



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
State Board for Certification of Water and Wastewater Systems Operators

**Certification To Operate Water and Wastewater Treatment Systems**  
**Examination Registration Instructions**

**EXAMINATION INFORMATION**

- ▶ You may apply for and take any examination(s) without meeting the experience requirements prior to taking the examination(s)
- ▶ Approximately two weeks before an examination, qualified applicants will receive a “LETTER OF NOTIFICATION” from the State Board for Certification of Water and Wastewater Systems Operators (the Board) or the Association scheduling the examination.
- ▶ Examination results will be mailed to the applicant.
- ▶ A passed examination score has No Expiration Date.

**Part 1: Applicant Information**

Complete all information as requested, including your CLIENT ID, if DEP has assigned one to you.

<b>Part 2: Requested Class</b>	<b>Part 3: Test Site</b>
Choose class based on size systems you want to operate, (See definition of classes below)	Choose only one testing site for the examination.

**Part 4: Certification Examinations (Mark appropriate boxes)**

**Water Examinations**

PART 1 – GENERAL EXAMINATION	Required for Class A, B, C, or D certification 1. Class A, B or C, certification require Technology Specific Examinations applicable to your system. Class D does not, unless your system is using a specific treatment technology. 2. Class Dc and Dn certification cannot be upgraded without re testing.
PART 2 – TECHNOLOGY SPECIFIC EXAMINATION	Applicable to your system – Check System Permit
CLASS E – DISTRIBUTION SYSTEM EXAMINATION	Distribution System certification Technology Specific Examinations 7 thru 14 (if applicable to your distribution system)
Dc – SMALL SYSTEM EXAMINATION	Groundwater source that serves less than 500 individuals or 150 connections and requires disinfection
Dn – SMALL SYSTEM EXAMINATION	Groundwater source that serves less than 500 individuals or 150 connections and requires NO treatment

**Wastewater Examinations**

PART 1 – GENERAL EXAMINATION	Required for Class A, B, C, or D certification
PART 2 – TECHNOLOGY SPECIFIC EXAMINATIONS	Applicable to your system - Check System Permit
CLASS E4 – SATELLITE COLLECTION	Satellite collection system with a pump station(s). Single entity owner collection system certification This certification cannot be upgraded without retesting.

Guidelines on the average time to take each examination are in brackets next to each examination name on the test registration form. Examination sessions are limited to four hours. Applicants should not register for more examinations than can be completed in the allocated four hours.

***If you anticipate the need for a testing accommodation due to a disability, your written request must be submitted with your registration form. Written requests must contain the following: (1) a letter from a professional who has made an assessment of your disability, describing the way in which you would be best accommodated and (2) letter from you describing the requested accommodation. If you have questions, please contact the Board at 717-787-5236 or through PA AT&T Relay Services at 1-800-654-5984 (TDD).***

For further information on the Operator Certification Program and the process for applying for certification, please refer to the Drinking Water and Wastewater Information Center at [www.dep.state.pa.us](http://www.dep.state.pa.us) DEP Keyword: “DEP operators”.

## DEFINITIONS OF CLASSES

### WASTEWATER

Class A – Greater than 5 mgd

Class B – Greater than 1 mgd, but less than or equal to 5 mgd

Class C – Greater than 100,000 gpd but less than or equal to 1 mgd

Class D – Less than or equal to 100,000 gpd

Class E – Satellite collection system with a pump station (Will be combined with wastewater subclassification 4)

#### Class E

► **Collection system** – Any system of pipelines or conduits, pumping stations, force or gravity mains used for collecting and conveying wastes to a point of treatment and disposal. The term does not include a collection system within the boundaries of the property of the owner.

► **Satellite collection system** – A publicly owned wastewater collection system that conveys sewage to a treatment plant owned by a different entity.

### WATER

Class A – Greater than 5 mgd

Class B – Greater than 1 mgd, but less than or equal to 5 mgd

Class C – Greater than 100,000 gpd but less than or equal to 1 mgd

Class D – Less than or equal to 100,000 gpd

Class E – Distribution and Consecutive Water Systems with no treatment

(Do not check a Requested Class box if you are taking the Dc or Dn certification examination.)

## DEFINITIONS OF SUBCLASSES

### WASTEWATER

**Subclassification 1** – Activated Sludge - The treatment technology that mechanically introduces air into wastewater to achieve treatment such as extended aeration, sequential batch reactors, contact stabilization, conventional, step fed or oxidation ditch.

**Subclassification 2** – Fixed film treatment - A wastewater treatment technology that uses a fixed contact media to achieve treatment such as trickling filters and rotating biological contactors.

**Subclassification 3** – Treatment ponds and lagoons - Technology that uses aerated, anaerobic, facultative process or wetlands to treat wastewater.

**Subclassification 4** – Single entity collection system – A wastewater collection system where the collection system relies on treatment from a wastewater treatment system owned by the owner of the collection system.

### WATER

**Subclassification 1** - Conventional filtration – For drinking water, a series of processes for the purpose of substantial particulate removal consisting of coagulation, flocculation, sedimentation and filtration.

**Subclassification 2** - Direct filtration - For drinking water, a series of processes for the purpose of substantial particulate removal consisting of coagulation, and filtration. The term normally includes flocculation after coagulation, but does not include sedimentation.

**Subclassification 3** - Diatomaceous earth filtration – For drinking water, a process for the purpose of substantial particulate removal, in which a pre-coat cake of diatomaceous earth filter media is deposited on a support membrane (septum) and, while the water is filtered by passing through the cake on the septum, additional filter media, known as body feed, is continuously added to the feed water, to maintain the permeability of the filter cake.

**Subclassification 4** - Slow sand filtration - For drinking water, a process for the purpose of substantial particulate removal by physical and biological mechanisms during the passage of raw water through a bed of sand at low velocity, generally less than 0.4 meters per hour.

**Subclassification 5** - Cartridge or bag filtration - For drinking water, a process for the purpose of substantial particulate removal by straining with bag or cartridge filters manufactured of various materials and pore sizes.

**Subclassification 6** - Membrane filtration – For drinking water, a process that uses a thin film that acts as a selective barrier (semi-permeable) to the transport of matter to remove contaminants from water and includes such processes as electro dialysis, reverse osmosis, nanofiltration, ultrafiltration, microfiltration or other similar technologies..

**Subclassification 7** - Corrosion control and sequestering – A water treatment process designed to mitigate the adverse effects of corrosion in drinking water.

**Subclassification 8** - Chemical addition – A water treatment process designed to improve the quality of the water being treated through the addition of chemicals such as lime, soda ash, caustic soda and permanganate.

**Subclassification 9** – Ion exchange and green sand – A water treatment process such as greensand filtration, ion exchange, or activated alumina designed to improve the quality of water being treated by removal of inorganic constituents.

**Subclassification 10** – Aeration and Activated Carbon Adsorption:

*Activated carbon* – A water treatment process designed to improve the quality of water being treated by using activated granular or powdered carbon to remove specific organic chemical compounds by adsorption.

*Aeration* – A water treatment process designed to improve the quality of water being treated by introducing air or oxygen into water to remove undesirable dissolved gases, to remove volatile organic compounds or to oxidize inorganic compounds so they can be removed as particulates.

**Subclassification 11** – Gaseous chlorination disinfection – A water treatment process designed to inactivate pathogenic organisms from water being treated utilizing gaseous chlorine.

**Subclassification 12** – Non-gaseous chemical disinfection - A water treatment process designed to inactivate pathogenic organisms from water being treated utilizing non-gaseous chemical elements or compounds.

**Subclassification 13** – Ultraviolet disinfection - A water treatment process that inactivates pathogenic organisms using light with a wavelength range of 4000 to 40 angstroms.

**Subclassification 14** – Ozonation - The water treatment process designed to inactivate pathogenic organisms from water being treated utilizing ozone.