guidelines, and to avoid losing 20% of the State Revolving Loan Funds (SRF). The bill created the new Small Groundwater Program to certify water operators of the nearly 900 community and nontransient noncommunity small groundwater systems with fewer than 150 connections which were previously outside the scope of the certification requirements. Rules were adopted that provided a variety of ways for these operators to become certified and also eliminated other exceptions in the certification guidelines. The new Small Groundwater Program is free to affected operators and systems and will be funded through an EPA grant (application pending). The program has been well received by the regulated community.

DHS-DWP worked with the Department of Justice regarding allegations of fraud or misconduct on the part of several Oregon water operators during this reporting period.

# DEQ

Consistent with the Governor's recommended budget, the 2001 Legislature shifted General Funds from the Wastewater System Operator Certification Program to DEQ's wastewater management program. The Legislature also authorized DEQ to proceed with an increase in certification fees to maintain adequate funding for the certification program. DEQ worked with its Operator Certification Advisory Committee to develop the new fee schedule and to address other program needs in the areas of certification, program administration and process improvement. The Environmental Quality Commission adopted the revised rules in October, 2002.

DEQ worked with the Department of Justice regarding allegations of fraud, false reporting and misconduct by one Oregon certified wastewater system operator during this reporting period.

2001 – 2002									
CATEGORY	DHS WATER			DEQ WASTEWATER					
Total Persons Certified	1673			1560					
With one certificate	Distribution or Treatment 1186 (70%)			Collection or Treatment 924 (59%)					
With two Certificates	Distribution & Treatment 487 (29%)			Collection & Treatment 636 (41%)					
Certified by Both DHS and DEQ	548 (or abou			it 33%)					
Certificate Applications Reviewed	758			673					
Applications Denied	155			10					
Certificates by Reciprocity	20			17					
Examinations Scheduled	578			659					
Operator in Training (OIT) <sup>1</sup>	146		70						
Continuing Education Requirement	2.0 CEUs every 2 years		2.0 CEUs every 2 years						
Certificate Renewal Period		Annual		Biennial					
Certificates	Distribution	Treatment	Filtration Endorsement	Collection	Treatment				
Provisional Grade I Certificate	N/A	N/A	N/A	7	22				
Grade 1 Certificate	569	324	N/A	411	396				
Grade 2 Certificate	646	229	128	363	296				
Grade 3 Certificate	136	97	72	152	181				
Grade 4 Certificate	70	69	60	133	235				
Total Certificates	2140 260		2196						
Systems w/Certified Operator Requirements	Distribution	Treatment	Filtration Endorsement	Collection	Treatment				
Class 1 (I)	225	54	4	129	175				
Class 2 (II)	122	84	71	139	78				
Class 3 (III)	23	24	22	43	37				
Class 4 (IV)	6	5	3	26	38				
Total Entities		356		382 <sup>2</sup>					
<b>Certification Fee</b> (application, exam & certificate)	\$75.00 for 1 yr. Cert. (single) \$130.00 for 1 yr. Cert. (double)			\$100.00 – \$160.00 for 2 yr. Cert.					
Renewal Fee — One Certificate	All Grades \$40.00 for 1 Yr.			All Grades \$100.00 for 2 Yrs.					
Renewal Fee — 2nd Certificate	All Grades \$20.00 for 1 Yr.			No additional fee					
	1.0 Certification Specialist			1.0 Natural Resource Specialist 3					
Program Staffing	0.75 Office Specialist 2		1.0 Office Specialist 2						
	DWP Technical Staff Support								
DHS-			ATER PROG	RAM					
Systems Requiring Certified operators			823						
Total Systems Certified			593						
Total Number of Certified Operators			885						
Continuing Education Requirement			.6 CEUs every 3 years						
Program Staffing			1.0 Environmental Health Specialist 3						
0		Į							

# Table 1: Comparison of DHS and DEQ Operator Certification Programs 2001 – 2002

 $<sup>^{1}</sup>$  A "non-certified" applicant who has passed an examination, but has not yet qualified by education and/or experience for a certificate. These numbers are not included in the total certificate count.

 $<sup>^{2}</sup>$  Of this number, fifty-four are regulated upstream or "satellite" wastewater collection systems that are connected to other regulated entities providing wastewater collection and/or treatment.

# Certification Program for Drinking Water System Operators

Under ORS 448, the Drinking Water Program of the Department of Human Services (DHS-DWP) classifies all drinking water treatment plants and water distribution systems and certifies individuals qualified to operate these systems. All community water systems using surface water sources, and those using groundwater sources with more than 150 service connections, must be under the supervision of an operator with a certificate equal to or higher in grade than the water system classification (Levels 1-4). HB 2239 passed during the 2001 session eliminated prior exclusions to the operator certification program to bring the program into line with EPA requirements. The bill and associated administrative rules (OAR 333-061-0228) requires all community and nontransient noncommunity water systems using only groundwater and having fewer than 150 connections to be under the supervision of a certified operator.

# **Program Activities**

# **Coordination and Development:**

- 1. Create and distribute training notices, forms, documents, and information for trainers
- 2. Network with other certifying authorities, organizations, and states
- 3. Manage data, receipts, refunds, and reports
- 4. Manage services agreement contract for exams and grading by the Association of Boards of Certification
- 5. Participate in the activities of the Oregon Environmental Services Advisory Council (OESAC), which evaluates and assigns Continuing Education Units (CEU) to courses offered for professional growth and assists in coordinating statewide training in environmental technology
- 6. Provide staff support for the Certification Subcommittee of the Drinking Water Advisory Committee

#### Water System Classification:

- 1. Classify systems in the areas of distribution, treatment, and filtration method to determine operator certificate grade requirements
- 2. Classify small groundwater systems

#### **Operator Certification for Grades 1-4 and Filtration Endorsement:**

- 1. Review, evaluate, and verify applications for certification including new exams, special exams, upgrades, reciprocity, renewal and reinstatement for applicants in the 4 grades of treatment and 4 grades of distribution operators
- 2. Schedule exams, secure sites, order exams, schedule proctors, and proctor exams
- 3. Provide information on examination study materials; notify examinees of exam results
- 4. Review and amend Water Operator Certification Rules

# **Technical Assistance and Training:**

- 1. Respond to inquiries on certification requirements, and procedures
- 2. Provide lists of qualified operators to systems recruiting for vacancies
- 3. Provide technical assistance and data management support to DHS-DWP staff regarding system operator and certification compliance

#### **Compliance and Enforcement:**

- 1. Track compliance by water systems with requirements to have certified and qualified operator
- 2. Respond to complaints and investigate allegations of fraud, misconduct, or false reporting
- 3. Track professional growth for individual operators

#### Small Groundwater Operator Certification Program (new):

- 1. Notified affected water systems of new requirements and compliance options.
- 2. Developed "need to know" criteria to guide future training development.
- 3. Applied to EPA for grant to fund training and certification activities.
- 4. Provided interim training and certified over 500 persons.

# **Efficiency and Service Improvements:**

- 1. Certification program staff worked with field staff to monitor compliance and assure proper system classification.
- 2. Improvements in our training website make it easier for operators to identify and access approved training.

#### **Coordination and Development**

Staff members participate in the activities of OESAC (Oregon Environmental Services Advisory Council), which reviews proposed training for qualifications of instructors, determines relevancy of course material, assigns continuing education units, and coordinates the training opportunities around the state. OESAC is composed of representatives from community colleges, professional organizations in the water and wastewater industry, the office of Professional Technical Education of the Department of Education, the Department of Environmental Quality, and DHS-DWP. Coordinated efforts have helped to improve the OESAC website, <u>www.oesac.com</u>, which is updated monthly for the benefit of operators and trainers.

Reciprocity certifications are granted when an operator's experience, education, and examination results meet established criteria. The criteria closely follow the Model Certification Standards developed by the Association of Boards of Certification (ABC) and used by over 40 states. These standards and a uniform exam allow operators certified in Oregon to become certified in any of these other states by reciprocity; and operators certified in other states to become certified in Oregon. During this two-year period, 20 reciprocity applications were reviewed; 14 were accepted.

#### Water System Classification

All water systems are classified as small groundwater, water distribution, and water treatment based on size and complexity, as determined by the Department. A water system is classified as a Small groundwater system if it has fewer than 150 connections and uses only groundwater as its source. Distribution systems, with four levels of complexity, are classified based on population served. Water treatment plant classification, also with four levels of complexity, is based on a point system assigned to reflect the complexity of the treatment process used at the plant. A filtration endorsement is required for treatment plants which use other than slow sand filtration. These classifications are used to determine the qualifications required of personnel in direct responsible charge of each water system. There are currently 356 water systems which require certified operators, Level 1-4.

#### **Operator Certification for Grades 1-4 and Filtration Endorsement**

Several rule changes were made to bring the certification program in compliance with EPA guidelines. With the elimination of the Operator-in-Training designation, all operators must now meet the education and experience requirements prior to qualifying for an exam. Those previously designated OITs who have already passed an exam must meet the minimum experience and/or education requirements for a Level One water operator before receiving a certificate of any kind. Operator certification variances (limited licenses) were also deleted from the rules. All limited licenses, initially given for a one year time period, were rescinded as of 12/31/02. Affected operators and/or systems must now meet all certification requirements. Licensed professional engineers, previously excluded from the certification requirement, now need to be certified in order to be the person in direct responsible charge of a system.

Regular certification exams are scheduled and administered by program staff and are held in May and October of each year at several locations around the state. A total of 733 applications for exams were reviewed and 578 exams were given during this 2-year period. Requests for special exams numbered 31 during this reporting period.

Successful applicants (scoring 70% or above) are allowed to become certified. All candidates are provided with individualized exam results noting the areas of deficiency. Success rate of these exams is over 90% and has remained fairly constant.

The Operator Certification Program has continued to show wide acceptance by the water industry. The number of certified operators in grades 1-4 has increased from 1,394 in 1990 to 1,673 in 2002. The additional certified operators represent the growing professionalism in the industry and the support for certification by water systems.

Certificates for Water Treatment and Water Distribution Grades 1-4 are renewed annually. Certified Operators are required to demonstrate professional growth in the field by completing two Continuing Education Units (CEUs) every 2 years in order to renew their certificates. One CEU is equivalent to 10 contact hours of lecture or formalized training in water treatment or distribution and related fields. Continuing education ensures that operators maintain and enhance their skills and keep pace with changing regulations and technology. Training opportunities are

plentiful in the state and well attended.

#### **Technical Assistance and Training**

During the past two years, program staff responded to thousands of requests for assistance from system owners, operator personnel, training providers, vocational counselors, and regional staff regarding operator certificate qualifications, application forms, continuing education, system classification, and rule interpretation. The majority of the questions during this two-year period dealt with the new Small Groundwater rule, the OIT classification change, and acceptable CEUs. A list of qualified operators is provided to communities, water systems, and organizations, etc., upon request, to assist them in recruiting new operators or sending technical course information mailings.

Department Staff participate in training events sponsored by professional organizations that provide certified operators with the CEUs necessary to renew their certificates. The Department also conducts a free, monthly Water System Training Course in locations throughout the state.

#### **Compliance and Enforcement**

Drinking Water Program Staff routinely work with regional staff to provide technical assistance to system owners, respond to requests for time extensions for operator hiring and examination, proctor exams and special exams, and/or initiate enforcement as needed.

Five operators held certification variances during this reporting period and all performed adequately. They have all been notified that no variances will be continued after 2002. All limited licenses, given out only for a one year time period, were rescinded as of 12/31/02. Affected operators and/or systems must now meet all certification requirements.

Program rules allow DHS-DWP to suspend an operator's certificate of competency for violation of any portion of the certification rules if the Department finds that such violation(s) constitute(s) a serious danger to the public health or safety. In addition, the DHS-DWP may deny an applicant or revoke a certification of competency for violation of any agency rule, failure to comply with any agency investigation, gross negligence, incompetence, or misconduct in the performance of the duties of an operator, fraud or deceit. DHS-DWP also investigates complaints alleging operator violations for acts such as failure to perform proper sampling and testing, improper facility operation, false or fraudulent records or reports, or failure to obtain proper certification. Three certificates of competency were revoked or suspended for one operator during this reporting period. The Department has also been involved with the Office of the Attorney General regarding more investigations of fraud or misconduct during this period.

#### **Small Groundwater Operator Certification**

The DHS-DWP has been active in designing and implementing the certification program for operators of nearly 900 small groundwater systems in Oregon to meet the 1996 amendments to the federal Safe Drinking Water Act. The goal was to design a small water system operator certification program that met EPA guidelines, made sense, addressed training needs, resulting in improved drinking water, and minimized costs. Program staff worked closely with a workgroup within the Drinking Water Advisory Committee in developing the new Small Groundwater Certification Program. Cooperatively, they drafted the Basic Program Design, which served as the foundation of rules development after elimination of the certification exemptions from statute by the 2001 Legislature.

Their second product was development of the Very Small Water System Operator Need-to-Know Criteria. This document will serve as the foundation for future work to develop and deliver training needed to support the certification effort for small water systems. The final issue for the workgroup was deciding how the program would be funded. The workgroup preferred funding the entire effort at no expense to operators of small systems; instead using the USEPA training reimbursement funds. These funds are to be available after an operator certification program is determined by USEPA to meet federal guidelines.

A key challenge to this undertaking was that the proposed rules could not be filed until the necessary statutory changes eliminating exemptions for small systems were passed by the Legislature and signed by the Governor. The EPA submittal deadline to demonstrate that our certification program met the EPA guidelines was February 5, 2001, to avoid the 20% SRF withholding, but the 2001 Oregon Legislature was scheduled to adjourn no earlier than June. In response to this, the Department accelerated its 2001 SRF grant application process. This delayed the functional deadline for Oregon to no later than September 30, 2001.

The 2001 Legislature repealed the exemptions from operator certification requirements for small groundwater systems (HB 2239). These systems are now required to have a certified operator. The DHS-DWP filed temporary rules on August 1, 2001 to implement this legislative action. In September 2001, small groundwater systems were notified of the temporary rule requirements and were given notice that public hearings would be held at 5 locations around the state during the last week of November to take comments on the rule. Final rules (333-061-0228) were filed and became effective on May 2, 2002.

The DHS-DWP prepared an application, contacted all systems, held trainings, created a database, and designed a certificate for this specific program. The following means were made available for operators to become certified: grandparenting, hiring a certified operator; or training by attending the free Water System Training Course put on by the Drinking Water Program. Certification via the grandparenting provision was available only until July 31, 2002 and only for water systems in compliance with all drinking water reporting and having the same operator as of July 31, 2001. The number of operators who took advantage of grandparenting, (which is non-renewable and non-transferable) is 488. The free training made available at multiple sites around the state was the certification mode used by 285. A total of 112 systems continue to use or decided to hire an operator already certified at Levels 1-4. Affected by the new rule were 823 small groundwater systems. To date, 593 systems are in compliance, with a total of 885 certified operators. Certificates for Small Groundwater System operators will be renewed every three years, after presenting evidence that the operator has completed 6 hours of Department-approved continuing education since the issuance of the prior certificate.

The Department hired an Environmental Health Specialist 3 staff person who will implement the remaining processes for the Small Groundwater Program:

- Continue the certification process to ensure compliance of all systems
- Prepare the EPA grant for program funding
- Evaluate the Need-to-Know Criteria
- Issue request for proposals for training materials development
- Award contract(s) for training materials development, and
- Begin contract management.

With the award of the EPA grant for training and certification, the Department will contract with trainers who will use the newly developed training and deliver it statewide in a variety of formats, e.g. classroom and Internet. Since Federal Grant money will be used for this program, there are no fees for operators or systems associated with the certification or the training. The available EPA operator training reimbursement funding represents the key element in supporting this program, which should result in many benefits for this class of systems.

#### **Efficiency and Service Improvements**

DHS-DWP Technical Staff regularly conduct trainings around the state. Systems are advised of upcoming events. Technical staff work closely with the certification staff to monitor certification compliance of systems and advise of system upgrades.

The latest advancements of the OESAC website, <u>www.oesac.com</u> have made approved courses easier to locate. Many courses were added this year and are now organized on the website by course title, course ID number, sponsor name, DWP approved courses, DEQ approved courses, and Home Study courses. The Home Study courses are the most recent addition to this website. They allow operators to earn CEUs while at home or at work; thereby saving travel time and expenses. Use of this website by operators is increasing and is a valuable communication tool. Managers and individuals of water systems know whether the training listed will be acceptable for certification renewal at the time they enroll for a course.

# Certification Program for Wastewater System Operators

ORS 448 requires the Department of Environmental Quality (DEQ) to certify persons operating or supervising the operation of sewage treatment works (wastewater systems). Wastewater systems include collection systems, treatment systems and combined collection and treatment systems, whether publicly or privately owned. The Wastewater System Operator Certification Program (program), as adopted in rule by the Environmental Quality Commission (EQC), requires DEQ to:

- Classify systems and define requirements of system owners;
- Certify persons qualified to operate and supervise systems;
- Set forth a system of penalties for rule violations;
- Revoke or refuse to issue certificates for established grounds;
- Provide for variances to the rules; and,
- Establish certification fees based on the principle of cost recovery.

# **Program Activities**

# Program Coordination & Development:

- 1. Develop forms and guidance material
- 2. Manage data and reports
- 3. Review and amend rules, including fees
- 4. Coordinate and provide staff support for DEQ's Operator Certification Advisory Committee
- 5. Communicate with trainers to assess training needs and career development ladders, and participate in activities of Oregon's Environmental Services Advisory Council (OESAC) for work force training and continuing education
- 6. Act as liaison with the Association of Boards of Certification, North American certifying authorities, and organizations that represent wastewater system operators, owners, vocational-technical educators, and the water quality control industry

# Wastewater System Classification:

- 1. Compile, evaluate and interpret design summary, operation, maintenance, and operational compliance information for wastewater systems statewide
- 2. Classify systems to determine operator or supervisor certificate grade requirement
- 3. Coordinate permit notification to system owners

#### **Operator Certification & Examination:**

- 1. Evaluate education, training and experience qualifications for certification including provisional and standard certificates, certificate by reciprocity, continuing education, renewal and reinstatement.
- 2. Evaluate and provide examination accommodations for the disabled
- 3. Develop, validate, maintain, and secure examinations
- 4. Prepare and distribute exam study guidance
- 5. Schedule exams and proctors
- 6. Score exams and provide notice of results
- 7. Issue certificates and periodic certificate validation

# **Technical Assistance & Training:**

- 1. Respond to inquiries and provide guidance and interpretation of certification requirements regarding system owner, supervisor, operator, and contractor operability issues
- 2. Provide technical assistance, clerical and record support for OESAC committee for the Continuing Education Uni.
- 3. Provide technical assistance and data management support to DEQ staff regarding system owner and operator certification compliance

#### **Compliance, Variance & Enforcement:**

- 1. Track compliance of system owners and operators
- 2. Respond to complaints and inquiries, including evaluation of compliance investigations and actions, and certificate sanction or revocation
- 3. Evaluate and prepare responses to variance applications

# **Program Coordination and Development**

DEQ staff routinely provides technical assistance to system owners, responds to requests for time extensions for operator hiring and examination, administers scheduled and special examinations, and initiates enforcement activity as warranted to compel compliance.

Staff participated on Association of Boards of Certification technical committees and the Oregon Environmental Services Advisory Council (OESAC) to assist in the evaluation of certification program standards and continuing education. DEQ supports and participates with OESAC to identify, develop and evaluate workforce training and assign Continuing Education Units (CEUs) to qualifying courses.

DEQ maintains a standing 14-member Operator Certification Advisory Committee to provide advice and recommendations to the program. Committee members are appointed by DEQ's Director and represent wastewater system owners and operators, professional technical education and training, and interested parties including the Oregon Association of Clean Water Agencies, League of Cities, Oregon Association of Water Utilities, and the Pacific Northwest Clean Water Association. DHS Water System Operator Certification Program staff also play an important program advisory role. During 2001- 2002, this group was heavily involved in the rulemaking effort described below.

#### **Revision of Certification Requirements and Fees**

Historically, the Operator Certification program had been funded with a mix of certification fees and General Funds. General Funds constituted over half the certification program's budget. In 2001, the Legislature, consistent with the Governor's Recommended Budget, shifted the General Funds to DEQ's wastewater management program. To keep the program whole, the Legislature approved an increase in Operator Certification fees.

On October 3, 2002, the Environmental Quality Commission amended OAR Chapter 340, Division 49, to incorporate the revised fee schedule. The new fee structure, which was developed and endorsed by the Operator Certification Advisory Committee, will make the program fully fee-supported. In addition to increasing most fees for certification of individuals, the new regulations establish program support fees for owners of permitted wastewater systems required to have certified operators. The program support fees vary based upon the size of the system. All monies collected are dedicated to support the Operator Certification Program.

DEQ will be returning the Legislature during the 2003 session for ratification of the revised fee schedule. Other rule changes were made to strengthen and improve the efficiency of the program by correcting long-standing deficiencies in the rules governing operator qualification and examination, program administration, and compliance and enforcement.

#### Wastewater System Classification

Wastewater systems are classified by DEQ in two areas, collection or treatment, and at one of four levels based upon a system's size, complexity and degree of difficulty to operate. These classifications establish the certificate type and grade level requirement for the operator. Some entities have both a collection and treatment system classification, while others have only one type of system. As of December 31, 2002, there were a total of 382 entities operating 665 classified systems. Additionally, there were about 140 systems where voluntary certification is encouraged by DEQ (Table 2).

Classified Wastewater Systems	CERTIFICATION		
Classified Wastewater Systems	MANDATORY	VOLUNTARY*	
Collection & Treatment	283	54	
Collection Only	54	6	
Treatment Only	45	80	
TOTAL	382	140	

Table 2: Or	egon Classified	Wastewater	Systems -	12/02
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\* These systems are not required to have certified operators but choose to have them anyway.

DEQ will conduct a classification review for a system whenever a permit action occurs (new permit, permit renewal or modification) or a technical evaluation is required (plan review). Over the past two years, DEQ staff reviewed system classifications for over 100 facilities, including 8 new ones. Eight systems were re-classified higher or lower, or dropped from operator certification requirements.

#### **Operator Certification and Examination**

To obtain a certificate, a person must meet minimum standards for education and operator work experience and pass an examination. Scheduled examinations are held twice each year (March and September) at up to seven sites around the state. DEQ administers standardized examinations which are developed jointly by DEQ and the Association of Boards of Certification (ABC). Exam results are evaluated by DEQ after scoring and analysis by ABC. During this reporting period, DEQ scheduled 659 exams for 567 applicants, including 12 that were scheduled on special dates to accommodate disability, permit compliance or hardship.

As of December 31, 2002, 1,560 persons held active operator's certificates, including 23 holding provisional certificates that enable on-the-job training. Of the total number of persons certified, 41 percent hold certificates in both collection and treatment system operation. The total number of active certificates on this date was 2,196. The following graph (Figure 1) shows how the number of scheduled examinations, valid certificates and persons certified has grown since 1984.





# **Professional Growth**

To be eligible to renew a certificate, an operator needs to complete a minimum of two Continuing Education Units (CEUs). One CEU is equivalent to 10 contact hours of lecture or formalized training in wastewater collection or treatment or related fields. Continuing education ensures that operators maintain and enhance their skills and keep pace with changing regulations and technology. During this reporting period, all the operators who were required to report were able to document the CEUs claimed.

#### **Technical Assistance and Training**

During the past two years, program staff responded to thousands of requests for assistance from system owners, operator personnel, training providers and DEQ regional staff regarding operator certificate qualifications, application forms, continuing education, system classification and rule interpretation. DEQ also provides certified operator and classified system information to system owners (employers), operators, vocational counselors, organizations, etc., to help with operator training, recruiting, and job placement.

Training of operators is primarily accomplished by a host of non-profit organizations, community colleges, public and private sector consultants and professional trainers. DEQ staff assists by coordinating and developing training, and often delivers training modules on certification requirements, system operation issues and compliance at regional "short schools" around the state. In 2001 and 2002, DEQ staff assisted with 16 training events.

# **Compliance, Variance and Enforcement**

DEQ determines permit compliance by reviewing self-monitoring reports and file records, and through field inspections, surveys, and other investigative techniques. DEQ has significant enforcement authority to compel compliance should it be needed. During the biennium, DEQ issued Notices of Noncompliance or Notices of Permit Violation to system owners for failure to comply with certification requirements.

DEQ worked with system owners and operators who were out of compliance, as well as those in marginal compliance, to help them find efficient ways to come into compliance. DEQ encourages and often recommends a course of action to assure both operator personnel and operator training deficiencies are corrected in the shortest possible time. At this time, all systems have either come into full compliance or are in the process of doing so.

Upon request, time extensions may be granted to allow for recruiting or contracting with a certified operator or examination of operator personnel. Currently, the number of systems being supervised by properly certified operators exceeds 95%, with the balance working to achieve full compliance. About one in four wastewater system owners meet operator certification compliance through some type of contractual agreement that includes the services of a certified operator to supervise system operation.

Program rules call for the Director of DEQ to revoke, or to refuse to issue, an operator's certificate for grievous acts. DEQ will investigate complaints alleging operator violations of permit conditions for various acts such as failure to perform proper sampling and testing, improper facility operation, false or fraudulent records or reports, or failure to obtain proper certification. During this reporting period, the Director took action to revoke two certificates and refuse to issue another (all actions were taken against one individual).

# **Efficiency and Service Improvements**

A program coordinator and a clerical support person currently staff DEQ's Operator Certification Program. Continued efficiency efforts have helped offset any need for increased staffing despite some increase in the number of persons certified and applying for certification. For example, the program has increased use of the Internet for communications and document distribution and has cut costs by switching to the use of national standardized wastewater examinations. Additional opportunities to increase efficiency are also being considered, such as on-line Internet applications, combining invoicing of annual program support fees with other DEQ fee invoices, and payment of fees via debit or credit cards.

# Legislative Issues

DEQ will be returning to the Legislature in 2003 for ratification of the new fee schedule that was adopted in October 2002. The fee increase, which was authorized by the 2001 Legislature, is needed to adequately fund the program after General Funds were shifted to fill funding deficiencies in other water quality programs. By statute, the revenue generated from wastewater operator certification fees is dedicated to covering DEQ's costs to administer the program.

# Conclusion

The objectives of the Wastewater System Operator Certification Program are to help protect public health, Oregon's environment and water resources, and capital investment in infrastructure through proper operation and maintenance of Oregon's domestic wastewater collection and treatment systems. The Operator Certification Program helps ensure that there are an adequate number of qualified persons available to provide these services throughout the state.

Oregon's wastewater utilities continue to raise minimum employment qualifications for both supervisory and nonsupervisory personnel. Certification has established a much-needed minimum standard for education, training and experience that helps ensure an effective and efficient workforce which properly operates and maintains facilities to minimize their adverse effect on water quality.

The continued acceptance and support of the program is evidenced by increased employer preference for certification, recruiting practices, promotional and pay incentives, and increased employer support for continuing professional skill training. Other indicators of support for this program are the support from system owners for establishing an annual program support fee, and the high number of employer-paid certification fees for operators (estimated to be around 70%).

The Wastewater System Operator Certification Program is working well in Oregon. For the near future, the main program development issues DEQ will be addressing include continued validation and evaluation of examinations and continued process efficiency improvement.