How Do I Become an Operator in Colorado?

Background Information – Almost everything you need to know about becoming an operator and maintaining your license in Colorado is written out in Regulation 100. The Certification Board also has several written policies for how they evaluate exam applications, experience, reciprocity, and education. Got a question? The answer is likely in either Regulation 100 or one of the policy documents.

You can become certified as a water or wastewater treatment plant operator, industrial treatment plant operator, water distribution operator, wastewater collection systems operator, or a small systems operator. Many operators hold more than one type of license. Treatment exams and licenses are classified as D, C, B, and A with the A license being the highest level attainable. Water Distribution and Collection Systems licenses are classified as 1, 2, 3, and 4 with the Grade 4 license being the highest level attainable. The small systems licenses are S licenses and are equivalent to holding both a D and a 1 in either “Water Treatment and Water Distribution” or in “Wastewater Treatment and Collection Systems”. Many people prefer the Small Systems license because of its flexibility, but it does require more training units to renew than a single level 1 or D license.

All license levels require a minimum level of hands-on experience before becoming eligible to take an exam. Up to half of the experience requirement can be replaced with education. You may not skip levels. In other words, you must test and pass each level exam before moving on to the next.

Note: You don’t have to be certified to work as an operator; however, the operator who is in charge and responsible for the facility (Operator-in-Responsible Charge) must be licensed at a level equal to or higher that the facility classification. The more complicated and larger the facility, the higher level license will be required.

Looking for a position in water or wastewater in Colorado? Check out the classified ads on the RMWEA website. Many, if not most, positions will be posted here.

Step 1 – Apply to take a certification exam. The certification exams are all given through the Operator Certification Program Office (OCPO). Visit their website to get an application. There are three testing cycles each year with multiple test dates and locations within each cycle. The application deadlines are March 1st, July 1st, and November 1st. If you apply before the March 1st deadline, you’ll be taking your exam sometime between mid-March and July 1st.
Important Points for Testing:

- Any experience requirement MUST be met by the application deadline. While you may be getting more experience between the application date and the exam date, it won’t count towards your application.
- Anybody can take a level 1 or D exam. If you pass, you’ll have to rack up the minimum 30 days of experience required before you can get your certificate.

Step 2 – Start studying! The pass rates on the exams are not very high. The 2014 report from the Operator Certification Program Office to EPA puts passing rates between 54 and 68 percent. Many people walk into the exam unprepared or they freeze up when faced with an exam. Don’t let that be you. There are many great resources out there for preparing for the certification exams. Here are some of our favorites:

- Get Familiar With the Exam
  - The Association of Boards of Certification writes the multiple choice exams given in Colorado and many other states. Visit their website to get the Need-to-Know Criteria list and a copy of the math formulas that you’ll be given in the front of the test booklet.
  - The State of Colorado has its own list of Need-to-Know Criteria that are published on the OCPO website. Look under the Operators tab at the top of the page. Colorado’s list is shorter and easier to read.
  - Each exam consists of 100 multiple choice questions.
  - There is no penalty for guessing.
  - A score of 70 percent or higher is passing.

- Training Classes
  - Indigo Water Group offers both classroom style training and on-line training classes. Classroom courses are great for people who can assimilate a lot of material in a short period of time or who just need to brush up or who hate sitting in front of a computer. On-line classes let you work at your own pace and repeat information that isn’t clear plus e-courses are always ready when you are and can be easier to fit into a busy schedule. The downside to on-line training is that you can’t ask the instructor questions very easily and you have to be able to self-motivate and stick to a study schedule. To ask Sidney a question, send her an e-mail at sidney@indigowatergroup.com. If you’re not sure where to start, just give us a call at 303-489-9226 and we’ll help you figure it out.
  - There are several week-long operator schools offered each year. Some of these schools will satisfy the 30 day experience requirement for a level 1 or D license. The major schools usually offer the exam on the Friday and Saturday after classes end. You still have to register for the exam separately through the OCPO website. Taking the exam is not part of the schools, it just follows the schools.
    - **Fundamentals School** – February
    - **Intermediate and Advanced School** (aka the Boulder School) – March/April
• **Leadville Operator School** – July/August
  • Distribution and Collection Short School – November
  o There are a few websites that can be useful for finding upcoming training classes.
    • Indigo Water Group’s Calendar
    • WaterOperator.org (formerly SmallWaterSupply.org)
    • Operator Certification Program Office
    • Colorado Rural Water

• Study Guides, Books, and other Resources
  o Free math workbooks and practice questions from Indigo Water Group
  o Water Environment Federation books and study guides
    • Manual of Practice 11 – Operation of Municipal Wastewater Treatment Plants
    • Operation of Nutrient Removal Facilities
    • Laboratory Procedures for the Operator-Analyst
    • Study Guides (practice questions)
  o American Water Works Association books and study guides
  o Wastewater Collection System Maintenance by Michael J. Parcher (~$30)
  o Sewergeek.com for collection systems practice tests and more.
  o ACR Publications – We love Skeet’s books because they are filled with diagrams.
    • Pumps and Pumping
    • Introduction to Small Water Systems
    • Operation of Distribution Systems
    • O&M of Chlorine Systems
    • Flash CERT! Books
  o State of Colorado Safe Drinking Water Regulations

**Step 3 – Continuing Education.** Once you have your license, you must participate in a minimum number of approved training classes to maintain your license. Licenses must be renewed every three years. The number of training hours you need is based on the level license you need to renew. In Colorado, the individual operators are responsible for tracking their training units and submitting their renewal applications along with copies of training certificates about 8 weeks before a license will expire.

**Summary**

Step 1 – Apply for the exam through the Operator Certification Program Office.

Step 2 – Find training classes and materials. Study, study, study. Pass!

Step 3 – Attend classes to get continuing education credits towards certificate renewal.