WASTEWATER OPERATOR CERTIFICATION TRAINING DIRECTORY

February 2019

State Water Resources Control Board
California Environmental Protection Agency
Introduction

What Is In This Directory?

This guide provides an overview of the educational requirements contained in both the Water Code, Division 7, Water Quality, Chapter 9 Waste Water Treatment Plant Classification and Operator Certification and the California Code of Regulations Title 23, Chapter 26, Division 3, and lists opportunities to satisfy those requirements.

What Is The State Water Board Authority?

Water Code, Division 7, Chapter 9, Section 13629 authorizes the State Water Resources Control Board (State Water Board) and the Wastewater Operator Certification Program (WWOCP) to approve courses of instruction at higher educational institutions. The section also gives the WWOCP authority to approve courses of instruction given by professional associations, nonprofit or for-profit private or public agencies, and educational companies if they are equivalent to courses of instruction given by higher educational institutions. Upon request, the WWOCP will assign educational points to approved courses.

California Code of Regulations Title 23, Chapter 26, Division 3, Sections 3685-3687, specify the education requirements and set out the method used by the State Water Board to calculate educational points.

Why Is Training So Critical?

The State Water Board, WWOCP certifies all operators of wastewater treatment plants with the primary goal of protecting public health and the environment by ensuring that all operators are trained in operating wastewater treatment plants. In California, all prospective wastewater treatment plant operators must demonstrate to the WWOCP that they have successfully taken technical training.

In fact, before an applicant is even owed to take an examination, they must document their training by sending official or copies of official college transcripts, diplomas or training certificates to the WWOCP. For more information, please visit our website at: http://www.waterboards.ca.gov/water_issues/programs/operator_certification/operator_certification.shtml. Depending on grade level, prospective operators must have specific levels of training. In some cases, this means college classes; in others it means seminars or in-house programs. Several grades have more than one possible path to satisfy the requirements.
Please refer to the “OPERATOR CERTIFICATION REQUIREMENTS TABLE” on page six for a list of education and experience requirements for Grades I through V. There is an educational requirement to both take the Examinations and to qualify for Certifications.

NOTE: Applicants must take and pass the WWQCP Examination before applying for Certification.

Educational Points vs. Semester Units

Educational Points are automatically allotted to non-college/university coursework (continuing education, association coursework, etc.) Additionally, if an applicant submits less than 60 semester (or equivalent quarter) units of college/university coursework and less than 15 semester units were earned in biology, chemistry, wastewater treatment, engineering, math or physics, the semester or quarter units will automatically be converted to educational points. Please note that all college/university coursework must be completed at an accredited college or university. Educational Points cannot be converted into Associate’s degree or Bachelor degree educational status. College and university courses completed on a quarter system are prorated to semester units.

California Code of Regulations Title 23, Chapter 26, Division 3, Section 3685 of the regulations authorizes the State Water Board to grant educational points as follows:

(a) Pursuant to the provisions of this article, applicants may be required to obtain educational points to qualify for certification. Operators may receive educational points for completing wastewater treatment, biology, chemistry, engineering, math, or physics courses as follows:

(1) One three-unit semester course completed as part of the curriculum of an accredited college or university is equal to eight educational points. Operators who have completed courses that result in more or less than three units or in quarter units rather than semester units shall be credited with educational points on a prorated basis.

(2) Each hour of instruction given by a professional association, private/public agency, or education company is equal to one tenth of an educational point (.1); ten hours of instruction is equivalent to one educational point.

(b) At Grades III, IV, and V, operators may earn up to a maximum of sixteen educational points for completing management courses. An operator may not earn more than four educational points for each management category. The management categories are: oral communication, technical writing, public administration, business management, and finance.
Educational points for a management coursework may be earned as follows:

(1) One completed two-unit semester course (or any course worth more than two semester or three-quarter units) that is part of the curriculum of an accredited college or university is equal to four educational points.

(2) Each hour of instruction taught at a professional association, private/public agency, or education company is equal to one half of an educational point; it takes twenty hours of instruction to equal one educational point.

(c) Applicants may not substitute experience for educational points.

The chart below may be useful when converting units to educational points:

<table>
<thead>
<tr>
<th>Units (Semesters)</th>
<th>Educational Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>5.5</td>
</tr>
<tr>
<td>3</td>
<td>8.0</td>
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<tr>
<td>4</td>
<td>10.5</td>
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<tr>
<td>5</td>
<td>13.5</td>
</tr>
<tr>
<td>6</td>
<td>16.0</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Units (Quarter) 12 weeks</th>
<th>Educational Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>3.5</td>
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<tr>
<td>3</td>
<td>5.5</td>
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<tr>
<td>4</td>
<td>7.0</td>
</tr>
<tr>
<td>5</td>
<td>9.0</td>
</tr>
<tr>
<td>6</td>
<td>10.5</td>
</tr>
</tbody>
</table>

**Educational Point Substitution for Experience**

Applicants may substitute 16 educational points for one year of experience; however, educational points cannot be used to substitute the 1,800 hours (or one year) of Operator-In-Training (OIT) experience. In other words, operators must work one year or 1,800 hours prior to being able to substitute educational points for experience. An applicant must retain the minimum educational points to qualify for their Grade level and have at least sixteen additional educational points available to substitute.

For example, a Grade II applicant with one year of experience and at least 28 educational points would be eligible to substitute 16 educational points for one year of experience. The applicant would have 12 points to satisfy the education requirement and 16 points to substitute for one year of experience. (28-16=12)

Once the 16 points are used to substitute for experience, they cannot be used again to substitute for experience at another grade level or qualify for a certification examination. Operators can substitute 16 educational points for one year of experience multiple times.
Acceptable High School Diplomas

Photocopies of high school diplomas and/or transcripts are acceptable. If submitting a transcript, it must be a copy of an official copy and clearly state the graduation date, the applicant’s name, and the name of the high school. If applicants do not have a copy of their diploma or it has been misplaced, contact the high school or school district directly for a copy.

Acceptable High School Diploma Equivalents

Here is a list of acceptable high school diploma equivalents:

- General Educational Development Test (GED, administered by the GED Testing Service GEDTS).
- High School Equivalency Test (HisSET administered by ETS educational Testing Service).
- The California High School Proficiency Examination (CHSPE) issued by the State of California Board of Education.

Community Colleges

Community colleges that offer certificate programs in wastewater are listed on pages 10 to 14. Community colleges offering only a few wastewater courses are listed separately on page 15. The prospective wastewater treatment plant operator should not confuse community college certification with certification by the WWOCP. A typical community college certification program requires the student to complete a program of study totaling approximately 23 semester units in wastewater and related topics. Certification by the State of California requires the qualified individual to pass an examination administered by the State Water Board, meet the experience and educational minimum requirements and submit a certification application with the applicable fee.

Even though a community college in your area may not be listed in this document, it is recommended that you inquire directly with your local college. Wastewater programs are in a continual state of change. Demand for courses and budget constraints often dictate scheduled offerings.

Universities

There are a few universities which offer correspondence coursework that includes wastewater manuals and online programs. These programs provide an excellent alternative for those individuals who are unable to attend a college or cannot find such courses offered in their vicinity.

The curriculum covers a variety of topics including tours of pre-treatment and wastewater treatment facilities. Contact the universities listed in the directory for more information.
Associations, Organizations, and Education Companies offering Courses, Classes or Seminar Coursework

There are various regional and statewide training organizations, and educational companies which provide wastewater training seminars, courses and classes. When a course has been completed, submit a copy of the certificate of completion that includes the name of the instructor and attendee, the course title, how many minutes or hours the course took, and a signature from the course instructor. Please note that the list of Associations and Organizations is not comprehensive nor does the WWOCP endorse any specific educational entity.

Where To Go For More Information?

For additional information, please contact:

Wastewater Operator Certification Program
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

(916) 341-5819

**OPERATOR CERTIFICATION REQUIREMENTS TABLE**
(Effective April 1, 2013)

*Note: Applicants must take and pass the Office of Operator Certification Wastewater Treatment Plant Operator Examination before applying for Certification.*

<table>
<thead>
<tr>
<th>PATH</th>
<th>EXAMINATION EDUCATION REQUIREMENTS</th>
<th>CERTIFICATION QUALIFYING EXPERIENCE REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>High school diploma or equivalent and 6 educational points</td>
<td>and 1 year of full-time qualifying experience</td>
</tr>
<tr>
<td><strong>GRADE II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>High school diploma or equivalent and 9 educational points</td>
<td>and 18 months of full-time qualifying experience as a Grade I operator</td>
</tr>
<tr>
<td>2</td>
<td>High school diploma or equivalent and 12 educational points</td>
<td>and 2 years of full-time qualifying experience</td>
</tr>
<tr>
<td>3</td>
<td>Associate’s degree, a higher degree, or a minimum of 60 college semester units, including a minimum of 15 semester units of science courses</td>
<td>and 1 year of full-time qualifying experience</td>
</tr>
<tr>
<td><strong>GRADE III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>High school diploma or equivalent and 12 educational points</td>
<td>and 3 years of full-time qualifying experience as a Grade II operator</td>
</tr>
<tr>
<td>2</td>
<td>High school diploma or equivalent and 18 educational points</td>
<td>and 4 years of full-time qualifying experience</td>
</tr>
<tr>
<td>3</td>
<td>Associate’s degree or a minimum of 60 college semester units, including a minimum of 15 semester units of science courses</td>
<td>and 2 years of full-time qualifying experience</td>
</tr>
<tr>
<td>4</td>
<td>Bachelor’s degree or a higher degree, including a minimum of 30 semester units of science courses</td>
<td>and 1 year of full-time qualifying experience</td>
</tr>
<tr>
<td>GRADE IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>High school diploma or equivalent and 32 educational points</td>
<td>and</td>
</tr>
<tr>
<td>2</td>
<td>Associate’s degree or a minimum of 60 college semester units, including a minimum of 15 semester units of science courses</td>
<td>and</td>
</tr>
<tr>
<td>3</td>
<td>Bachelor’s degree or a higher degree, including a minimum of 30 semester units of science courses</td>
<td>and</td>
</tr>
<tr>
<td>4</td>
<td>Valid registration as a chemical, civil, or mechanical engineer issued by the California Board for Professional Engineers and Land Surveyors or by another state, territory, or Indian tribe</td>
<td>and</td>
</tr>
</tbody>
</table>

| GRADE V | | | |
|---|---|---|
| 1 | High school diploma or equivalent and 48 educational points | and | 10 years full-time qualifying experience |
| 2 | Associate’s degree or a minimum of 60 college semester units, including a minimum of 15 semester units of science courses | and | 6 years of full-time qualifying experience |
| 3 | Bachelor’s degree or a higher degree, including a minimum of 30 semester units of science courses | and | 5 years of full-time qualifying experience |
| 4 | Valid registration as a chemical, civil, or mechanical engineer issued by the California Board for Professional Engineers and Land Surveyors or by another state, a territory, or an Indian tribe | and | 4 years of full-time qualifying experience |
Community Colleges Offering Wastewater Certificate or Degree Programs –continued-
(Visit website for course information)

College of the Canyons
26455 Rockwell Canyon Road
Santa Clarita, CA 91355
www.canyons.edu/

College of the Canyons Program is administered by the Water Systems Technology Program.

http://www.canyons.edu/Departments/WATER/Pages/default.aspx

Degree Information
Associate of Science Degree in Water Systems Technology, can emphasize in Wastewater
Certificate Of achievement in Water Systems Technology, can emphasize in Wastewater

Cuyamaca College
900 Rancho San Diego Parkway
El Cajon, CA 92019
http://www.cuyamaca.edu/

Cuyamaca College’s Wastewater Treatment Plant Operator’s Program is administered by the Water and Wastewater Technology Program.

http://www.cuyamaca.edu/academics/departments/wwtr/default.aspx

Degree Information
Associate of Science Degree in Wastewater Treatment Plant Operations
Certificate in Wastewater Treatment

Folsom Lake College – Los Rios Community College District
10 College Parkway,
Folsom, CA 95630
http://www.flc.losrios.edu/

Folsom Lake College’s Waste Water Management program is administered by the Environmental Technology Department.

http://www.flc.losrios.edu/academics/waste-water-management

Degree Information
Certificate in Wastewater Management
Imperial Valley College
380 East Aten Road
Imperial, CA 92251
www.imperial.edu

Imperial Valley College’s Water Treatment Systems Technology Program is administered by the Division of Industrial Technology.

Degree Information
Associate Degree in Water Treatment Systems Technology
Certificate in Waste Water Systems Technology
Specialization Certificate in Wastewater Systems Technology - Wastewater Treatment

Los Angeles Trade-Technical College
400 West Washington Boulevard
Los Angeles, CA 90015
www.lattc.edu

Los Angeles Trade-Technical College’s wastewater program is administered by the Department of Science and Mathematics.


Degree Information
Associate Degree in Water Systems Technology
Certificate in Water Systems Technology – Wastewater Option

Mt. San Jacinto College
San Jacinto Campus
1499 N. State St.
San Jacinto, CA 92583

Menifee Valley Campus
28237 La Piedra Rd.
Menifee, CA 92584

http://www.msjc.edu/Pages/default.aspx

Mt. San Jacinto College’s Program is administered by the Water Technology Program.
http://www.msjc.edu/InstructionalPrograms/Documents/WATR.pdf

Degree Information
Non-Transfer Degree Associate Degree in Water Technology
Certificate in Wastewater Treatment Operator
Community Colleges Offering Wastewater Certificate or Degree Programs –continued-
(Visit website for course information)

Palomar College
1140 West Mission Avenue
San Marcos, CA 92069
www.palomar.edu

Palomar College’s wastewater program is administered by the Department of Occupational and Education.

https://www2.palomar.edu/pages/watertech/catalog/

Degree Information
Associate in Wastewater Technology Education
Certificate in Wastewater Technology of Achievement

Santa Barbara City College
721 Cliff Drive
Santa Barbara, CA 93109
http://www.sbcc.edu/

Santa Barbara City College’s Wastewater Technology Education Certification of Achievement program is administered by the Water Science Department.

http://www.sbcc.edu/waterscience

Degree Information
Certificate of Achievement

Santa Rosa City College
1501 Mendocino Avenue
Santa Rosa, CA 95401
https://www.santarosa.edu

Santa Rosa City College’s Wastewater Treatment Operators Major is administered by the Engineering and Applied Technology Department.

https://portal.santarosa.edu/SRWeb/SR_ProgramOfStudy.aspx?ProgramType=1&Program=003333

Degree Information
Associate Degree or Certificate of Achievement in Wastewater Treatment Operations.
Santiago Canyon College
8045 East Chapman Avenue
Orange, CA 92869

www.sccollege.edu

Santiago Canyon College’s Wastewater/Environmental Sanitation Program is administered by the Water Utility Science Department.

http://www.sccollege.edu/Departments/CareerEd/WaterSci/Pages/default.aspx

Degree Information
Associate Degree or Certificate of Achievement in Wastewater/Environmental Sanitation

Shasta College
11555 Old Oregon Trail
Redding, CA 96049-6006

www.shastacollege.edu

Shasta College’s wastewater program is administered by the Center for Science, Industry and Natural Resources.

http://www.shastacollege.edu/Academic%20Affairs/BAIT/WTWTT/WT%20PDFs/WATER.Wastewater%20Treatment%20Cert%201213.pdf

Degree Information
Certificate in Water/Wastewater Treatment

Solano Community College
4000 Suisun Valley Road
Fairfield, CA 94534

www.solano.edu

Solano Community College’s wastewater program is administered by the Gainful Employment Program.

http://www.solano.edu/degrees/1516/water.pdf

Degree Information
Associate Degree or Certificate in Water and Wastewater Technology
Ventura College
4667 Telegraph Road
Ventura, CA 93003
www.venturacollege.edu

Ventura College’s Wastewater Program is administered by the Department of Industry and Technology. http://www.venturacollege.edu/departments/academic/water-science

Degree Information
Associate Degree or Certificate in Water Science and can choose to concentrate in Wastewater

Castro Valley Adult & Career Education
4430 Alma Ave.
Castro Valley, CA 94546
http://www.cvadult.org

Castro Valley’s Adult and Career Education’s modern wastewater program is administered by the Castro Valley Adult & Career Education.

http://www.cvadult.org/for-students/programs/career-education/wastewater-treatment
### Community Colleges Offering One or More Wastewater Courses
(Visit website for course information)

<table>
<thead>
<tr>
<th>College</th>
<th>Address</th>
<th>City, State, Zip</th>
<th>Phone Number</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield College</td>
<td>1801 Panorama Drive</td>
<td>Bakersfield, CA</td>
<td>(661) 395-4011</td>
<td><a href="http://www.bakersfieldcollege.edu">www.bakersfieldcollege.edu</a></td>
</tr>
<tr>
<td>College of the Sequoias</td>
<td>915 South Mooney Blvd.</td>
<td>Visalia, CA</td>
<td>(559) 730-3700</td>
<td><a href="http://www.cos.edu">www.cos.edu</a></td>
</tr>
<tr>
<td>Merced College</td>
<td>3600 M Street</td>
<td>Merced, CA</td>
<td>(209) 384-6171</td>
<td><a href="http://www.mccd.edu">www.mccd.edu</a></td>
</tr>
<tr>
<td>Sacramento City College</td>
<td>3835 Freeport Blvd.</td>
<td>Sacramento, CA</td>
<td>(916) 558-2351</td>
<td><a href="http://www.scc.losrios.edu">http://www.scc.losrios.edu</a></td>
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<tr>
<td>San Bernardino Valley College</td>
<td>701 S. Mt Vernon Ave.</td>
<td>San Bernardino, CA</td>
<td>(916) 558-2351</td>
<td><a href="https://www.valleycollege.edu/">https://www.valleycollege.edu/</a></td>
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</tbody>
</table>
Universities and Schools Offering
Wastewater Training or Technology Courses
(Visit website for course information)

Office of Water Programs California State University, Sacramento
6000 J Street
Sacramento, CA 95819-6025 www.owp.csus.edu

The Office of Water Programs at California State University, Sacramento (CSUS) offers a series of self-study manuals in wastewater treatment. Students study at their own pace, complete the test for continuing education units (CEUs) for each of the volumes, and mail it to CSUS for grading and comment.

Companies Offering
Wastewater Training
(Visit website for course information)

American Water College
P.O. BOX 348614
Sacramento, CA 95834
http://www.americanwatercollege.org/index.php

CEU Plan
https://www.ceuplan.com/

OCT Water Quality Academy
4600 Roseville Rd. Ste 190
North Highlands, CA 95660
www.octwqa.org

WasteWater Technology Trainers
2424 Donner Way
Sacramento, CA 95818
www.wastewatertechnologytrainers.com
Wastewater Associations
(Visit website for course information)

California Water Environment Associations (CWEA)
7677 Oakport Street
Oakland, CA 94621
www.cwea.org

California Rural Water Association
1234 N. Market Blvd.
Sacramento, CA 95834
www.calruralwater.org

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314
www.wef.org