

# **Operator Certification Program**

**Technical Guidance Number  
391-2300-002**

**State Board for Certification  
of  
Water and Wastewater Systems Operators**

## **Board Guidelines**

**Prepared by  
Bureau of Safe Drinking Water  
Division of Training, Technical and Financial Services**



**pennsylvania**

DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Bureau of Safe Drinking Water**

**DOCUMENT NUMBER:** 391-2300-002

**TITLE:** State Board for Certification of Water and Wastewater Systems Operators,  
Board Guidelines

**EFFECTIVE DATE:** Effective upon publication in the *Pennsylvania Bulletin*

**AUTHORITY:** Water and Wastewater Systems Operators' Certification Act, 63 P.S.  
§§ 1001 et seq.

**POLICY:** The State Board for Certification of Water and Wastewater Systems Operators (Board) and the Department of Environmental Protection (DEP) will follow the guidance and procedures in this document in the implementation of the Water and Wastewater Systems Operators' Certification Act and meet the federal guidelines established under Section 1419 of the Federal Safe Drinking Water Act.

**PURPOSE:** The purpose of this document is to provide the Board and DEP a framework for implementing and administering the requirements of the Drinking Water and Wastewater Systems Operators' Certification Act and 25 Pa. Code Chapter 302, Administration of the Water and Wastewater Systems Operators' Certification Program Regulations.

**APPLICABILITY:** This guidance applies to all of the operators and owners of regulated water and wastewater systems, the Board and DEP.

**DISCLAIMER:** The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP or the Board to give these policies that weight or deference. This document establishes the framework within which DEP and the Board will exercise their administrative discretion in the future. DEP and the Board reserve the discretion to deviate from this policy statement if circumstances warrant.

**PAGE LENGTH:** 80 pages

**STATE BOARD FOR CERTIFICATION OF  
WATER AND WASTEWATER SYSTEMS OPERATORS**

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# STATE BOARD FOR CERTIFICATION OF WATER AND WASTEWATER SYSTEMS OPERATORS

## BOARD GUIDELINES

### 1. General Information

#### 1.1 Introduction

Section 1419 of the Federal Safe Drinking Water Act requires states to meet federal guidelines for operator certification programs. In February of 2002, Governor Mark Schweiker signed into law House Bill 1830, the Water and Wastewater Systems Operators' Certification Act (Act) to ensure Pennsylvania's compliance with these federal guidelines. The Act, as amended, provides the State Board for Certification of Water and Wastewater Systems Operators (Board) with separate and distinct powers and duties for program administration. These guidelines further clarify how the Board will administer its authority under the Act and Chapter 302, Administration of the Water and Wastewater Systems Operators' Certification Program Regulations.

#### 1.2 Membership of the Board

The Act defines the membership of the Board to include seven members. The seven members include a member from the general public having knowledge of water and wastewater systems, an individual certified to operate a water system, an individual certified to operate a wastewater system, a certified operator who is the owner or official of a privately owned water or wastewater system, a certified operator who is an employee of a political subdivision or represents a state association of political subdivisions, an individual who is on the teaching staff of the civil, environmental or sanitary engineering department of an accredited Pennsylvania university or college, and the Secretary of DEP or the Secretary's designee.

#### 1.3 Powers and Duties of the Board

The Act identified specific duties and powers to the Board. They include:

Review and Act upon Applications: The Certification Board shall review and act upon all applications for certification, recertification and renewal of water and wastewater system operators. The initial and reciprocity certification application shall include a report of a Criminal History Record from the Pennsylvania State Police.

Administer Examinations: At least one examination shall be held each year at a time and place designated by the Board. An individual may not appeal examination results to the Board. The content of an examination shall not be shared with the Certification Program Advisory Committee or the general public.

Approve and Issue Certificates: Upon completion of all requirements for certification, the Board shall approve applications and issue the appropriate levels of certification.

Revoke, Suspend, Modify or Reinstate Certificates: Upon petition by DEP, the Board has the authority to revoke, suspend, modify or reinstate an operator's certification. The Board must promptly schedule a hearing to take such an action if the petition is appealed. These hearings must be held in accordance with the Administrative Agency Law, 2 Pa. C.S.A. §501 et seq. The Board may revoke, suspend or modify an operator's certificate for misconduct, including, but not limited to, negligence in the operation of a water or wastewater system, fraud, falsification of application, falsification of operating records, incompetence or failure to use reasonable care or judgment in the performance of duties as specified in the Act or other applicable laws administered by DEP.

Review and Act upon Complaints: The Board shall deal with all complaints submitted to them that are relative to its powers and duties.

Subpoena and Issue Written Orders: The Act grants the Board the authority to subpoena witnesses, records and other physical evidence to implement its duties and responsibilities as necessary. The Board may enforce its subpoena in Pennsylvania Commonwealth Court. The Board may also issue written orders as necessary to implement its duties and responsibilities.

Adopt By-Laws: The Board shall adopt bylaws as needed to properly direct and carry out the activities of the Board. These bylaws recognize Robert's Rules of Order for conducting Board business.

Collect Fees: Fees are established in Chapter 302, Administration of the Water and Wastewater Systems Operators' Certification Program Regulations.

Approve or Disapprove Training: DEP has the authority to review, approve, disapprove or return incomplete training proposals. These DEP actions are in accordance with DEP's "Training Provider Manual for the Pennsylvania Water and Wastewater System Operator Training Program" guidance, DEP ID: 383-2300-002. A training provider or sponsor may request the Board to review a Department training action as provided in 25 Pa. Code, §302.309.

Establish Equivalency for Professional Engineers: Professional engineers may no longer become certified to operate a water or wastewater system based solely on a professional engineer license. The Act requires professional engineers to apply for certification and meet the standards for certification as established by regulation.

The Board provides the following Program Guidelines to administer its duties and responsibilities established by the Act.

## **1.4 Background**

The Act directs the Board to administer an operator certification program to assure the proper operation of water and wastewater systems in Pennsylvania. The Act charges the Board and DEP with specific and separate responsibilities to carry out this program. These "Operator Certification Program Board Guidelines" further define the processes under which the Board will administer its duties as defined by the Act and regulations at 25 Pa. Code, Chapter 302, relating to administration of the Water and Wastewater Systems Operators' Certification Program.

## 1.5 Definitions

The following words and terms, when used in these guidelines, have the following meanings, unless the content clearly indicates otherwise.

*Application for certification* – a completed application submitted to the Board to issue an operator certificate that documents the applicant’s experience and training, criminal history record, and supervisor attesting to the experience, is notarized and includes all appropriate fees.

*Approved Examination Provider (AEP)* – an individual, company, association or industry organization approved by the Department to administer certification examinations in accordance with Board guidelines and procedures.

*Board* – The State Board for Certification of Water and Wastewater Systems Operators.

*Board designated agent* – a Board member, Certification Program Advisory Committee member or Department staff person who completes certain duties on behalf of the Board.

*Board guidelines* – the guidelines established to carry out the powers and duties of the Board.

*Board Secretary* – a Department staff member elected by the Board to implement administrative aspects of the Drinking Water and Wastewater System Operators’ Certification Program.

*Certification Action* – action taken by the Board related to a certification examination or recertification or the issuance of an initial certificate, certificate renewal or certificate through reciprocity.

*Criminal History Record (CHR)* – a report of criminal history record issued by the Pennsylvania State Police under 18 Pa. C.S. Chapter 91 (relating to criminal history record information).

*DEP/Department* – the Pennsylvania Department of Environmental Protection.

*Examination* – A test module or grouping of test modules administered by the Board or its designated agent used in part to determine the competency of applicants for certification or recertification.

*Fee* – a non-refundable cost assigned to cover the expenses of the program.

*Person* – An individual, company, corporation, municipality, municipal authority, partnership, firm, association, trust, estate, public or private institution, or any agency of Federal or State government. The term also includes the officers, directors, employees and agents of any partnership, firm, association, company, corporation, municipality, municipal authority, public or private institution or any agency of Federal or state government.

*Petition* – a written request from the Department to the Board to take an action to modify, suspend, revoke or reinstate a certified operator’s certificate.

*Training approval process guidelines* – Department guidelines authorized by the act that set standards for training sponsors, courses, course content, training approval criteria and training provider approval criteria. These guidelines are documented in the Training Provider Manual for the Pennsylvania Water and Wastewater Systems Operator Training Program, DEP ID: 383-2300-002.

## **2. General Provisions**

### **2.1 General Requirements of the Act**

The Board shall administer and implement its powers and duties outlined in the Act and Chapter 302 Regulations.

## **3. Examinations**

### **3.1 Approved Examination Provider (AEP) Program**

The Board may provide certification examinations using an Approved Examination Provider (AEP).

All AEPs must apply and be granted approval by the Board Secretary to participate as an examination provider.

AEPs should meet the requirements and standards as defined in **Appendix A, Approved Examination Provider Manual**.

### **3.2 Failure to Take an Examination**

The Board will not reimburse the processing fee for examinations assessed by the Department when an individual fails to be present to take an examination and failed to notify the AEP (so that the individual’s name can be removed from the registration list). The AEP may have its own cancellation or refund policy regarding any additional costs assessed by them in the deliverance of an examination. This policy should be clearly stated in the notification letter sent to the examinee by the AEP.

### **3.3 Examination Administration**

No applicant for an examination may be admitted to the examination site after the specified scheduled time for the beginning of the examination.

The examination proctor has the authority to modify the scheduled start time for the examination where circumstances prevent initiation of an examination at the scheduled time.

The examination proctor may at any time terminate an individual's examination when an individual is:

- (1) Using forbidden materials as listed in **Appendix B, Drinking Water and Wastewater Operator Certification Program Proctor Manual**, or
- (2) Engaged in disruptive behavior, or
- (3) Engaged in fraudulent behavior.

The proctor shall provide a written report to the Board regarding any applicant in violation of this section.

An applicant may not be admitted to an examination without showing valid photo identification.

The proctors and DEP staff shall follow all procedures for the administration of an examination as set forth in **Appendix B, Drinking Water and Wastewater Operator Certification Program Proctor Manual**.

### **3.4 Review of Examination Questions**

The DEP will review all examination questions at a minimum of once every year using appropriate subject matter experts including at least one member of the Board.

Before the examination begins the proctor shall instruct all applicants as to the process for raising comments or concerns relating to any of the questions on the exam. This process is:

- (1) The applicant shall raise his or her hand, and
- (2) The Proctor shall provide the applicant with a "Question Comment Form" that must be completed immediately and promptly returned to the proctor.
- (3) As part of the annual review of examination questions, the Board or DEP will carefully review all comments received from applicants. The Board may respond to the applicant if appropriate.

## **4. Application for Certification Action**

### **4.1 General Application Requirements**

A person applying for certification action for initial certification shall complete a DEP approved application form for each certification request, and:

- (1) Submit a complete application and required documentation to the State Board for Certification of Water and Wastewater Systems Operators, Rachel Carson State Office Building, P.O. Box 8454, Harrisburg, PA 17105-8454 or other designated address.

- (2) Provide the Pennsylvania State Police Criminal History Record; SP-164 form or through the State Police [PATCH](#) (*Pennsylvania Access To Criminal History*) system.
- (3) Submit a processing fee for each examination session and the initial certification fee as specified in 25 Pa. Code Chapter 302.

The application for certification action for initial certification or recertification must include all elements as specified in the 25 Pa. Code Chapter 302.

#### **4.2 Submission of Application for Certification Action**

A separate application for certification action in water or wastewater with appropriate documentation shall be filed for each request. An incomplete application for certification action shall be returned to the applicant. The processing fee shall not be returned to the applicant with the incomplete application.

#### **4.3 Board Procedure for Applications for Certification Action**

The Board shall use this procedure for processing applications for certification action relating to initial certification and recertification:

- (1) The Board Secretary will provide each individual their test results and an application for initial certification for those individuals who have passed enough examinations to qualify for certification.
- (2) The Board Secretary will evaluate the documentation submitted with the application for those applicants who have passed the examination and make a recommendation as to the appropriate certification class and type or subclassification for Board consideration and action.
- (3) If an applicant has a criminal record, the Board will review the CHR in accordance with 25 Pa. Code Chapter 302, Subchapter D.
- (4) The Board Secretary will notify the applicant of the Board's decision to issue or deny an applicant a certification.

The Board will use this procedure for processing applications for certification renewal:

- (1) The Board Secretary will send the certified operator an application for renewal at least 60 days prior to the date of expiration of the operator's certificate.
- (2) The certified operator will pay the fee and complete and return the application for renewal to the Board Secretary.
- (3) DEP will review the operator's continuing education transcripts and any training Discrepancy Reports submitted by the operator to determine compliance with the continuing education requirements as defined in 25 Pa. Code Chapter 302 and the

training approval process guidelines. A Discrepancy Report is used to list training course(s) taken that are not listed on the DEP continuing education transcripts.

- (4) The Board Secretary will issue a new operator certificate in accordance with the requirements in 25 Pa. Code Chapter 302 if the applicant meets all applicable requirements.
- (5) The Board Secretary will recommend to the Board that a new operator certificate should not be issued if continuing education requirements are not met.
- (6) The Board Secretary will provide the Board the names of all applicants who failed to qualify for consideration of an application for certification renewal action and the specific reasons for a recommendation of certification denial.
- (7) If the applicant for certification is employed by a water or wastewater system in the Commonwealth, and the Board denies renewal for any reason, the Board Secretary will notify the applicant's employer if the employer's contact information is available.

The Board will use the following procedure for processing all applications for an upgrade in certification:

- (1) The certified operator submits a complete application for certification action as defined in 25 Pa. Code Chapter 302.
- (2) The Board Secretary will review the documentation submitted with the application in accordance with Appendix C, Certification Upgrade Model.
- (3) The Board Secretary will make a recommendation to the Board as to the appropriate certification class and type or subclassification for Board consideration and action.

The Board will use the following procedure for processing all applications for a downgrade in certification class:

- (1) The certified operator submits an application for certification action as defined in the 25 Pa. Code Chapter 302. An operator can apply only once for a downgrade in certification class.
- (2) The Board Secretary verifies the downgrade in certification and ensures the operator is appropriately certified for any systems where the operator has been identified by the owner as an available operator for the system.
- (3) The Board Secretary will make a recommendation as to the appropriate certification class and type of subclassification for Board consideration and action.

Once the Board has issued an operator certificate for a lower class, the operator must show proof of change of employment to a higher class system in order to upgrade to a higher class.

The Board will use the following procedure for processing applications for an extension of the expiration date of an operator certificate for the purpose of meeting the continuing education requirements:

- (1) The certified operator submits an application for an extension of their renewal cycle using the DEP-approved forms describing how the request meets one of the following conditions for an extension:
  - a. Military service that would prohibit an operator's ability to access continuing education, mandated training or Board testing. The operator should attach the Military Orders with the extension application.
  - b. Personal or Family Health related circumstances that would prohibit an operator's ability to participate in continuing education or mandated training. The operator needs to include a letter from a physician, including dates of illness, prognosis etc.
  - c. Other extreme circumstances. The operator is advised to add any supporting documentation that would assist the Board in its review.
- (2) The Board Secretary verifies the application information, reviews for appropriate documentation and presents to the Board.
- (3) The Board Secretary notifies the operator of the Board's decision by letter.
- (4) The Board Secretary adjusts the expiration or training dates and coordinates with the Training Section staff.

## **5. Board Decisions on Applications for Certification Action**

### **5.1 General Requirements for Certification**

As defined in 25 Pa. Code Chapter 302, an applicant must meet all the specified requirements for:

- (1) Certification,
- (2) Recertification,
- (3) Certificate upgrade, downgrade, or
- (4) Certificate renewal.

Applicants who have met the exam requirements for certification, but do not have the appropriate amount of experience will be issued a letter designating them as an Operator-In-Training.

The test results do not expire. Therefore, the applicant can submit documentation to the Board Secretary whenever the applicant has accumulated the necessary experience.

The Board will issue a certificate when an applicant provides the necessary documentation that the requirements for certification as defined in 25 Pa. Code Chapter 302 have been met. The certificate will:

- (1) Be issued on a date corresponding to the date of the Board action,
- (2) Be issued for a 3-year period (starting either the first day of January, April, July or September),
- (3) Specify the class and subclassification of certification,
- (4) Be issued with a wall certificate and wallet size card for identification purposes,
- (5) Be issued with a client ID, and
- (6) Expire on the date indicated.

## **5.2 Board Actions**

The Board will take action on all complete applications for certification action. All actions of the Board are considered an action of DEP and are appealable to the Environmental Hearing Board.

The Board is required to take an action on applications for certification action within 120 days of receipt of a complete application provided:

- (1) All individual applications are completed to the satisfaction of the Board,
- (2) All issues related to the applicant's Criminal History Record are resolved, and
- (3) The Board's review procedure has been completed.

The Board Secretary will review complete applications for certification upgrade and make a recommendation for certification to the Board in accordance with the principles defined in **Appendix C, Certification Upgrade Model**.

The Board Secretary will review complete applications for DEP employees and the documentation of experience in accordance with **Appendix D, Experience Credit for DEP Employees & Local Agency Employees with DEP Delegated Programs** to make a recommendation for certification to the Board.

The Board Secretary will review applications from employees with DEP-delegated regulatory authority and the documentation of experience in accordance with **Appendix D, Experience Credit for DEP Employees & Local Agency Employees with DEP Delegated Programs** to make a recommendation for certification to the Board.

Failure by the Board to take action does not constitute issuance of a certification.

### **5.3 Reciprocity**

An applicant for a certification action based on reciprocity shall submit a completed application with all required documentation to the Board Secretary. If the application is not complete, the applicant will be notified within 14 days from receipt of the application of the specific information required to make the application complete.

When the application is complete, the Board Secretary shall make a recommendation to the Board on the appropriate class and subclassification to issue, using **Appendix E, Certification Reciprocity Model** to ensure equivalency with the operator's current level of certification and experience.

### **5.4 Delegation of Board Authority**

In order to expedite the delivery of services by the Board, the Board has delegated a number of decisions to the Board Secretary or other DEP program staff in accordance with the matrix in **Appendix F, Decision Matrix - Board/DEP Staff Actions**.

### **5.5 Operator Compliance Review**

One of the factors the Board considers when issuing an operator certificate is the compliance history of the applicant and the system where the applicant is working. To accomplish this, the Board needs to identify and track operators with ongoing compliance issues or a history of problems in the operation of a water and/or wastewater system. The Board recognizes the DEP regional office program staff is in the best position to capture this information. Therefore, the Board has developed a one-page "Operator Compliance Report" in **Appendix G** to facilitate the reporting of this information. This form must be signed by the DEP regional office Operations Chiefs or Program Managers. The form is then mailed to:

The State Board for Certification of Water and Wastewater Systems Operators  
Attention: Board Secretary  
P.O. Box 8454  
Harrisburg, PA 17105-8454

When the Board Secretary receives the "Operator Compliance Report," the Board Secretary will place a comment in the operator's eFACTS certification record indicating "DEP has reported compliance issues with this operator." If the operator completes an application for certification action, the Board Secretary will submit the compliance report with the application to the Board for review, discussion and final action. The Board Secretary will also confirm with the appropriate Operations Chief or Program Manager

that the information captured in the “Operator Compliance Report” is still accurate and current at the time the complete application for certification action is received.

## **Appendix A**

# **Approved Examination Provider Manual**

Pennsylvania Water and Wastewater System  
Operator Examination Program



September 2013

**State Board for Certification of Water and Wastewater System Operators**

# Approved Examination Provider Manual

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- \* Request for Examination Services
- \* Operator Certification Examination Instructions and Registration
- \* Template for Examination Notification Letter
- \* Flyer to be mailed with Examination Notification Letter

## **Section 1. General Information**

### **A. Introduction**

This manual explains how an organization or individual becomes an Approved Examination Provider (AEP) for water and wastewater system operator certification examinations. This manual outlines the approved examiner's responsibilities, security needs, and documentation and testing site requirements.

The purpose of the AEP Program is to:

- Provide better geographical access to examinations.
- Offer more examination opportunities.
- Create stronger partnerships between the DEP and industry associations.
- Provide association-training efforts with immediate examination opportunities.
- Reduce the administrative cost and demands for state resources.

With an expansion of the existing examination services through the AEP, the ultimate goal of increasing drinking water and wastewater system compliance can be enhanced. There appears to be a direct relationship between areas of the state where examinations are not offered, and high non-compliance rates. There also is a statistical relationship between training and success on the examination. These results demand a flexible approach that provides the opportunity for examinations associated with training.

To also achieve this end, the DEP created this AEP Program. This process allows qualified organizations to sponsor examinations. The prototype for this new examination delivery system was explored during the "beta testing" effort completed in 2005. In partnership with different industry associations, over 1,100 people took examinations outside of the DEP's usual examination protocol during this effort. Based upon this success, the DEP developed the program presented in this manual.

### **B. Contact Information**

If you have questions about this program, you may contact:

PA DEP  
Bureau of Safe Drinking Water  
Training, Technical and Financial Services Division  
Operator Certification Program  
P.O. Box 8454  
Harrisburg, PA 17105-8454  
Phone: 717-772-5158  
Fax: 717-772-5630  
E-mail: csansoni@pa.gov

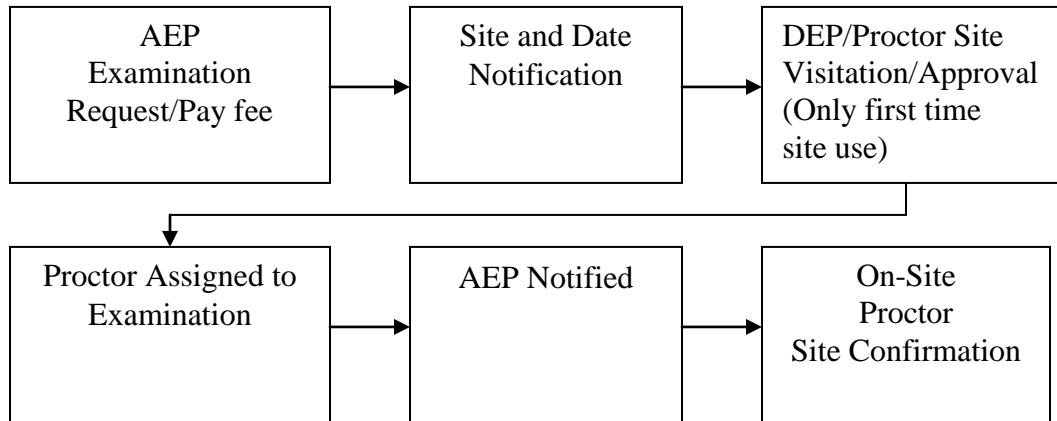
## **C. Overview of the Approved Examination Provider Program**

Purpose:	To allow organizations, associations and individuals to assist in the delivery of examinations to applicants for drinking water and wastewater system operator certifications.									
Options:	<p>Any organization, association or individual may apply to the DEP to become an AEP to administer certification examinations in accordance with this manual. An AEP may opt to provide certification examinations in a number of environments:</p> <ol style="list-style-type: none"><li>1. Stand-alone examination sessions.</li><li>2. Examinations associated with organization meetings or conferences.</li><li>3. Examinations associated with specific training activities.</li><li>4. Special single-type examination. (e.g. distribution only)</li></ol>									
Application:	A request to be granted AEP status is a one-time application process. An applicant for AEP status may request approval to administer examinations for applicants for certification as operators of water systems or wastewater systems using the AEP application form in Section 7.									
Qualifications:	Organizations, associations and individuals having water or wastewater industry interests that conform to the guidelines set forth in this manual.									
Fees:	<p>AEPs may establish a reasonable fee schedule for the services provided in accordance with this manual.</p> <p>AEPs are required to pay DEP a fee to hold examination sessions. This fee must be submitted with the AEP’s Request for Examination Services.</p> <table><tr><td>Ten or more exams per year</td><td>\$800</td></tr><tr><td>Five to nine exams per year</td><td>\$700</td></tr><tr><td>Two to four exams per year</td><td>\$600</td></tr><tr><td>One exam per year</td><td>\$400</td></tr></table>		Ten or more exams per year	\$800	Five to nine exams per year	\$700	Two to four exams per year	\$600	One exam per year	\$400
Ten or more exams per year	\$800									
Five to nine exams per year	\$700									
Two to four exams per year	\$600									
One exam per year	\$400									

## **D. Overview of the Approved Examiner Process**

The delivery of water and wastewater certification examinations is a two-step process. First, organizations or individuals wishing to provide examination services must be granted status as an AEP. This one-time approval process recognizes that an AEP agrees to meet the program standards and conditions for the delivery of an examination. A DEP proctor is responsible for determining if all the standards set forth in this manual are met prior to delivering the examination. The proctor or other DEP staff are required to complete a site visitation if the site has not already been approved to administer exams. The AEP will be advised of the lead proctor to assure this occurs. DEP will determine the proctors to be assigned to each examination site.

### Examination Site Approval Process

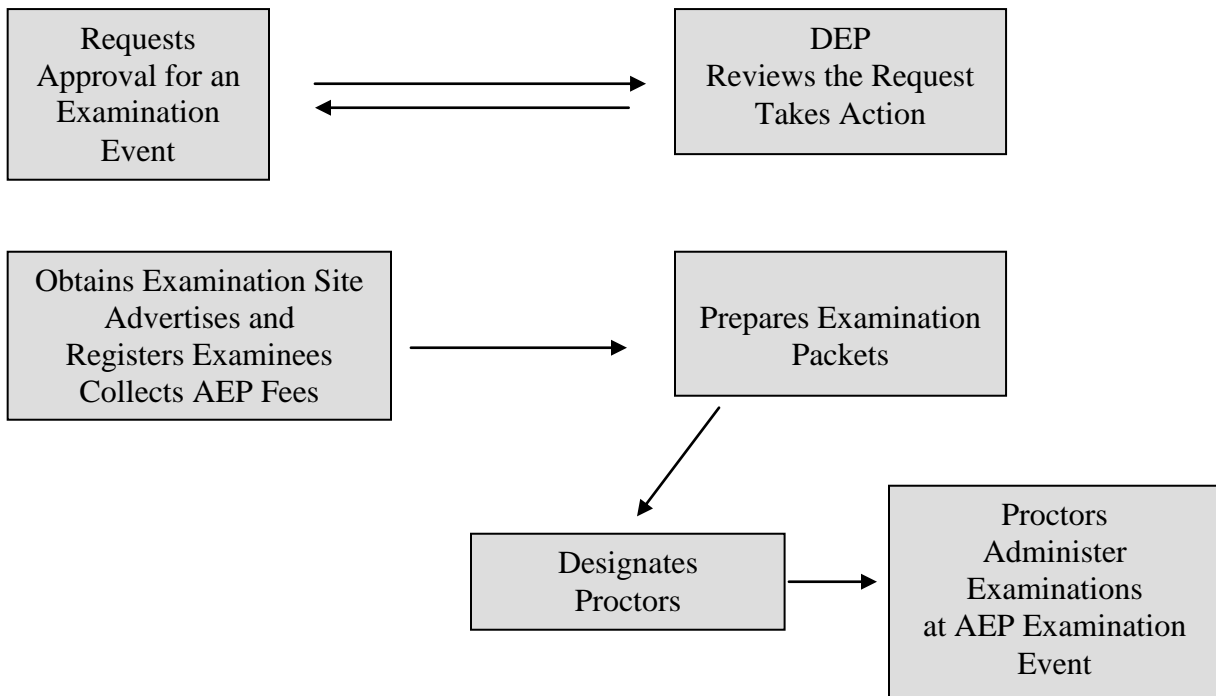


After receiving AEP status, an examiner should register each examination event using the Request for Examination Services Form (see section 7). DEP will provide sufficient proctors and appropriate examinations at the site and time specified by the AEP. A representative for the AEP should be present on-site during the examination to assist with examination registration and ensure site suitability.

### General Responsibilities and Activities

#### Approved Examination Provider

#### DEP



## **Section 2. Examination Site Requirements**

### **A. Physical Location**

The physical location for an examination site should meet the following guidelines:

1. Be of sufficient construction to provide for a controlled environment that protects against weather related risks.
2. Have heating and air conditioning services necessary to maintain an approximate ambient air temperature of 70 degrees Fahrenheit at all times during the examination. The heating, ventilation and air conditioning system should adequately prevent the introduction of particulate matter, noxious and toxic fumes and any other foreign material that may impair or affect the air quality in the examination room.
3. Have functioning drinking water and wastewater disposal facilities within a reasonable distance of the examination room and include toilet and hand washing facilities for both male and female examinees. All toilet, hand washing and drinking areas should be maintained in a sanitary condition.
4. Have sufficient lighting to provide 40 to 70 foot-candles in the examination room or meets any other national illumination standard for classrooms. No lighting may create a distraction for the examinees.
5. Isolate examinees from disruptive noises or other interferences during the examination.
6. Examination areas should be posted with a notice stating: **DO NOT DISTURB - EXAMINATION IN PROGRESS** in letters no less than 1 and 1/2 inch in size.
7. Have provisions for adequate parking for examinees.

### **B. Seating, Writing Areas and Table Arrangements**

1. All examinees should be provided a flat, smooth, hard and dry writing surface with a minimum area of 432 square inches (18" wide by 24" long).
2. A maximum of two examinees per table are allowed. Examinee tables should be a minimum of 6 feet in length and at least 36 inches wide. Eighteen inch wide tables can be used as long as they are a minimum of 8 feet in length.
3. Writing surfaces will not be arranged in such a manner as to put examinees face to face with each other. Examinees may face a wall or other solid surface.
4. A minimum of 5 feet should be provided between tables serving as writing surfaces from the back of the table to the front of another table with sufficient room for proctors to pass behind the examinees during the examination.
5. All seats should have a back rest and be of sufficient size to accommodate an average adult.

6. The AEP should make available an applicant registration table outside of the examination area.
7. A chair for a proctor should be provided for each 30 examinees.

### **Section 3. Fee Collection**

#### **A. Fees Charged by AEP**

An AEP may collect a reasonable fee to cover the cost of providing the examination. This fee could cover the cost of the facilities, a service fee for arranging the examination, and reimbursement for AEP staff that are assisting in the administration of the examination.

#### **B. Fees Charged by DEP**

Costs incurred by the DEP for the delivery of the examination are defined in 25 Pa. Code Chapter 302. This fee applies whether or not the applicant failed, passed or did not attend the examination session. DEP will collect this fee when the applicant applies for certification or when the applicant has registered for the fifth examination session.

### **Section 4. Data Management**

#### **A. General**

The AEP will use an Excel Spreadsheet provided by DEP to capture the following information:

1. Name, Address, Phone Number, Social Security Number and Client ID (if the applicant has one) of every applicant registered to take the examination. Must secure the spreadsheet due to the sensitive nature of the information.
2. The examination(s) each applicant wishes to take and the Class of certification the applicant is requesting.

The AEP will use the Registration Form in Section 7 to register all applicants. The AEP should mail a copy of all completed registration forms with an electronic version (CD) of the Excel Spreadsheet roster by Certified Mail, or hand carry to DEP at least four weeks before the scheduled examination. The AEP should keep a copy of the roster and registration forms in the event it would get lost in the mail.

The AEP should also use the template for a Notification Letter in Section 7 to confirm the applicant is registered to take the appropriate examinations as indicated on the registration form. A copy of the flyer in Section 7 should be sent with each notification letter.

## **Section 5. Examinees**

### **A. General**

No AEP may deny access to its examination services based on race, color, creed, religion or sexual preference. An AEP may not condition its examination services at a specific examination site to members of its association or organization. An AEP may charge non-members of its association a different rate for examination services. An AEP may establish a priority for access to the examination based on:

- (1) Membership in the AEP's organization.
- (2) Completion of training offered by the AEP.

No AEP may administer a certification examination to any applicant who fails to file a completed application for examination and provide the appropriate fees. All appropriate examinee information must be in the possession of DEP prior to the examination.

DEP staff reserve the right to include additional candidates for examination if DEP staff determine a water or wastewater facility is non-compliant because there is no certified operator or the operator is not properly certified.

### **B. Examinee Identification**

All examinees must present photo identification prior to being granted access to take the examination. An examinee's photo identification will be in clear view for proctor verification at all times during the examination. A confirmation letter from the AEP for admittance to the examination is not required to take the exam.

## **Section 6. Examination Services and Proctors**

### **A. Request for Examination Services**

An AEP should file a request for examination services and proctors by the deadline DEP sets. The Examination Services Request Form is provided in this manual for this purpose (see section 7). All information must be completed on this form.

### **B. Examinations**

On the day of the examination, the DEP proctor will arrive at the designated examination site with the appropriate examinations requested by the AEP. The examinations shall be kept in the possession of the DEP proctor at all times. The AEP shall not be allowed to review, store or transmit any examination materials.

The AEP shall assist DEP proctors during the registration process and with any other duties requested by the proctor.

No examination session will exceed four hours. The applicant for examination is permitted to take up to eight examination modules during this period. Any examination not completed will be scored based on the modules completed. The applicant will be charged the examination fee for examination preparation and assembly, regardless of whether the examination is taken or completed.

### **C. Proctor(s)**

DEP will provide proctors to each examination site based on the number of individuals taking the examination. Proctors will arrive at the examination site at least one hour prior to the start time for the examination. The proctor may cancel any examination event if the site and conditions do not meet the criteria in this manual. A proctor may also modify the start time for an examination event. Proctor duties include:

- (1) Conducting a pre-examination inspection of the examination site (when necessary).
- (2) Transporting all examinations and materials to the examination site.
- (3) Directing all examination activities at the examination site.
- (4) Collecting all examinations and answer sheets.
- (5) Terminating the examination period.

### **D. Special Testing Protocol**

DEP may establish modified requirements (streamline) for examination when an AEP provides a single module or same module testing. An AEP administering a single type examination should request approval for modified testing administration procedures. This may include, but is not limited to, different registration requirements, deadlines for submittal, and processing methods.

## **Section 7. Forms**

Approved Examiner Provider Application

Request for Examination Services

Operator Certification Examination Instructions and Registration

Template for Examination Notification Letter

Flyers to be mailed with the Examination Notification Letter



## APPROVED EXAMINATION PROVIDER APPLICATION

**Complete and submit this form to:**

State Board for Certification of Water and Wastewater Systems Operators  
Attn: Board Secretary  
PO Box 8454  
Harrisburg, PA 17105-8454

*Please print or type. Copy as needed. This form is available on DEP's website at [www.dep.state.pa.us](http://www.dep.state.pa.us).*

APPLICATION		
1. Approved Examination Provider Applicant (organization, association, corporation, institution)		
2. Street or Box Address		
3. City	4. State	5. Zip
6. Contact Person and Title	7. Phone	8. FAX
9. E-mail Address	10. Website (if applicable)	

The undersigned being properly authorized to represent the above applicant hereby agrees to meet all applicable conditions set forth by the State Board for Certification of Water and Wastewater Systems Operators (Op Cert Board) for the Approved Examination Provider (AEP) Program and understands that their status as an AEP may be revoked or suspended by the Op Cert Board at any time.

\_\_\_\_\_  
Name of Authorized Agent (printed)

\_\_\_\_\_  
Signature of Authorized Agent

\_\_\_\_\_  
Date

## REQUEST FOR EXAMINATION SERVICES

**Complete and submit this form to:**

State Board for Certification of Water & Wastewater Systems Operators  
 Attn: Board Secretary  
 P.O. Box 8454  
 Harrisburg, PA 17105-8454

*Please print or type. Copy as needed. This form is available on DEP's website at [www.dep.state.pa.us](http://www.dep.state.pa.us).*

APPLICATION			
1. Approved Examination Provider Name			
2. Street or Box Address			
3. City		4. State	5. Zip
6. Contact Person and Title		7. Phone	8. FAX
9. E-mail Address		10. Website (if applicable)	
EXAMINATION SITE			
11. Site			
12. Street or Box Address			
13. City		14. State	15. Zip
16. Contact Person and Title		17. Phone	
18. Proposed Date of Examination  (Registration Deadline: _____)	19. Proposed Time Slot		20. Approximate No. of Examinees
21. Directions to site			
		22. Fee to be charged examinees \$ _____	

\_\_\_\_\_  
 Name of Authorized Agent (printed)

\_\_\_\_\_  
 Signature of Authorized Agent

\_\_\_\_\_  
 Date

## Instructions



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

## STATE BOARD FOR CERTIFICATION OF WATER AND WASTEWATER SYSTEMS OPERATORS

**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 exam provider.
- ▶ Examination results will be mailed to the applicant approximately 40 days after examination.
- ▶ 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.

**Part 2: Requested Class**

Choose class based on size systems you want to operate, (see definition of classes below).

**Part 3: Test Site**

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 requires 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 retesting.
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.

**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. These are suggested time limits only. Examination sessions are limited to four (4) hours. Applicants may register for up to eight exams per session.

***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) a 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), keyword: Operators.

## DEFINITIONS OF CLASSES

### WASTEWATER

Class A – Serving an average of more than 5 million gallons per day.

Class B – Serving an average of greater than 1 million gallons per day but less than or equal to 5 million gallons per day.

Class C – Serving an average of greater than 100,000 gallons per day but less than or equal to 1 million gallons per day.

Class D – serving an average of less than or equal to 100,000 gallons per day.

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

#### **Class E**

► **Collection system** – A system of pipelines or conduits, pumping stations and force or gravity mains used for collecting and conveying wastes to a point of treatment and disposal.

► **Satellite collection system** – A wastewater system consisting only of collection facilities with at least one pump station, which is designed to convey in excess of 2000 gallons per day of untreated wastewater to a wastewater system owned by a different entity.

### WATER

Class A – Serving an average of more than 5 million gallons per day.

Class B – Serving an average of greater than 1 million gallons per day but less than or equal to 5 million gallons per day.

Class C – Serving an average of greater than 100,000 gallons per day but less than or equal to 1 million gallons per day.

Class D – Serving an average of less than or equal to 100,000 gallons per day.

Class E – Distribution and consecutive water systems.

Class Dc- Serving no more than 500 individuals or having no more than 150 connections, where the source of water for the system is exclusively groundwater and requires only disinfection.

#### **Class E**

► **Consecutive water system** – A public water system that obtains all of its water from another public water system and resells the water to a person, provides treatment to meet a primary maximum contaminant level or provides drinking water to an interstate carrier. The term does not include bottled water and bulk water systems. If treatment is provided the examination for the type of treatment utilized must also be taken.

► **Distribution system** – Pipelines, appurtenances, devices and facilities that convey potable water under pressure to customers. If treatment is provided the examination for the type of treatment utilized must also be taken.

## DEFINITIONS OF SUBCLASSES

### WASTEWATER

**Subclassification 1 (Activated Sludge)** – A treatment technology that mechanically introduces air into wastewater to achieve microbiological suspended growth treatment such as extended aeration, sequential batch reactors, contact stabilization, conventional, step feed or oxidation ditch.

**Subclassification 2 (Fixed Film)** – 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 & Lagoons)** – A wastewater treatment technology that utilizes a pond, lagoon or wetlands with anaerobic or facultative biological processes for the treatment of wastewater and meets the following criteria: (i) A design hydraulic detention time in the treatment process of 15 days or greater; (ii) A biological treatment process that does not have any return activated sludge system and (iii) A biological treatment process that is impacted by diurnal fluctuations as a result of photosynthesis.

**Subclassification 4 (Single Entity Collection Systems)** – A wastewater collection system consisting only of collection facilities with at least one pump station which is designed to convey in excess of 2000 gallons per day of untreated wastewater to a wastewater treatment system owned by the owner of the collection system.

**Subclassification 5 (Laboratory Supervisor)** - An individual having the knowledge, skills and abilities necessary to supervise laboratory procedures and the reporting of analytical data for an environmental laboratory operated by a wastewater system in accordance with industry, State and Federal standards. An operator must already be certified in wastewater treatment to add this subclassification.

## **WATER**

**Subclassification 1 (Conventional Filtration)** – A series of processes for the purpose of substantial particulate removal consisting of coagulation, flocculation, clarification and granular media filtration. The clarification step must be a solid/liquid separation process where accumulated solids are removed during this separate component of the treatment system.

**Subclassification 2 (Direct Filtration)** – A series of processes implemented for the purpose of substantial particulate removal consisting of coagulation, and filtration. The term includes flocculation after coagulation, but does not include sedimentation.

**Subclassification 3 (Diatomaceous Earth Filtration)** – A process for the purpose of substantial particulate removal, in which a precoat 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)** – 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)** – 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)** – A pressure or vacuum driven separation process in which particulate matter larger than one micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. The term includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration and reverse osmosis.

**Subclassification 7 (Corrosion Control & 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 & 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 & Activated Carbon 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.

Activated Carbon Adsorption – 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.

**Subclassification 11 (Gaseous Chlorine Disinfection)** – A water treatment process designed to inactivate pathogenic organisms from water being treated utilizing gaseous chlorine.

**Subclassification 12 (Nongaseous Chemical Disinfection)** – A water treatment process designed to inactivate pathogenic organisms from water being treated utilizing nongaseous chemical elements or compounds.

**Subclassification 13 (Ultraviolet Disinfection)** – A water treatment process that inactivates pathogenic organisms using light with a wavelength range of 1000 to 4000 angstroms.

**Subclassification 14 (Ozonation)** – A water treatment process designed to inactivate pathogenic organisms from water being treated utilizing ozone.

**Subclassification 15 – Laboratory Supervisor** – An individual having the knowledge, skills and abilities necessary to supervise laboratory procedures and the reporting of analytical data for an environmental laboratory operated by a drinking water system in accordance with industry, State and Federal standards. An operator must already be certified in drinking water treatment to add this subclassification.



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE BOARD FOR CERTIFICATION OF WATER AND WASTEWATER SYSTEMS OPERATORS

**OPERATOR CERTIFICATION EXAMINATION REGISTRATION**  
**PA Certification to Operate Water or Wastewater Systems**

**PRINT CLEARLY**

Part 1: Applicant Information				
LAST NAME		FIRST NAME		MIDDLE INITIAL
STREET – PO BOX:			HOME PHONE NUMBER ( )	CLIENT ID (if you have one)
CITY	COUNTY	STATE	ZIP CODE	SOCIAL SECURITY #
Part 2: Requested Class: A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/>		Part 3: Examination Date & Site		EMAIL ADDRESS
Part 4: Examinations <input type="checkbox"/> <b>WATER</b>		<input type="checkbox"/> <b>WASTEWATER</b>		
<b>WATER EXAMINATIONS</b>		<b>WASTEWATER EXAMINATIONS</b>		
<input type="checkbox"/> CLASS E – Distribution Systems Examination (WE) [60 minutes] <input type="checkbox"/> Dc – Groundwater source that serves less than 500 individuals or 150 connections and requires only disinfection (WDC) [90 minutes]		<input type="checkbox"/> CLASS E – Satellite Collection System with Pump Station/Single Entity Owner Collection System Examination (WWE4) [75 minutes] <input type="checkbox"/> <b>PART 1 – GENERAL EXAMINATION (WWGEN)</b> [75 minutes]		
<input type="checkbox"/> <b>PART 1 – GENERAL EXAMINATION (WGEN)</b> [30 minutes]		<b>PART 2 – TECHNOLOGY SPECIFIC EXAMINATIONS</b> <input type="checkbox"/> <b>Subclass 1</b> – Activated sludge (WW1) [45 minutes] <input type="checkbox"/> <b>Subclass 2</b> – Fixed film treatment (WW2) [30 minutes] <input type="checkbox"/> <b>Subclass 3</b> – Treatment ponds and lagoons (WW3) [30 minutes] <input type="checkbox"/> <b>Subclass 5</b> – Laboratory Supervisor (WW5)		
<b>PART 2 – TECHNOLOGY SPECIFIC EXAMINATIONS:</b> <input type="checkbox"/> <b>Subclass 1</b> – Conventional filtration (W1) [60 minutes] <input type="checkbox"/> <b>Subclass 2</b> – Direct filtration (W2) [45 minutes] <input type="checkbox"/> <b>Subclass 3</b> – Diatomaceous earth filtration (W3) [30 minutes] <input type="checkbox"/> <b>Subclass 4</b> – Slow sand filtration (W4) [30 minutes] <input type="checkbox"/> <b>Subclass 5</b> – Cartridge or bag filtration (W5) [30 minutes] <input type="checkbox"/> <b>Subclass 6</b> – Membrane filtration (W6) [30 minutes] <input type="checkbox"/> <b>Subclass 7</b> – Corrosion control and sequestering (W7) [30 minutes] <input type="checkbox"/> <b>Subclass 8</b> – Chemical addition (W8) [90 minutes] <input type="checkbox"/> <b>Subclass 9</b> – Ion exchange and greensand (W9) [45 minutes] <input type="checkbox"/> <b>Subclass 10</b> – Aeration and activated carbon adsorption (W10) [45 minutes] <input type="checkbox"/> <b>Subclass 11</b> – Gaseous chlorine disinfection (W11) [60 minutes] <input type="checkbox"/> <b>Subclass 12</b> – Non-gaseous chemical disinfection (W12) [60 minutes] <input type="checkbox"/> <b>Subclass 13</b> – Ultraviolet disinfection (W13) [30 minutes] <input type="checkbox"/> <b>Subclass 14</b> – Ozonation (W14) [30 minutes] <input type="checkbox"/> <b>Subclass 15</b> – Laboratory Supervisor		<b>Guidelines on the average time to take each examination are in brackets next to each examination name. Examination sessions are limited to four (4) hours. Applicants should not register for more examinations than can be completed in the allocated 4 hours.</b> <i>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) a letter from you describing the requested accommodation. If you have questions, please contact the State Board for Certification of Water and Wastewater Systems Operators at 717-787-5236 or through PA AT&amp;T Relay Services at 1-800-654-5984 (TDD).</i>		
<b>Send This Completed Registration to:</b>   <b>Registration Deadline:</b>		I hereby certify that all information in this application is true and accurate to the best of my knowledge. I understand that any information provided by me that is not accurate may be grounds for ineligibility for certification to operate a Water or Wastewater System.  _____ Signature of Applicant		

## Template for Examination Notification Letter

AEP ADDRESS

AEP Phone Number

Date

### EXAMINATION NOTICE

<Applicant's First Name><Last Name>

<Address>

<City> <State> <Zip>

You are scheduled for the following Drinking Water or Wastewater Operator Certification examination. **Please read carefully.**

Exam Date: <Exam date>

Exam Time: <Exam time>

Exam Site: <Exam location>

**You will not be admitted into exam after \_\_\_\_\_ (time)**

Exams (EXAMPLE)

W1 -	Conventional Filtration Exam
W7 -	Corrosion Control and Sequestering Exam
W8 -	Chemical Addition Exam
W11 -	Gaseous Chlorine Disinfection
WGEN -	Water - General Exam

If you need to make any corrections to the examination registration or changes in the specific exam(s) you wish to take, please notify us at the above Phone # by \_\_\_\_\_ (TIME) on \_\_\_\_\_ (DATE). No corrections or changes will be accepted after this date. **Review carefully; you will not be permitted to change examinations at the exam site.**

In addition to the registration fee paid to us, there is a \$35 fee charged by the Department of Environmental Protection (DEP) for each examination registration date/session, whether you failed, passed or did not attend. DEP will collect this fee when you apply for certification or when you register for your fifth examination. If you find you cannot attend the examination session, please contact us immediately. Failure to notify us will result in DEP assessing this fee. We reserve the right to refund or retain your registration fee of \$XX to us, based on your situation.

Bring with you:

- This notice
- Picture identification, no admittance without a photo ID
- Three sharpened No. 2 (soft) pencils
- Non-Printing calculators and slide rules may be used

Note: Formula conversion tables will be provided at the exam site.

**DO NOT BRING:** Cell phones, food, drink, books, papers, notes, pagers/beepers, alarm watches, purses or backpacks. These items will not be permitted in the examination room. Smoking is not permitted in the examination room.

**Exam results will be mailed to you approximately 30 days after the examination. Please do NOT contact DEP staff for your scores unless it has been beyond 30 days.**

If you are a person with a disability and require accommodation to take the examination, please contact Cheri Sansoni at 717-787-5236 or through Pennsylvania AT&T Relay Services at 1-800-654-5984 (TDD) to discuss how the State Board for Certification of Water and Wastewater Systems Operators may accommodate your needs. Although every attempt is made to provide a quiet and comfortable testing environment, last minute circumstances beyond our control may occur. If you are sensitive to temperature variations or noise distraction, you may wish to wear clothing appropriate for a cooler or warmer examination room and bring earplugs. If the distraction becomes unbearable, please inform the chief proctor during the examination process.

## Flyers for Examination Notification Letter

### Drinking Water Examination Selection

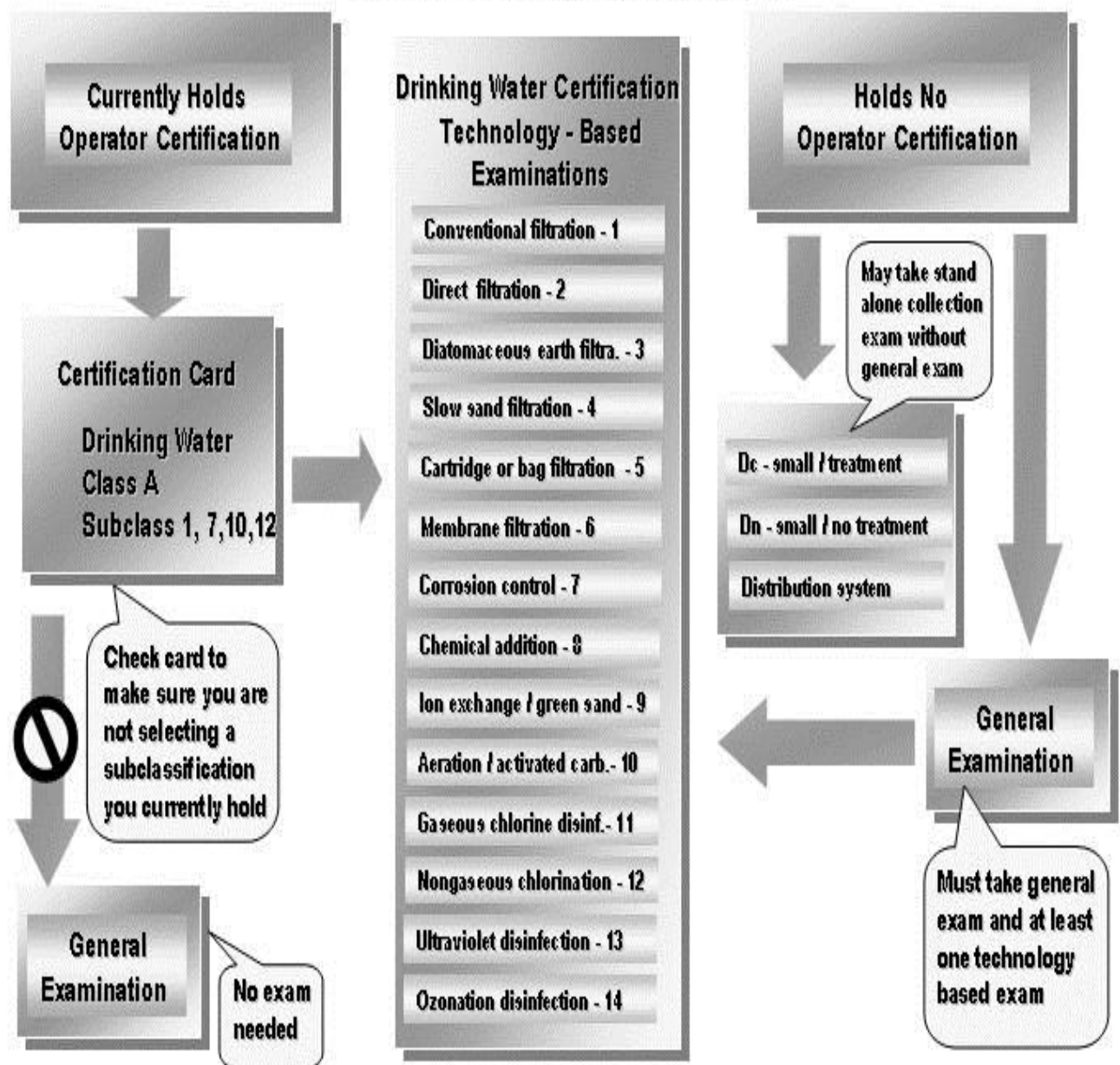
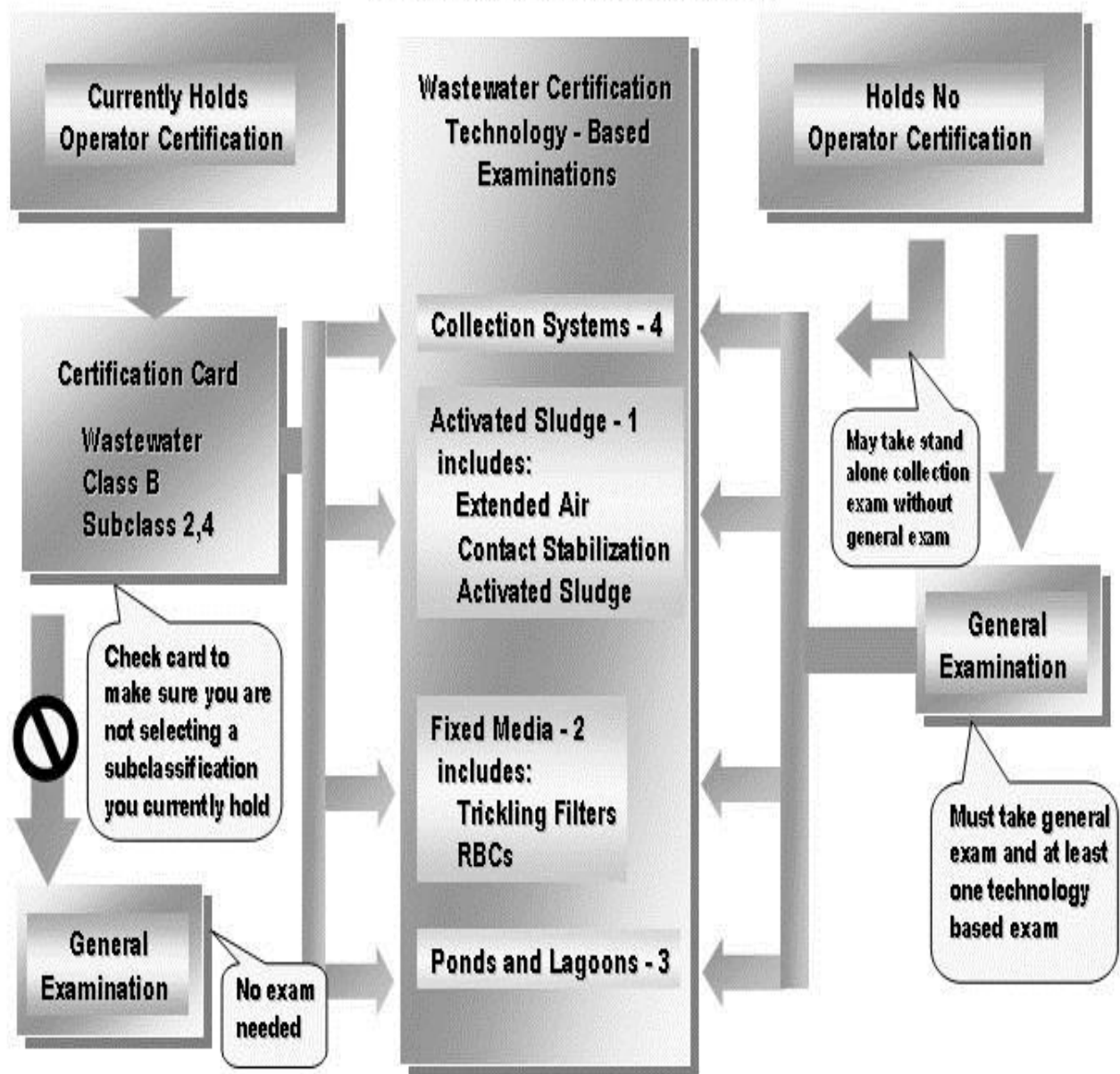
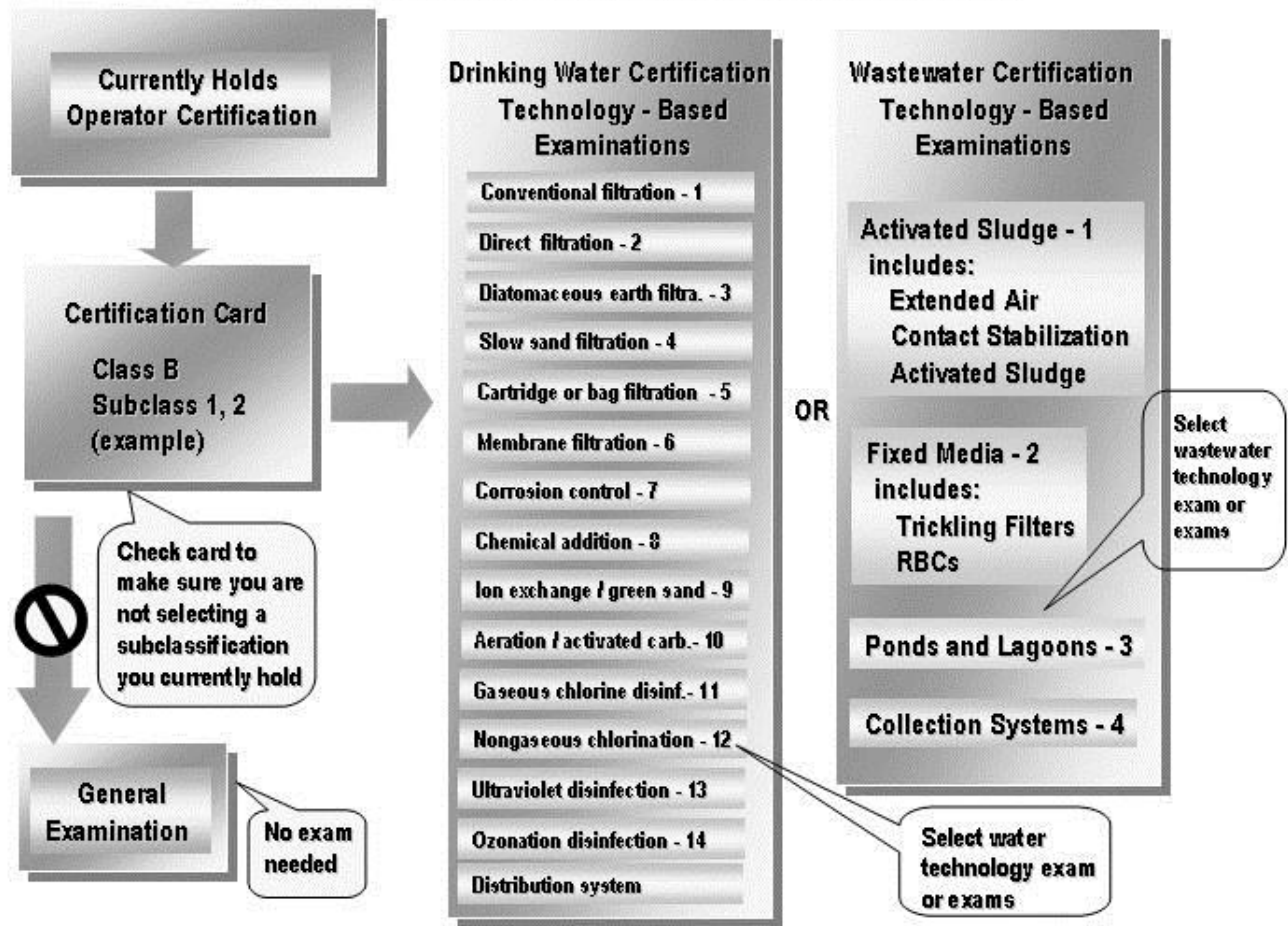


Figure 1

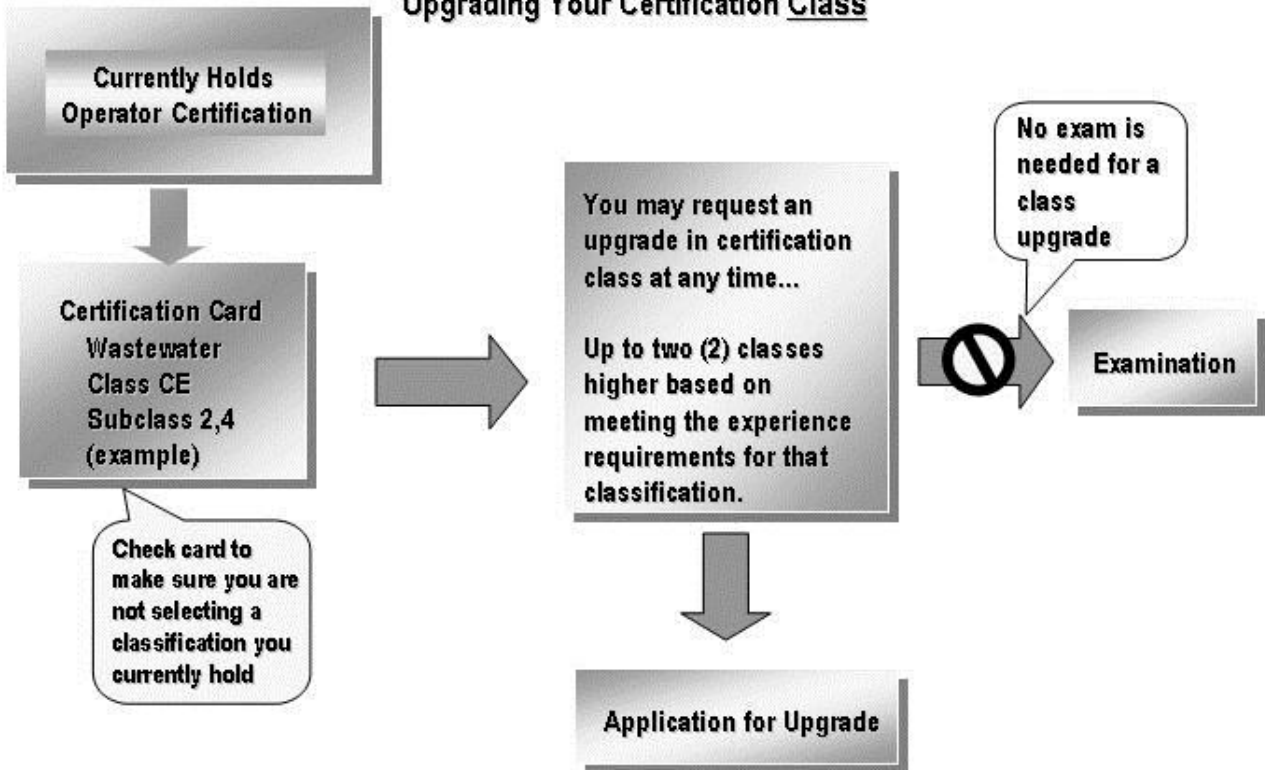
## Wastewater Examination Selection



## Certification Upgrade for Technology (subclassifications)



## Upgrading Your Certification Class



# **Appendix B**

## **DRINKING WATER AND WASTEWATER OPERATOR CERTIFICATION PROGRAM**

### **Proctor Manual**

(A copy of this manual must be available at all examination sites)

State Board for Certification of Water and Wastewater Systems Operators

September 2013

## EXAMINATION SCHEDULE

Examinations will be scheduled throughout the year in partnership with Approved Examination Providers (AEPs). Once the schedule of examinations to be provided by AEPs is drafted, the State Board for Certification for Water and Wastewater System Operators (Board) and the DEP may provide additional examinations at additional sites in the Commonwealth on an as needed basis. Additional examination sessions may also be scheduled to address a specific enforcement or compliance issue.

## EXAMINATION SITES

Examination sites should comply with all requirements specified in the AEP Manual. AEPs are responsible for working with representatives from the examination site to insure site conditions meet examination site standards.

## EXAMINATION PROCTORS

The DEP will provide the examination proctors. Specially trained DEP personnel or wage employees shall assist as needed to proctor all examinations. DEP staff will serve as the lead proctor.

A proctor/DEP staff to examinee ratio for an examination will be:

<b>1 – 60 examinees:</b>	<i>One DEP and one OAPP/Wage proctor will oversee the examinations</i>
<b>61 – 90 examinees:</b>	<i>Two DEP and one OAPP/Wage proctor will oversee the examinations</i>
<b>91 – 120 examinees:</b>	<i>Two DEP and two OAPP/Wage proctors will oversee the examinations</i>
<b>Over 120 examinees:</b>	<i>One additional proctor is needed for every 30 examinees. Depending on site capacity, a second site or the scheduling of additional examination dates may be needed.</i>

If the examination is being given in more than one room at an examination site, a minimum of two proctors will be provided for each room. One DEP staff person will serve as the lead proctor in each room.

### ***Proctor Responsibilities***

Proctor responsibilities are as follows:

- Surveying examination space and keeping all examination materials secure.
- Arranging for admission into examination space, keeping the examination area quiet.
- Maintaining the integrity of the examinations.
- Admitting anyone listed on the examination roster that has proper identification.
- Identifying the examinees and ensuring the examinees know their seat numbers.
- Preventing examinees from bringing personal items into the examination area.
- Providing a designated area for examinee personal belongings.
- Assuring that only pencils and erasers are used on the answer sheets.
- Ensuring no examinee is admitted after the examination has begun.
- Identifying defective examinations and opening another examination for the examinee. (Only under the circumstances of a defective examination is a proctor allowed to examine or review an examination.)

- Advising the examinees to answer questions to the best of their ability and encouraging them to fill out the question evaluation form if they have a problem with a particular question.
- Permitting examinees to go to the restroom one at a time. However, their examination materials are to be collected before leaving the room and returned after the examinee re-enters the room. No extra time is allowed for their absence.
- Permitting examinees to leave once the examination is completed, after ensuring that the examinee has turned in all examination materials.
- Assuring the examinees that disruptive behavior will not be tolerated. Any examinee causing disruptive behavior will be required to leave the examination area.
- Completing a report if you suspect an examinee of cheating, or not complying with the rules, indicating all relevant details and present to Board Secretary. Allow the examinee to complete the examination.
- Informing examinees for anyone refusing to comply with the rules, their scores may be invalidated for that session.
- Ensuring each examinee starts and ends each examination on the right place in the answer sheet.
- Ensuring each examinee uses the right answer sheet corresponding to the type of examination. For example, an examinee taking the water distribution examination must use a blue answer sheet with the words “Water Distribution Exam” typed across the top.
- Ensuring only authorized admittance into the examination area.
- Ensuring all cell phones are left in the examinee’s vehicle.
- No food, drinks or smoking are allowed in the examination room.
- Returning all examination material to the DEP Operator Certification Program the following business day.

## **Training**

All DEP, OAPP or wage proctors will be trained in the administration of the certification examination. Training shall include:

- Proctor Responsibilities
- Examination Materials
- Procedures Prior to Examination Day
- Receiving Examination Materials
- Examination Check-In
- Administering the Examination
- Examination Instructions to Candidates
- Monitoring the Examination
- Examination Check-Out
- Loss of Examination Material
- Packing Examination Material
- Examination Site Requirements
- Allowable Electronic Devices

## **EXAMINATIONS AND ASSOCIATED MATERIALS**

The “Examinations In A Box” shall be given to the DEP’s lead proctor for each examination session. Proctors need to arrange the room, post signs and distribute the Seating and Check-In/Check-Out rosters to be ready for the examinees to begin the examination. Examination materials include:

### **Contents of Examination Box**

- Examination Packets for each examinee
- Examinee Roster – Check-In/Check-Out
- Five extra copies of each examination
- Exam Proctor Report form
- Exam Checklist
- Question Evaluation Sheet
- Masking Tape
- Post It Notes
- Signs: Do Not Disturb - Examination In Progress; Check-In/Check-Out
- Seat numbers
- Spare Calculators
- Restroom passes
- Pencils

### **Contents of Individual Examination Packet**

- Conversion Chart and Formulas
- Examination booklet(s)
- Answer sheet(s)
- Demographic Information Form (BETA Tests Only)
- Question Evaluation Form (BETA Tests Only)

The Operator Certification Program examinations consist of the following:

- Part I - Water General Examination
- Part I - Wastewater General Examination

- Part II - Technology Specific Examination

For drinking water the Technology Specific Examinations include the following:

- (1) Subclassification 1 - conventional filtration
- (2) Subclassification 2 - direct filtration
- (3) Subclassification 3 - diatomaceous earth filtration
- (4) Subclassification 4 - slow sand filtration
- (5) Subclassification 5 - cartridge or bag filtration
- (6) Subclassification 6 - membrane filtration
- (7) Subclassification 7 - corrosion control and sequestering
- (8) Subclassification 8 - chemical addition
- (9) Subclassification 9 - ion exchange and greensand
- (10) Subclassification 10 - aeration and activated carbon adsorption

- (11) Subclassification 11 - gaseous chlorine disinfection
- (12) Subclassification 12 - non-gaseous chemical disinfection
- (13) Subclassification 13 - ultraviolet disinfection
- (14) Subclassification 14 - ozonation
- (15) Subclassification 15 - laboratory supervisor

For wastewater the Technology Specific Examinations include the following:

- (1) Subclassification 1 - activated sludge
- (2) Subclassification 2 - fixed film
- (3) Subclassification 3 - treatment ponds and lagoons
- (4) Subclassification 4 - single entity collection systems (See Class E – wastewater collection system below)
- (5) Subclassification 5 - laboratory supervisor

Other stand alone examinations include:

- Water Class Dc Examination
- Water Class E Water Distribution Systems Examination
- Wastewater Class E Wastewater Satellite Collection System Examination - (will be combined with wastewater Subclassification 4)

There are a total of 24 examinations, eighteen (18) Water Examinations and six (6) Wastewater Examinations.

The examination booklets and answer sheets are color-coded.

Blue examination booklets include:

- Water Part I
- Water Class E Distribution Systems
- Water Dc (Small Water Systems w/Disinfection)
- Wastewater Part I and Subclassifications 1 - 3

White examination booklets (with teal answer sheets) include:

- Class E Collection Systems
- Laboratory Supervisor Examination(s)

Purple examination booklets include:

- Water Subclassifications 1 through 6

Green examination booklets include:

- Water Subclassifications 7 through 10

Red examination booklets include:

- Water Subclassifications 11 through 14

The examinee will use a blue answer sheet with the type of examination typed across the top when working in a blue book. Likewise, when an examinee is working in a green book, the answer sheet will

have green lettering and in a purple book, the answer sheet will have purple lettering. All candidates for initial certification will have a blue answer sheet for their first examination. This will not necessarily be the case for examinees upgrading their certification. The cover of the examination booklet will tell the examinee the starting question number.

## **THE EXAMINATION PROCESS**

A comprehensive flow chart of the entire process is included in Exhibit B-1. The DEP or an Approved Examination Provider (AEP) shall process requests for examination.

The cut-off date for registering to take an examination may be determined by the DEP or the AEP. Deadlines for registering to take an examination should be advertised. The DEP recommends a minimum of 45 days.

The DEP or AEP will complete an administrative review of each examination registration form. Forms shall be complete and separated according to requested examination site. The DEP will provide an AEP the appropriate Excel Spread sheet to compile examination registrations. The DEP is responsible for entering all examination data into eFACTS. All AEPs must designate a single individual as a contact for the DEP for this process. The DEP or AEP will send a notification letter to each applicant. The letter will indicate the name of the applicant, address, examination site, time of arrival and a contact number. The AEP will provide the DEP a copy of the Excel spreadsheet and each registration form no later than 30 days before the scheduled examination date.

Once the registration deadline has passed, and all examination registrations are processed, the DEP will determine the final applicant tallies. A roster in electronic format and a copy of each registration form will be compiled.

### **Printing the Examinations**

The DEP's print shop will print the required number of examinations. Each DEP lead proctor shall have five extra copies of each examination and corresponding answer sheets. These extra copies shall be available if there is a printing error or registration error. These extra examinations shall be maintained in the "Examination In A Box" provided to each DEP lead proctor.

### **Pre-examination Site Visit**

A DEP proctor will make a site visit prior to the examination day. This may be modified after initial site visits have verified the suitability of the examination site. All examination sites must be pre-approved prior to scheduling any examinations using the facility site specifications contained in Exhibit B-2.

### **Examination Operations**

A designated area for examinees to store personal belongings while the examination is in progress should be provided. Examinees should be advised:

- There should be no disruptive noise during the examination.
- No food or drink is permitted during the examination.
- No use of tobacco or smoking is permitted during the examination.
- Cell phones need to be left in the examinee's vehicle.

## **Assigning Seating**

The DEP will assign seats to the examinees and print the check-in and check-out rosters for the examination sites. Two lists shall be sorted alphabetically by name. These lists are to be used for check-in and check-out. All examination seating will be facing the same direction. The proctors will be seated so they have an unobstructed view of the examinees at all times.

## **Collating the Examination Packets**

Water examination packets are sealed in blue folders. Wastewater examination packets are sealed in yellow folders. The “Formulas, Conversions, and Common Scientific Units” handout is inserted in the left inside pocket and the examination booklets and answer sheets in the right inside pocket.

DEP program staff will collate all examination packets. Each examination packet will have an identification label stating the applicant’s name, examinations and seat number assigned to the applicant. The examination packets will then be sealed.

DEP program staff will ensure that all materials required for examination are in each “Examinations In A Box” for each examination site and session. Each box will then be given to the lead DEP proctor.

## **Administering the Examination**

Proctor teams will consist of a lead DEP proctor and the required number of wage personnel. The DEP proctor, upon receiving the “Examinations In A Box,” will immediately inventory its contents. The DEP proctor will check the roster against the number of examination packets and check the other examination supplies to insure it is complete.

The DEP proctors should arrive at the pre-qualified examination site at least one hour before the examination. The proctor will ensure the examination site meets all facility standards. The lead proctor will be responsible for assigning tasks to the wage proctor and ensuring all materials in the “Examinations In A Box” are returned to the appropriate DEP program staff in Harrisburg. The DEP lead proctor is responsible for ensuring no examinations are misplaced, lost or stolen.

Duties of the proctors include the reading of the Examination Instructions to Candidates (Exhibit B-4), checking applicants in and out of the examination site, physically arranging the examination site, posting the signs, distributing the examinations, answering questions during the examinations and assisting in ensuring all examination materials are returned. During check-in, each applicant must supply a valid photo ID. Once the examination has started, no applicant is allowed to leave the room until finished, except to use the restroom. The examination instructions to be read by a proctor are included in the “Examinations In A Box” provided to each lead proctor. No examinee is allowed to leave the examination site until all of the examinee’s examination materials have been secured and audited.

## **Examination Check-In - Identification**

Examinees will present government issued photo identification to the proctor. The proctor should make sure that the picture on the photo ID matches the applicant. Examinees who do not have a picture ID should not be admitted.

Examples of approved photo-bearing identification cards include any one of the following:

- Driver's License, or PennDOT ID
- Military ID
- Passport

The proctor will match the examinee to the name on the roster sheet and verify the accuracy of the examinee's address. All examinees properly registered for the examination are listed on the admission roster.

**Note:** One of the most challenging aspects of administering an examination is ensuring that the individual taking the examination is properly identified. There may be incidences of impersonation. It is up to the discretion of the proctor whether or not to accept an examinee's form of identification. Proctors should not accept identification that can be easily manipulated or altered.

### **Seat Assignments**

Upon check-in, the proctor should ensure the applicant knows their assigned seat. These assignments are indicated on the Check-In sheets. Proctors will have already set out seat numbers throughout the room. The examinee cannot change a seating assignment. This will ensure that friends do not automatically sit next to each other. Additionally, by assigning seats, the proctors can plan in advance for distribution of the examinations to the correct examinee.

### **References**

No references may be used by the examinees, except those supplied in the examination packet. Proctors must also ensure that all loose notes and papers have been removed from the examinee's assigned seat area prior to the start of the examination.

### **Admitting Late Examinees**

If an examinee arrives late and the proctor is still providing the examination instructions, they should be allowed to enter and take the examination. However, no examinee may be allowed into the examination after examinees have begun taking the examination.

### **Signing Examination Booklets**

An important part of the examination process is the distribution of the examination packet. Each examinee will be directed to sign their signature on *each* examination booklet. In the event of a missing examination, the signatures will help the proctor to identify whose examination booklet is missing.

### **Filling Out the Answer Sheet(s)**

Proctors will circulate throughout the room and spot check to ensure the examinee is using the correct answer sheet and the answer sheet information is being properly completed and filled in. They will also verify the name and Client ID number, because the scoring system will read the marks and enter this information into the database, independent of whether that information is correct or not.

## **Monitoring the Examination**

Proctors should circulate among the examinees during the examination and scan each examinee's work area to be sure that the work area is free of unauthorized materials and that examinees are not engaged in any other type of examination misconduct. Proctors should avoid making excessive noise that may disturb examinees. Proctors should occasionally look at answer sheets to make sure the examinees are not only properly filling in their answers, but to ensure the colored answer sheet matches the colored examination booklet. Additionally, proctors should check to ensure that the examinees have not made any stray marks on their answer sheets and that they only use a #2 pencil.

Under no circumstances should a proctor answer any questions regarding the examination content. In the event that an examinee objects to a question, a proctor should advise the examinee to answer the examination question to the best of their ability and encourage them to complete a "Question Evaluation Form" if the examinee has a problem with a question.

If a defective examination is reported during the examination, the proctor should open and inspect the examination material and attach a note to the examination and include it with the completed examination materials to be returned to the DEP. Please make a note of the incident on the proctor report. Then replace the defective material with an unused examination(s).

Proctors are to allow only one examinee at a time to use the restroom. Proctors should collect the individual's examination materials and give them back when they return from the break. No extra time is allowed for their absence.

As the four (4) hour examination session proceeds, the DEP proctor will alert examinees when there are two (2) hours; one (1) hour; thirty (30) minutes; and fifteen (15) minutes remaining for them to complete the examination. This signals the examinees as to the time remaining and to be ready at the end of the examination, as some examinees will use the entire examination time available.

## **Early Completion**

Examinees that finish the examination early are permitted to leave the examination room when they have checked out. Examinees can check-out one at a time, until the last ten minutes of the examination session. Ten minutes before the end of the examination session, all remaining examinees must remain in their seats and follow the procedures for check-out described below. Proctors must collect all examination materials from each examinee that leaves early and have the examinee check-out before leaving the examination site.

## **Permanent Withdrawal**

If an examinee withdraws from the examination permanently for whatever reason, the proctor will collect the examinee's examination packet and make sure all examination materials are in the examination packet. The incident should be noted on the proctor report.

## **Irregular Behavior**

The proctors have the authority and the responsibility to remove examinees that are displaying disruptive behavior. This kind of behavior will not be tolerated. If an examinee does not comply with the rules, let them finish out the exam if they are not disruptive. Report the incident on the proctor

report and submit it to the Board Secretary. The Board Secretary will present the incident to the Board. The Board will determine if the examinees' scores will be invalidated for their behavior.

## **Examination Check-Out**

As examinees complete the examination, the proctors should instruct them to stay seated until the proctor can inspect the examinee's examination materials and verify that all materials have been returned. It is especially important at the conclusion of the examination for the examinees to stay seated during the check-out process. The proctor must maintain control over the examination site at all times. Individuals seeking to remove examination materials from the examination site may try to use confusion at the end of an examination session to hide examination materials. Confusion may result if multiple individuals stand up and leave the facility at once.

Examination materials to be collected from each examinee include:

- Examination packet
- Examination booklet(s)
- Answer sheet(s)
- Formulas, Conversions and Common Scientific Units handout
- Seat number
- Calculator and pencils (if borrowed from proctor)
- Question evaluation forms, if used

When collecting the examination materials, the proctor will ensure that the answer sheet information has been properly completed and filled in and verify the examinee's name and Client ID. Corrections must be made on the roster sheet. In addition, the proctor will make sure that all the pages of the examination are present and that nothing has been removed from the examination booklet including questions, figures, diagrams, or charts. When the examinee's examination materials have been accounted for, the proctor will check the examinee's name off the roster. The examinee can then leave the examination site once everything has been checked. No side discussions should take place with any examinee while examination materials are still distributed to examinees.

When all materials have been collected, the proctor will prepare the materials for scoring and returning to the DEP. Answer sheets must be separated from the examination booklets. Examination booklets do not need to be sorted. Answer sheets need to be separated by examination type and alphabetized by the examinee's last name. Question evaluation forms should be collected into a separate pile, if used. Blank forms need to be separated into another pile for re-use. The proctors must count the number of booklets and answer sheets and compare with the total number indicated on the Check-In/Check-Out sheet. If discrepancies exist, the proctor should make every effort to locate the missing materials. A tool to use to identify the missing materials is the signature of the examinees on the examination booklets. If the proctor determines that something is missing, the proctor should attempt to recover the materials as quickly as possible.

## **Loss of Examination Material**

The most damaging security breach is the removal of examination materials from the examination site. When removed, it is impossible to know if copies were made, even if the original document was returned. Therefore, it is very important to guard against the removal of examination materials. In earlier sections, the check-out process is described. However, it is important to take action to recover the missing materials as soon as they are discovered missing. If the proctor is still administering the

examinations, have another proctor cover the assigned territory and leave the center to recover the materials. If the material is not recovered, it needs to be reported on the Proctor Examination Report.

### **Collection of Examination Materials**

At the completion of the examination session, the DEP proctors shall immediately collect, organize and return the answer sheets, the “Formula, Conversions, and Common Scientific Units” handout, question evaluation forms, attendance (check-in/check-out) rosters, examination books and any other examination materials to program staff located in Harrisburg. When staff in Harrisburg receives the examination materials, the examination booklets shall be shredded. The answer sheets will be scored in-house and an applicant will be notified through the mail (by letter) approximately 75 days after the examination. Any storage of examination materials shall be in a locked and secure office location.

### **Upload Examination Scores to eFACTS, Send Pass Letter and Application Packet**

Upon completion of the examination scoring, the Board Secretary is responsible for ensuring the scores are correctly uploaded into eFACTS. The DEP shall send a letter to all the applicants with the results of their examination(s) within 30 days. Applicants who passed the required examinations to qualify for certification shall receive an application for certification and an invoice for the appropriate fees. The Board secretary shall review all complete applications for certification and recommend the Board take action.

### **Proctor Qualifications**

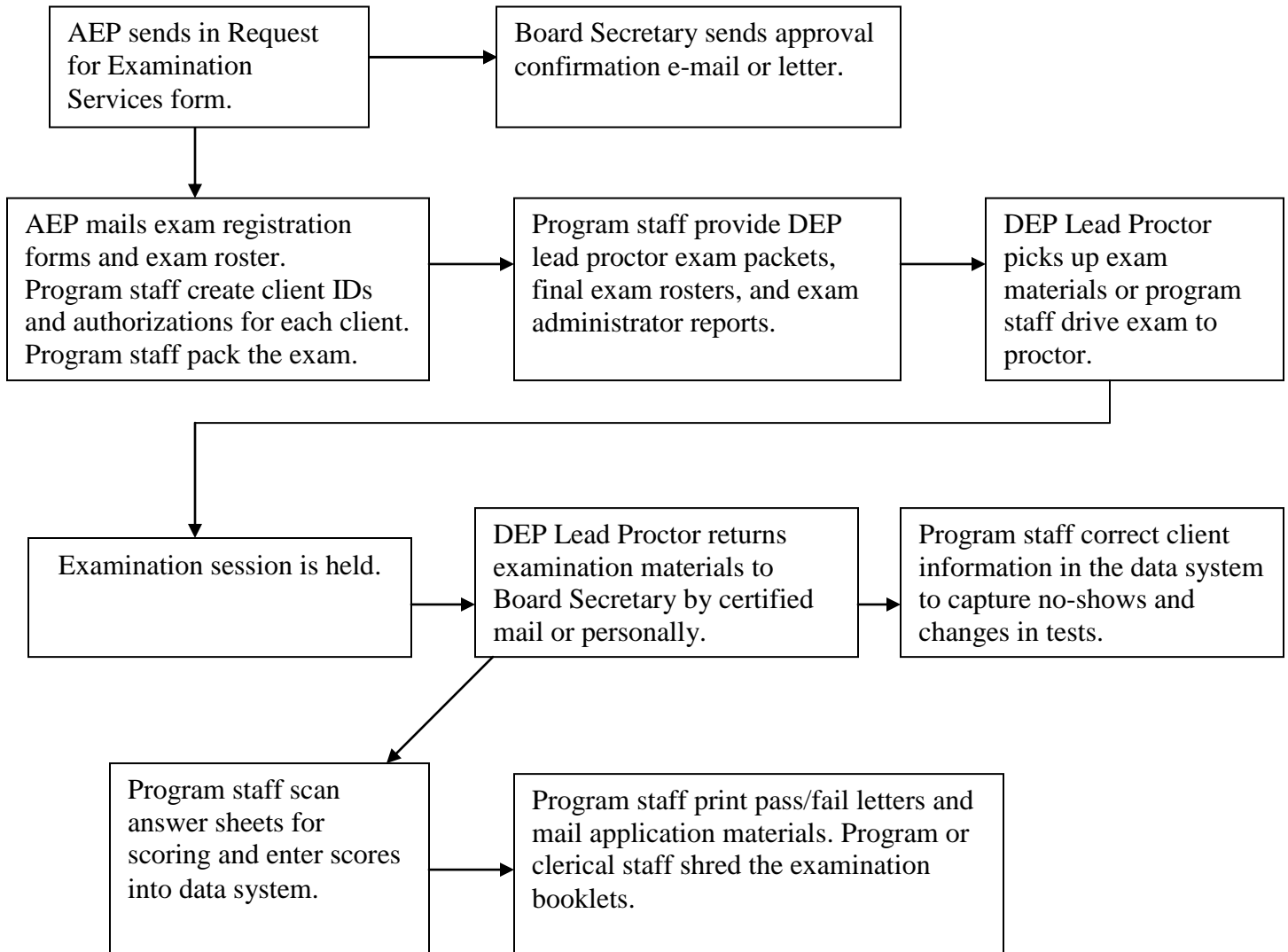
A proctor can be either a DEP employee, wage Water Professional Examination Proctor, or Outreach Assistance Provider Program (OAPP) personnel. OAPP members are wage, part-time state employees of the DEP who provide technical, financial and managerial assistance to water and wastewater systems. OAPP members are considered experts in their related water or wastewater field and may work for local government or the private sector. A proctor cannot participate in an examination session sponsored by an AEP where that proctor is a full-time employee, Board member or other official of that Approved Examination Provider. All proctors must sign the Statement of Confidentiality included in Exhibit B-3.

### **Contacts**

Any questions concerning examination material or the administration of the certification examinations should be directed to:

Board Secretary  
State Board for Certification of Water and Wastewater Systems Operators  
P.O. Box 8454  
Harrisburg, PA 17105-8454  
717.772.5158

**EXHIBIT B-1**  
**Examination Delivery Process Chart**



## **EXHIBIT B-2 SITE SPECIFICATIONS**

### **Physical Location and Seating**

The physical location for an examination site should meet the following standards:

1. Be of sufficient construction to provide for a controlled environment that protects against weather related risks.
2. Have heating and air conditioning services necessary to maintain an ambient air temperature of 70 degrees Fahrenheit at all times during the examination. The heating, ventilation and air conditioning system should adequately prevent the introduction of particulate matter, noxious and toxic fumes and any other foreign material that may impair or affect the air quality in the examination room.
3. Have functioning drinking water and wastewater disposal facilities within a reasonable distance of the examination room and include toilet and hand washing facilities for both male and female examinees. All toilet, hand washing and drinking areas should be maintained in a sanitary condition.
4. Have sufficient lighting to provide 40 to 70 foot-candles in the examination room or meets any other national illumination standard for classrooms. No lighting may create a distraction for the examinees.
5. Isolate examinees from disruptive noises or other interferences during the examination.
6. Examination areas should be posted with a notice stating: **DO NOT DISTURB - EXAMINATION IN PROGRESS** in letters no less than 1 and 1/2 inch in size.
7. Have provisions for adequate parking for examinees.

### **Seating, Writing Areas and Table Arrangements**

1. All examinees should be provided a flat, smooth and dry writing surface with a minimum area of 432 square inches (18" wide by 24" long).
2. A maximum of two examinees per table are allowed. Examinee tables should be a minimum of 6 feet in length and at least 18 inches wide.
3. Writing surfaces should not be arranged in such a manner as to put the examinee face to face with each other. Examinees may face a wall or other solid surface.
4. A minimum of 5 feet should be provided between tables serving as writing surfaces from the back of the table to the front of another table with sufficient room for proctors to pass behind the examinees during the examination.
5. All seats should have a backrest and be of sufficient size to accommodate an average adult.

6. The approved examination provider should make available an applicant registration table outside of the examination area.
7. A chair for a proctor should be provided for each 30 examinees.

## **EXHIBIT B-3**

### **CONFLICT OF INTEREST STATEMENT**

#### **General**

It is very important to minimize and safeguard against any possible “conflict of interest” in the administration of the Operator Certification Program. The program’s unique framework tends to create an overlap of personnel, who are wearing different hats to carry out different activities. This framework uses personnel from the private sector, part-time state employees, Governor-appointed Board members and government. Further complicating the issue of “conflict of interest” is the limited pool of expertise that exists in the field.

#### **Program Elements**

The enactment of the amendments to the Federal Safe Drinking Water Act creates a host of new certified operator requirements. Some of those requirements include continuing education and psychometrically valid examinations. Accordingly, the DEP developed a partnership program with the private sector to put this program in place. This partnership helped create the 25 different certification examinations, provides proctors for the administration of these examinations, and provides over 250,000 person hours of training each year. The following is a list of those participating:

1. *Employees of the Outreach Assistance Provider Program (OAPP)*

State part-time employees are paid on an hourly basis by the DEP to provide technical, financial and managerial assistance to water and wastewater systems at no cost to the system or customer. Employees are considered experts in their related field and may work for local government or the private sector.

2. *Approved Training Providers*

These entities are industry and private sector organizations that meet the state criteria for the delivery of training for certification and continuing education. Approved training providers may charge a fee for their services.

3. *Subject Matter Experts (SMEs)*

SMEs are individuals from the water and wastewater industry who are recognized as having the knowledge, skills and abilities to qualify as experts in the field of water and wastewater treatment system operation. SMEs participated in the development of the certification examinations. SMEs included DEP staff, Board members and members of the OAPP. SMEs were not compensated for their effort unless they were staff on the OAPP.

4. *Approved Examination Providers (AEPs)*

Industry and private sector organizations approved by DEP to advertise examination sessions, register applicants and provide examination sites for the certification examination with the authority to charge a fee for such services.

5. *Wage Payroll/Water Professional Examination Proctors*

Specially trained part-time wage employees who proctor certification examinations for the DEP and the AEPs.

6. *Appointed Board Members*

The Governor appoints these members of the Board who make decisions to grant certification to applicants. These Board members only receive compensation for their travel, lodging and subsistence expenses.

7. *DEP staff*

These people are full-time employees of the DEP who are responsible for the development and administration of the Operator Certification Program.

**What is a “Conflict of Interest” for the Operator Certification Program?**

For the purpose of this program, the DEP views “conflict of interest” criteria as:

- When participating in certain program activities provides an individual or organization an unfair advantage that may result in a financial gain to the individual or organization, and/or
- When participating in certain program activity provides an individual or an organization’s membership an unfair advantage to obtain operator certification.

It is important to note this statement defines the limits of program interaction to minimize “conflict of interests” and **does not** attempt to eliminate any possibility of a conflict of interest. The limited number of individuals considered experts and their willingness to expend their time and resources should be considered.

**Possible “Conflict of Interests”**

1. *Subject Matter Experts*

SMEs participated in the question selection and validation. They had the opportunity to view only specific examinations during the day of their development. Different groups of SMEs developed the 24 examinations. At no time did a SME have an electronic or hard copy in their possession outside of the session. No written material or notes concerning the examination or questions were permitted to leave the room during the examination development phase. SMEs did not ultimately choose the examination questions; they only validated their correctness and applicability. The question selection model chose individual questions. SMEs providing technical input were all certified in their specific field of expertise. The subject content of each question and priority are public information and were used to develop and focus the content of modules for training developed by the DEP. The possibility of SMEs using their role in examination development to meet the criteria for conflict of interest is minimal.

2. Board Members

Board members did not develop the examination questions or content unless they participated as a SME. As a Board member, they are responsible for reviewing the examination and scoring. Most of the Board members are required to be certified by law. The actions of the Board members do not create an obvious “conflict of interest.”

3. Water Professional Examination Proctors

Part-time wage payroll proctors have limited access to the certification examination while carrying out their duties as examination proctors. Proctors may incidentally view examinations while providing services to examinees. This can occur in three ways: policing the examinees to assure no fraudulent behavior occurs, collecting open examination booklets after the examination is completed, and assuring the examination materials are all returned. At no time does a wage proctor have an examination outside of the examination site. A DEP staff person directing all examination procedures is on site to ensure security. It does not appear that the limited access to an examination is extensive enough to allow the wage proctors to compile information on the examinations and use it for other purposes such as developing and delivering training for profit as a DEP-approved training provider.

4. Approved Examination Providers (AEPs)

AEPs primarily sponsor examination opportunities for their organizations. The sponsorship of an examination could be for profit or to promote the goals of meeting their membership’s needs. There does exist the possibility that a SME or Board member may be associated with an AEP. However, since AEPs are not allowed access to the examination content, this would not provide an advantage to a specific AEP. Full-time staff members, Board members or other officials of an AEP, who are also OAPP proctors, are not allowed to proctor an examination session hosted by the AEP.

5. Approved Training Providers

DEP approved training providers may offer their services for profit or without compensation. A number of SMEs are also approved training providers. As a SME, there may be a possible “conflict of interest” of knowing the content of the examination and training specifically for the examination. While at first glance this appears to be a problem, there are two mitigating factors. No SME has unlimited access to any examination. The ability to memorize the content of a complete examination is remote. Furthermore, it is unnecessary. All approved training providers are provided standard training modules for each technology-based examination. In these modules, objectives are embedded that correspond to questions on the examination. In addition, the need to know criteria (knowledge, skills and abilities) used to develop and prioritize questions was also used to develop these training modules. This creates a level playing field for all approved training providers.

6. DEP staff

In terms of a “conflict of interest,” all DEP staff are subject to the Governor’s Code of Ethics and state ethics law.

In general, the methodology used to develop the examinations limited access to question content. As a further level of protection, any individuals that may be involved in future activities that might be construed as a possible “conflict of interest,” or create an examination security risk must execute the following “Statement of Confidentiality.”

### Statement of Confidentiality

The Department of Environmental Protection and the State Board for Certification of Water and Wastewater Systems Operators require individuals who have had, or may in the future have, access to any portion of the certification examinations to sign a statement of confidentiality as a further safeguard to prevent a release of confidential information, and to prevent an actual or apparent conflict of interest.

I, \_\_\_\_\_, on this date \_\_\_\_\_, hereby agree that I will not:

- a. tell, relate, duplicate or divulge the content of any certification examination to any person;
- b. use any such examination content to make a financial gain for myself or any corporation or business interest I hold; and
- c. use any such examination content to further the goals and objectives of any organization of which I am a member.
- d. additionally, I hereby certify and agree that I will not take a water or wastewater operator certification examination, technology specific examinations, or other stand-alone examinations for a three-year period from the signature date on this confidentiality statement.

Furthermore, as a proctor, I hereby certify and agree that I will not provide proctoring services for any Water/Wastewater Operator Certification Examination scheduled and provided by an Approved Examination Provider for whom I am an employee, officer, board member or hold a position of authority.

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Signature

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Date

## **EXHIBIT B-4**

### **EXAMINATION INSTRUCTIONS TO CANDIDATES**

My name is \_\_\_\_\_ and I am the proctor for this state examination. Other proctors for this examination are stationed throughout the room. Please keep in mind, the proctors are here to help you, but we can NOT help you with specific examination questions or wording.

Should there be an emergency during the examination session where we are required to leave the building, please pick up your driver's license and your calculator and proceed to the nearest exit. Leave all examination materials on the table. Do NOT take any of your examination materials with you outside of the room. Any questions, before we move on? *(Pause)*

Under the rules governing this examination, you must keep your photo ID in a visible place on top of the desk at all times. If you have not done this, please remove your photo ID, place on top of the desk and put your wallet or pocketbook away. *(Pause)* If at any time you must leave your seat, please take your photo ID with you.

If you need to use the restroom, raise your hand and a proctor will provide you a restroom pass. The proctor will collect your examination booklets and answer sheets. The proctor will hold all materials until you return to the room. Only one person will be permitted to leave for the restroom at a time. You must keep the restroom pass and your ID with you at all times until you return to your seat. Any questions? *(Pause)*

At this time I would like to remind you, the use of tobacco is not permitted in the examination room. Eating food or drinking beverages is not allowed during the examination.

Cell phones and/or pagers are not permitted in the examination room. If you have a cell phone or pager, it is very important that you turn it off and give it to one of the proctors. *(Pause)*

Anyone refusing to comply with the rules set forth in these examination instructions may have their examination scores invalidated for this session.

Please clear your work areas except for your photo ID, your sharpened soft-lead No. 2 pencils, erasers and a calculator. Please also be reminded that you may NOT use calculators with word processing or printing capabilities. All other electronic devices are not permitted in the examination room unless the State Board for Certification of Water and Wastewater Systems Operators has granted prior approval.

Proctors will now pass out the examination packets. DO NOT break the seal on the packet until you have been instructed to do so. *(Pause)*

Please verify the name on the examination packet is your name. If it is not, please raise your hand. *(Pause)*

Without breaking the seal on the packet, look at the front of your packets and verify that they contain the proper examinations you requested. If they are not, please raise your hand. *(Pause)*

You may now open the seal on the examination packet. From the left side of the packet remove the “Formulas, Conversions, and Common Scientific Units” handout which contains information that you can use when making calculations. Please do NOT write on this handout. Use your test booklets for scratch paper.

If you have any comments to make concerning any question that is contained within this examination, please raise your hand and a proctor will bring you a “Question Evaluation Sheet”. This form must be completed immediately and promptly given back to the Proctor. Raise your hand when you have completed the “Question Evaluation Sheet” and the proctor will collect it. The State Board for Certification of Water and Wastewater Systems Operators will carefully review your comments, and make edits to the test question if appropriate. However, you will not receive a response from them.

Now, from the right side of the packet please remove the examination booklets and answer sheets. DO NOT open the examination booklets until you are instructed to do so. Please wait for instructions to fill in your Answer Sheets.

You will notice that the examination books are color-coded. Use the blue answer sheet with the appropriate test name typed on the side if you are taking the following examinations:

Water Part I General

Water Class E Distribution

Wastewater Part I General

Wastewater Subclass 1 – 3

Water Dc (Small Water Systems w/Disinfection)

All candidates that currently do not hold a certification in water or wastewater should have a blue test booklet and a blue answer sheet for their first examination. Candidates will use the teal answer sheet if they are taking the wastewater collection system Class E, the purple answer sheet if they are taking water subclass 1-6, a green answer sheet if they are taking a water subclass 7-10 examination and a red answer sheet if they are taking a water subclass 11-14 examination.

Now, write your name on the front cover of each examination booklet (*Pause*).

Look at the label on the examination folder to determine which examination you are taking first. Keep that examination booklet and all the answer sheets in front of you. Place the other examination booklets back in the packet. (*Pause*)

Use only a soft-lead No. 2 pencil to fill out the answer sheets. Fill in each circle COMPLETELY with your pencil, making a dark mark. Be sure to fill in the entire circle. Any erasing should be done carefully and should not leave smudge marks.

Depending upon the examinations you are taking, you may use one answer sheet for more than one examination. The sections regarding date of birth, sex and education should be left blank. (*Pause briefly to let candidates find those sections so they can be skipped*).

Under section NAME, please print your name; last name, first name, and middle initial. Leave one blank space between your last name, first name and middle initial. Do not use commas or periods. Fill in the circles below the boxes that correspond to the letters of your name. (*Pause*)

During this time, the proctors should spot check to make sure that all candidates are printing their names in the correct place and filling in the circles correctly. Also make sure examinees are using a pencil and are only printing one letter in each box.

Under the Section “Identification Number”, print your Client ID in the correct boxes. Your Client ID is a six-digit number printed on the label on the front of your packet. This number is printed on the label just below the list of examinations you are taking. Do not put spaces, hyphens or dashes between numbers. Now fill in the corresponding circles below your printed Client ID. This information is critical to processing examination results. If this section is not filled in correctly, examination results will be delayed. (Pause) After filling in the Client ID numbers, double check the corresponding bubble number for each number above. If you filled in an incorrect number, erase it and fill in the correct number.

After you have filled in this information for one answer sheet, continue to the next answer sheet until all of your answer sheets have these boxes filled in. Keep the answer sheet for your first examination and put the other answer sheets back in the right side of your packet and place the packet in the corner of your desk with your Photo ID.

Be sure that as you fill in the answer on the answer sheet that the number you are filling in on the answer sheet corresponds with the question number in your examination book. Please note that if you are taking subclass examinations, you may need to skip several numbers on the answer sheet. The cover of the examination booklet will inform you which question to start with.

Read each question carefully before choosing the best answer. There is only one correct answer for each question. If you mark more than one answer, the answer will not be counted. It is to your advantage to attempt to answer each question. There is no penalty for guessing.

Please understand that all your examination booklets are the property of the Department of Environmental Protection, and their content is copyrighted. Copying, reproducing, or taking any action to copy or reveal the content of this examination in whole or in part is unlawful. Removal of this

booklet from the examination room is prohibited. At the conclusion of the examination, you are responsible for returning the examination booklet(s) that have been assigned to you.

When you have completed your first examination, raise your hand and the proctor will get you started on your next examination. If you are taking additional examinations, do not open the next examination booklet until the proctor instructs you to do so. If you are not taking any additional examinations, your proctor will collect your examination materials and send you to check-out. After your examination packet and its contents are returned and verified at check-out, you may exit.

Are there any questions? *(Pause to see if anyone raises their hand and answer their question.)*

You will have four (4) hours to complete the examinations. You will be alerted when there is approximately 2 hours remaining, 1 hour remaining, 30 minutes remaining and 15 minutes remaining in the examination session. The starting time for this examination session is \_\_\_\_\_. You may open your first examination booklet and begin.

# Appendix C

## Certification Upgrade Model

Upgrading allows individuals holding an operator certificate to receive (without examination) a higher-class operator certificate. It is essential that Pennsylvania's Operator Certification Program provide this opportunity. Pennsylvania needs a continual influx of certified operators who are qualified to make process control decisions at larger and more complex treatment systems. It is important not to create administrative barriers to a progressive process of equating increased experience with increased capability in the water and wastewater field.

### Principles of Upgrading Certification

Listed below are the principles of upgrading to be used in making upgrading decisions.

- A. All operators holding a wastewater B, C or D class may upgrade their certification class up to two class levels by meeting the additional experience requirements.
- B. All operators holding a water B, C or D class may upgrade their certification class up to two class levels by meeting the additional experience requirements.
- C. Operators who hold a water Dn, Dc or E, a wastewater class E, or a grandparented certificate are not permitted to upgrade their certificate. Operators holding an E license who pass the general exam and subclass(es) and have actual plant experience, may upgrade their license.
- D. All certified water or wastewater operators holding an A, B, C or D, class may upgrade their certification subclassifications by meeting certain additional testing and experience requirements.
- E. Only documented experience gained while employed at a water or wastewater system shall qualify an applicant for an upgrade.
- F. An applicant requesting an upgrade for class shall be granted the higher class when meeting the experience requirements for that higher class.
- G. An applicant requesting an upgrade for class may use Track I or Track II (if they qualify) to meet experience requirements.
- H. No applicant shall be granted an upgrade in subclassification based on only experience.

An applicant requesting an upgrade in subclassification must successfully pass the subclassification examination. An additional year of experience may be required, depending on whether the applicant has experience in a similar technology as defined by the program. Where sufficient experience (minimum one year) can be demonstrated, no additional experience is needed.

All applicants for an upgrade shall be given the right to appeal the Board's action on their request for an upgrade. When the Board denies an application for certification action, the Board Secretary will notify the applicant in writing within 60 days of the Board decision, describing the applicant's right to appeal the action to the Environmental Hearing Board.

# Appendix D

## Experience Credit for DEP Employees and Local Agency Employees with DEP Delegated Programs

### SAFE DRINKING WATER PROGRAM

General: The Board approved the following experience for DEP employees in the Safe Drinking Water (SDW) Program **on December 19, 2006**. These activities can be used to meet the experience requirements for drinking water certification.

Personnel assigned Safe Drinking Water Program (SDW) duties in the following job classifications are eligible to obtain experience credits towards operator certification.

- Environmental Trainee
- Sanitarian
- Sanitarian Supervisor
- Environmental Protection Compliance Specialist/Water Program Specialist/Environmental Group Manager (Operations)
- Environmental Engineer Trainee/Environmental Engineer Specialist/Environmental Engineer
- Environmental Group Manager (Section Chief)/Environmental Engineer Manager
- Previous Experience (Water Treatment Plant)

The following paragraphs address pertinent experience for each of the above classifications.

**Environmental Trainee** - These individuals are entry level personnel being trained to become Sanitarians in the SDW Program. They inspect and monitor drinking water treatment facilities as part of their training program under the supervision of the Sanitarian Supervisor. Eventually, their job duties include but are not limited to:

- Collect and analyze chemical and biological samples related to process control and regulatory compliance.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Calibrate meters and equipment used to monitor drinking water treatment facilities (including preparation of standardizing chemical solutions).
- Assist with treatment system diagnostic evaluations e.g., Filter Plant Performance Evaluations (FPPE)
- Meet with plant operation staff to evaluate and discuss appropriate process control measures.
- Use equipment to monitor and measure flows in a system.
- Review operational records, monitoring reports, and all related data to determine system compliance status.
- Review and comment on Standard Operating Procedure (SOP) plans for permitted drinking water treatment facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for permitted drinking water treatment facilities.

- Review and comment on Emergency Response plans for permitted drinking water treatment facilities.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Create detailed inspection reports based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

Environmental Trainee shall be awarded 0.25 years operating experience per year of service assigned to the SDW Program.

**Sanitarian** - These individuals inspect and monitor drinking water treatment facilities on a daily basis. All Sanitarians inspect “Major” drinking water treatment facilities (permitted for flow greater than 5.0 MGD). Their job duties include but are not limited to:

- Collect and analyze chemical and biological samples related to process control and regulatory compliance.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Calibrate meters and equipment used to monitor drinking water treatment facilities (including preparation of standardizing chemical solutions).
- Assist with treatment system diagnostic evaluations e.g., FPPE.
- Meet with plant operation staff to evaluate and discuss appropriate process control measures.
- Use equipment to monitor and measure flows in a system.
- Review operational records, monitoring reports, and all related data to determine system compliance status.
- Review and comment on Standard Operating Procedure (SOP) plans for permitted drinking water treatment facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for permitted drinking water treatment facilities.
- Review and comment on Emergency Response plans for permitted drinking water treatment facilities.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Create detailed inspection reports based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

Sanitarians shall be awarded 0.5 years operating experience per year of service assigned to the SDW Program.

**Sanitarian Supervisor** - Individuals in these positions frequently serve as Sanitarians prior to their advancement. Sanitarian Supervisors tend to spend less time in the field than the Sanitarians. However, they directly supervise Sanitarians providing significant input into much of their casework. In regard to drinking water treatment facilities, Sanitarian Supervisors perform the following duties:

- Supervise Sanitarians directly responsible for monitoring and compliance in the SDW Program in the conduct of all related duties.
- Supervise and participate in the completion, compilation, and interpretation of monitoring data.
- Supervise and participate in on-site assessment or evaluation of plant processes.

- Perform calculations related to process control and compliance monitoring.
- Instruct Sanitarians in preparation of standardizing chemical and biological solutions and meter calibration of equipment used to monitor drinking water treatment facilities.
- Supervise and assist with treatment system diagnostic evaluations.
- Meet with plant operational and management staff to evaluate and discuss appropriate process control measures.
- Instruct Sanitarians in proper use and interpretation of flow monitoring equipment.
- Review operational records, monitoring reports, and all related data to determine and then manage system compliance issues.
- Review and comment on Standard Operating Procedure (SOP) plans for drinking water treatment facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for drinking water permitted facilities.
- Recommend and/or initiate and then manage certain enforcement actions to protect human and environmental health.
- Review detailed inspection reports created by Sanitarians based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

Sanitarian Supervisors shall be awarded 0.25 years operating experience per year of service assigned to the SDW program.

**Environmental Protection Compliance Specialist/Water Program Specialist/Environmental Group Manager** - Individuals in these positions often served as a Sanitarian prior to advancement. They tend to spend less time in the field but work very closely with Sanitarians and Sanitarian Supervisors on cases involving permitted drinking water treatment facilities. Duties may include:

- Take enforcement actions based on recommendations from Sanitarians, Sanitarian Supervisor, and regional monitoring data.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Review inspection reports, operational records, discharge monitoring reports and related data to determine and help manage system compliance issues.
- Meet with plant operational and management staff to discuss appropriate process control measures as they relate to compliance issues.
- Manage enforcement actions as needed to protect human and environmental health.
- Perform calculations related to process control and compliance monitoring.
- Provide expert testimony regarding administrative, civil, and criminal enforcement action.
- In addition, Environmental Group Managers supervise Sanitarian Supervisors and work closely on many aspects of Sanitarian Supervisor duties.

These individuals typically spend at least 25% of their time on the above mentioned duties. Therefore, they shall receive 0.25 years operating experience per year of service assigned to the SDW Program.

**Environmental Engineer Trainee/Environmental Engineer Specialist/Environmental Engineer** - These individuals conduct reviews of drinking water treatment facilities on a daily basis. Engineers spend the majority of their time reviewing proposals for new and modified treatment facilities; however, they also spend a significant amount of time in the field. Time in the field is spent inspecting facilities;

reviewing operating data and working with operators to make certain permanent and pilot facilities are optimized. The engineer's job duties include, but are not limited to:

- Collect and analyze chemical and biological samples related to process control and regulatory compliance.
- Complete, compile and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Assist with treatment system diagnostic evaluations e.g., FPPE.
- Meet with plant operation staff to evaluate and discuss appropriate process control measures.
- Use equipment to monitor and measure flows in a system.
- Review the design of treatment facilities to determine if equipment and processes meet applicable standards of DEP, and can be operated to consistently produce water of acceptable quantity and quality.
- Participate in the design, operation and data collection of pilot studies for innovative technologies.
- Inspect new, modified and existing treatment facilities to determine if they were properly constructed and that they are being operated to optimize the quantity and quality of the water produced.
- Provide technical assistance to operators and other engineers to resolve treatment deficiencies.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Create detailed inspection reports based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil or criminal enforcement action.

These individuals shall be awarded 0.25 years of operating experience per year of service assigned to the SDW program

**Environmental Engineer Manager (EEM)** - These individuals are Commonwealth-licensed Professional Engineers (PEs). They supervise the Environmental Engineer Trainee, Environmental Engineer Specialist and the Environmental Engineer and are professionally responsible for the engineering work conducted by a non-PE. The EEMs conduct reviews of drinking water treatment facilities on a daily basis. They spend the majority of their time ensuring that the engineer's reviews of proposals for new and modified treatment facilities result in systems that meet industry standards and can be operated to produce water of acceptable quality; however, they also spend time in the field. Time in the field is spent inspecting facilities, reviewing operating data and working with operators to ensure permanent and pilot facilities are optimized. The EEM is very familiar with a wide range of treatment facilities and is considered an expert resource on their design and operation. Job duties include, but are not limited to:

- Supervise and participate in the collection and analysis of chemical and biological samples related to process control and regulatory compliance.
- Complete, compile and interpret monitoring data.
- Supervise and participate in on-site assessment or evaluation of plant processes.
- Supervise and perform calculations related to process control and compliance monitoring.
- Supervise and assist with treatment system diagnostic evaluations e.g., FPPE.
- Meet with plant operation staff to evaluate and discuss appropriate process control measures.
- Supervise and use equipment to monitor and measure flows in a system.

- Supervise and review the design of treatment facilities to determine if equipment and processes meet applicable standards and can be operated to consistently produce water of acceptable quantity and quality.
- Supervise and participate in the design, operation and data collection of pilot studies for innovative technologies.
- Supervise and inspect new, modified and existing treatment facilities to determine if they were properly constructed and that they are being operated to optimize the quantity and quality of the water produced.
- Provide technical assistance to operators and other engineers to resolve treatment deficiencies.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Supervise and create detailed inspection reports based upon on-site facility evaluations.
- Supervise and provide expert testimony regarding administrative, civil or criminal enforcement action.

These individuals shall be awarded 0.25 years of operating experience per year of service assigned to the SDW Program.

The appropriate Regional Environmental Program Manager must certify the period(s) of work experience for the requesting individual in each category mentioned via the attached form.

Date: \_\_\_\_\_

## STATE BOARD FOR CERTIFICATION OF WATER AND WASTEWATER OPERATORS SAFE DRINKING WATER EMPLOYEE EXPERIENCE

**From: SDW Program Manager (DEP Regional Office)**

\_\_\_\_\_  
 (Name and Title)

Employee Name: \_\_\_\_\_

Employee Number: \_\_\_\_\_

Current Position Title: \_\_\_\_\_

I hereby certify that the above named employee has experience in the Safe Drinking Water Program as follows:

Job Title	Years	Factor *	Total
Environmental Trainee		0.25	
Sanitarian		0.50	
Sanitarian Supervisor		0.25	
Environmental Protection Compliance Specialist/Water Program Specialist/Environmental Group Manager		0.25	
Environmental Engineer Trainee/Environmental Engineer Specialist/Environmental Engineer		0.25	
Environmental Engineer Manager		0.25	
*Previous Experience (Water Treatment Plant)		1.00	
**Laboratory Supervisor			

\*Note – If you have operational experience from previous job(s) at drinking water or wastewater treatment plant(s), include that experience on the certification application.

\*\*Must have at least 2 years of laboratory experience testing environmental samples. Contact DEP's Operator Certification Section for qualification requirements.

If your classification is not included in the above table, briefly describe your job duties as they relate to Operator Certification:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature: SDW Manager Date

\_\_\_\_\_  
 Signature: Employee

**Experience Credit for  
DEP Employees and Local Agency Employees with DEP Delegated Programs**

**Safe Drinking Water Program**

**FILTER PLANT PERFORMANCE EVALUATION (FPPE) PROGRAM**

**General:** The Certification Board approved the following activities as experience for DEP employees in the Safe Drinking Water on **August 31, 2004**. These activities can be used to meet the experience requirements for drinking water certification.

- Based on input from all FPPE field staff, we've estimated that on average, it takes approximately 55 hours to compile an FPPE report.
- It takes approximately 20 hours of field work per FPPE.
- FPPE staff dedicates a total of 75 hours per plant/per FPPE (or about 9.5 working days).
- Class C certification needs 1.5 years of experience to upgrade to a Class A certification (this equates to 330 days or 2,550 hours).
- Class C certified staff are required to complete 35 FPPEs to get an upgrade to a Class A certification.
- The average FPPE field person completes about 12 FPPEs per year. Therefore, on average, it would take approximately 3 years of experience for the average FPPE person to be qualified for a Class A certification.

**Experience Credit for  
DEP Employees and Local Agency Employees with DEP Delegated Programs**

**WASTEWATER/CLEAN WATER PROGRAM**

**General:** The Certification Board approved the following activities as experience for DEP employees in the Wastewater/Clean Water Program on December 19, 2005. These activities can be used to meet the experience requirements for wastewater certification.

DEP employees assigned Clean Water Program duties in the following job classifications should be eligible to obtain experience credits towards operator certification.

- Environmental Trainee
- Water Quality Specialist (WQS)
- Water Quality Specialist Supervisor (WQSS)
- Environmental Protection Compliance Specialist (WQCS)/Water Program Specialist
- Previous Experience (Wastewater Plant)

**Environmental Trainee** - These individuals are entry level personnel being trained to become Water Quality Specialists. They inspect and monitor wastewater treatment systems as part of their training program under the supervision of the Water Quality Specialist Supervisor. Eventually, their job duties include but are not limited to:

- Collect and analyze chemical and biological samples related to process control and regulatory compliance.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Calibrate meters and equipment used to monitor wastewater treatment systems (including preparation of standardizing chemical and biological solutions).
- Assist with treatment system diagnostic evaluations.
- Meet with plant operational staff to evaluate and discuss appropriate process control measures.
- Use equipment to monitor and measure flows in a system.
- Review operational records, monitoring reports, and all related data to determine system compliance status.
- Review and comment on Standard Operating Procedure (SOP) plans for NPDES permitted facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for NPDES permitted facilities.
- Review and comment on solids management plans for NPDES permitted facilities.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Create detailed inspection reports based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

Environmental Trainees shall be awarded 0.25 years operating experience per year of service assigned to the Clean Water Program.

**Water Quality Specialist (WQS)** - These individuals inspect and monitor wastewater treatment systems on a daily basis. All WQS inspect NPDES “Major” wastewater treatment systems (flow greater than 1.0 MGD). Their job duties include but are not limited to:

- Collect and analyze chemical and biological samples related to process control and regulatory compliance.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Calibrate meters and equipment used to monitor wastewater treatment systems (including preparation of standardizing chemical and biological solutions).
- Assist with treatment system diagnostic evaluations.
- Meet with plant operational staff to evaluate and discuss appropriate process control measures.
- Use equipment to monitor and measure flows in a system.
- Review operational records, monitoring reports, and all related data to determine system compliance status.
- Review and comment on Standard Operating Procedure (SOP) plans for NPDES permitted facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for NPDES permitted facilities.
- Review and comment on solids management plans for NPDES permitted facilities.
- Recommend and/or initiate enforcement actions to protect human and environmental health.
- Create detailed inspection reports based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

These individuals will receive 0.5 years operating experience per year of service as a WQS assigned to the Clean Water Program.

**Water Quality Specialist Supervisor (WQSS)** - Individuals in these positions frequently served as WQSSs prior to their advancement. WQSS tend to spend less time in the field than the WQSSs. However, they directly supervise WQSSs providing significant input into much of their case work. In regard to wastewater treatment systems WQSS perform the following duties:

- Supervise WQSSs directly responsible for monitoring and compliance in the Clean Water Program in the conduct of all related duties.
- Supervise and participate in the completion, compilation, and interpretation of monitoring data.
- Supervise and participate in on-site assessment or evaluation of plant processes.
- Perform calculations related to process control and compliance monitoring.
- Instruct WQSSs in preparation of standardizing chemical and biological solutions and meter calibration of equipment used to monitor wastewater treatment systems.
- Supervise and assist with treatment system diagnostic evaluations.
- Meet with plant operational and management staff to evaluate and discuss appropriate process control measures.
- Instruct WQSSs in proper use and interpretation of flow monitoring equipment.
- Review operational records, monitoring reports, and all related data to determine and then manage system compliance issues.

- Review and comment on Standard Operating Procedure (SOP) plans for NPDES permitted facilities experiencing permit violations where SOPs play a role in the non-compliance.
- Review and comment on Operation and Maintenance (O&M) plans for NPDES permitted facilities.
- Recommend and/or initiate and then manage certain enforcement actions to protect human and environmental health.
- Review detailed inspection reports created by WQSs based upon on-site facility evaluations.
- Provide expert testimony regarding administrative, civil, or criminal enforcement action.

WQSSs shall be awarded 0.25 years operating experience per year of service as a WQSS assigned to the Clean Water Program as long as the WQSS previously spent time as a WQS or worked at a wastewater treatment plant for at least 1 year.

**Environmental Protection Compliance Specialist (WQCS)/Water Program Specialist** - Individuals in these positions often served as a WQS prior to advancement. They tend to spend less time in the field but work very closely with WQSs and WQSSs on cases involving wastewater treatment systems. WQCS duties are as follows:

- Take enforcement actions based upon recommendations from the WQS, WQSS, regional monitoring and compliance chief positions.
- Complete, compile, and interpret monitoring data.
- Participate in on-site assessment or evaluation of plant processes.
- Review inspection reports, operational records, discharge monitoring reports and related data to determine and help manage system compliance issues.
- Meet with plant operational and management staff to discuss appropriate process control measures as they relate to compliance issues.
- Manage enforcement actions as needed to protect human and environmental health.
- Perform calculations related to process control and compliance monitoring.
- Provide expert testimony regarding administrative, civil, and criminal enforcement action.

WQCSs shall be awarded 0.25 years operating experience per year of service as a WQCS assigned to the Clean Water Program, as long as the WQCS previously spent time as a WQS or worked at a wastewater treatment plant for at least 1 year.

The appropriate Regional Operations Chief must certify the period(s) of work experience for the requesting individual in each category mentioned above using the form below.

Date: \_\_\_\_\_

## STATE BOARD FOR CERTIFICATION OF WATER AND WASTEWATER OPERATORS WASTEWATER/CLEAN WATER PROGRAM EMPLOYEE EXPERIENCE

**From: Water Quality Program Manager (DEP Regional Office)**

\_\_\_\_\_  
 (Name and Title)

Employee Name: \_\_\_\_\_

Employee Number: \_\_\_\_\_

Current Position Title: \_\_\_\_\_

I hereby certify that the above named employee has experience in the Clean Water Program as follows:

Job Title	Years	Factor *	Total
Environmental Trainee		0.25	
Water Quality Specialist		0.50	
Water Quality Specialist Supervisor		0.25	
Water Quality EP Compliance Specialist / Water Program Specialist		0.25	
*Previous Experience (Wastewater Plant)		1.00	
**Laboratory Supervisor			

\*Note – If you have operational experience from previous job(s) at drinking water or wastewater treatment plant(s), include that experience on the certification application.

\*\*Must have at least 2 years of laboratory experience testing environmental samples. Contact DEP's Operator Certification Section for qualification requirements.

If your classification is not included in the above table, briefly describe your job duties as they relate to Operator Certification:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature: Operations Chief

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Signature: Employee

# **Appendix E**

## **Certification Reciprocity Model**

### **General Purpose**

Full reciprocity allows individuals holding an operator certificate from another state or federal issuing authority to receive (without examination) a comparable Pennsylvania operator certificate. It is essential that Pennsylvania's reciprocity process be broad-based and equitable. Pennsylvania's Reciprocity Model (RM) should be sufficiently flexible to deal with the variety found in other state certification programs.

The primary goals for Pennsylvania's RM are fairness and operator competency. Our RM should offer no significant advantage for out-of-state or in-state certified operators. The RM adopted by the State Board for Certification of Water and Wastewater System Operators (Board) should neither penalize out-of-state operators, nor create an administrative loophole promoting "Border Jumping" to obtain certification. "Border Jumping" occurs when an in-state operator finds it easier to be certified in another state and request reciprocity rather than meet the in-state requirements. If an operator loses their certification in Pennsylvania because the operator did not take the required training, that operator cannot apply for reciprocity to become an operator again in Pennsylvania.

### **Principles of Reciprocity Now Being Implemented**

Listed below are the principles of reciprocity used in making reciprocity decisions. These principles are incorporated into a decision process to assist staff in making reciprocity decisions.

- A. Whenever practical, the Board recognizes the Association of Boards of Certification Registry (ABC) and United States Military or Coast Guard discharge papers documenting water or wastewater operation as reciprocity registers. These registries are valuable in measuring the knowledge, skills and abilities of prospective reciprocity candidates. The registries do not automatically qualify an applicant for any certification class or subclassification. This RM does not automatically exclude other state certification programs that use their own testing methods. Reciprocity may be granted by the Board when other certification programs and testing clearly demonstrate equivalency to Pennsylvania's experience, testing and educational requirements.
- B. Applicants for reciprocity shall not be required to take an examination for any class or subclassification certificate when the operator holds a valid certificate issued by a state and can demonstrate achievement of the required Pennsylvania education and experience requirements. The primary licensing state must confirm in writing that their examination content covers the necessary knowledge, skills and abilities to meet Pennsylvania's examination. This includes our specific technology subclassifications. This means that if an applicant makes a request for a specific technology, the primary licensing state indicates their examination is intended to qualify that individual to be certified to operate a specific type(s) of treatment technology.
- C. Qualifying applicants for reciprocity shall not be automatically upgraded a maximum of two classes using the reciprocity process. These applicants must meet the experience requirement for the higher classification by demonstrating experience working at the appropriate class system. Once a certified operator using reciprocity is granted a Pennsylvania certificate, the operator may

upgrade by accumulating the necessary experience at a system in Pennsylvania. Those reciprocity candidates holding an equivalent drinking water certification to a Dc do not qualify for upgrades to a higher class.

- D. Applicants for reciprocity shall be granted the highest certification class for which they meet the minimum experience requirements required for in-state operators. When an applicant for reciprocity fails to meet any specific class experience requirement, the DEP shall total the aggregate experience and award the appropriate lowest class for that level of experience.
- E. Applicants shall be granted subclassifications for all technologies where the licensing state confirms examination content (see B.) and the applicant demonstrates a minimum of one year of experience for each specific technology.
- F. All applicants for reciprocity have the right to appeal the board's action on their reciprocity request to the Environmental Hearing Board.

### **Establishing General Class and Subclassification**

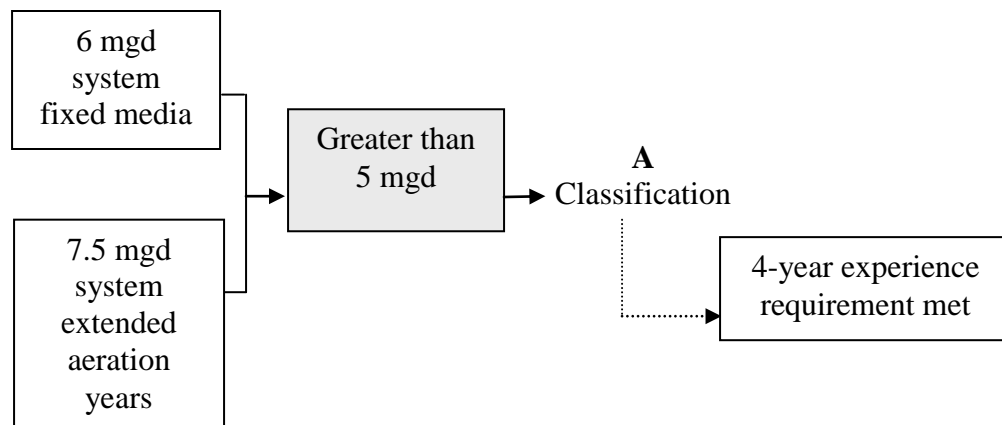
An applicant for reciprocity shall be granted a certificate based upon meeting the experience requirement working at the highest comparable Pennsylvania class system. (Note: Up to 50% experience credit for bioperable status.)

Technology subclassifications shall be granted for all appropriate technologies operated for a year or more, regardless of system size. An applicant for reciprocity must demonstrate they have a minimum of one year's experience operating that specific technology.

### **Determining Reciprocity**

#### *Step 1. Classification*

Match the experience with the largest system classification that meets Pennsylvania's minimum operating experience for that class. Award the class where the experience meets or exceeds the class requirement. Remember any educational credit under the regulations applies for experience. Experience must be based on the appropriate track.

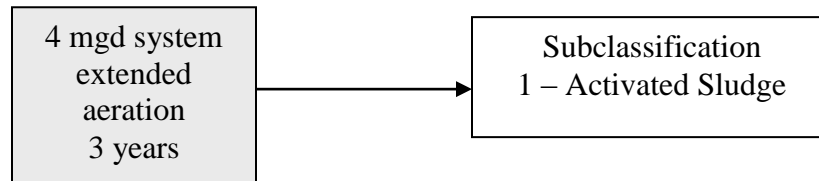


### *Step 2. Upgrade provision*

Apply the upgrade provision if the reciprocity candidate has qualifying experience in Pennsylvania. Note the upgrade provision does not apply to small water and wastewater systems.

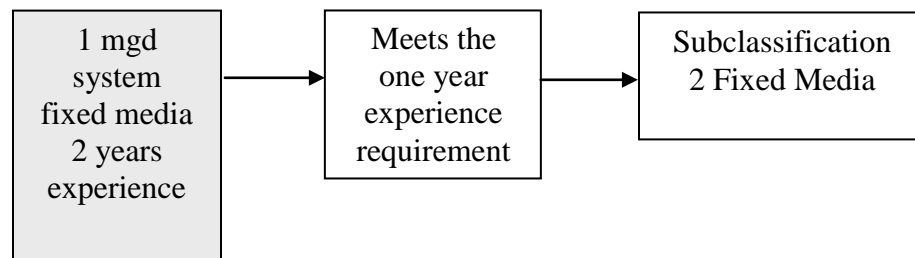
### *Step 3. Subclassification*

Where the minimum experience requirement for an assigned class is established, identify all the technologies operated at that system.



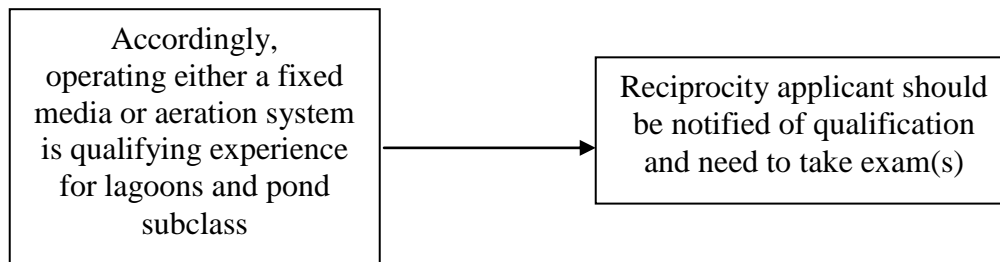
### *Step 4. Additional subclassification*

Identify any technology subclassifications that the applicant has operated that were not awarded in Step 3. Determine if the applicant meets the one-year experience requirement for additional subclassification.

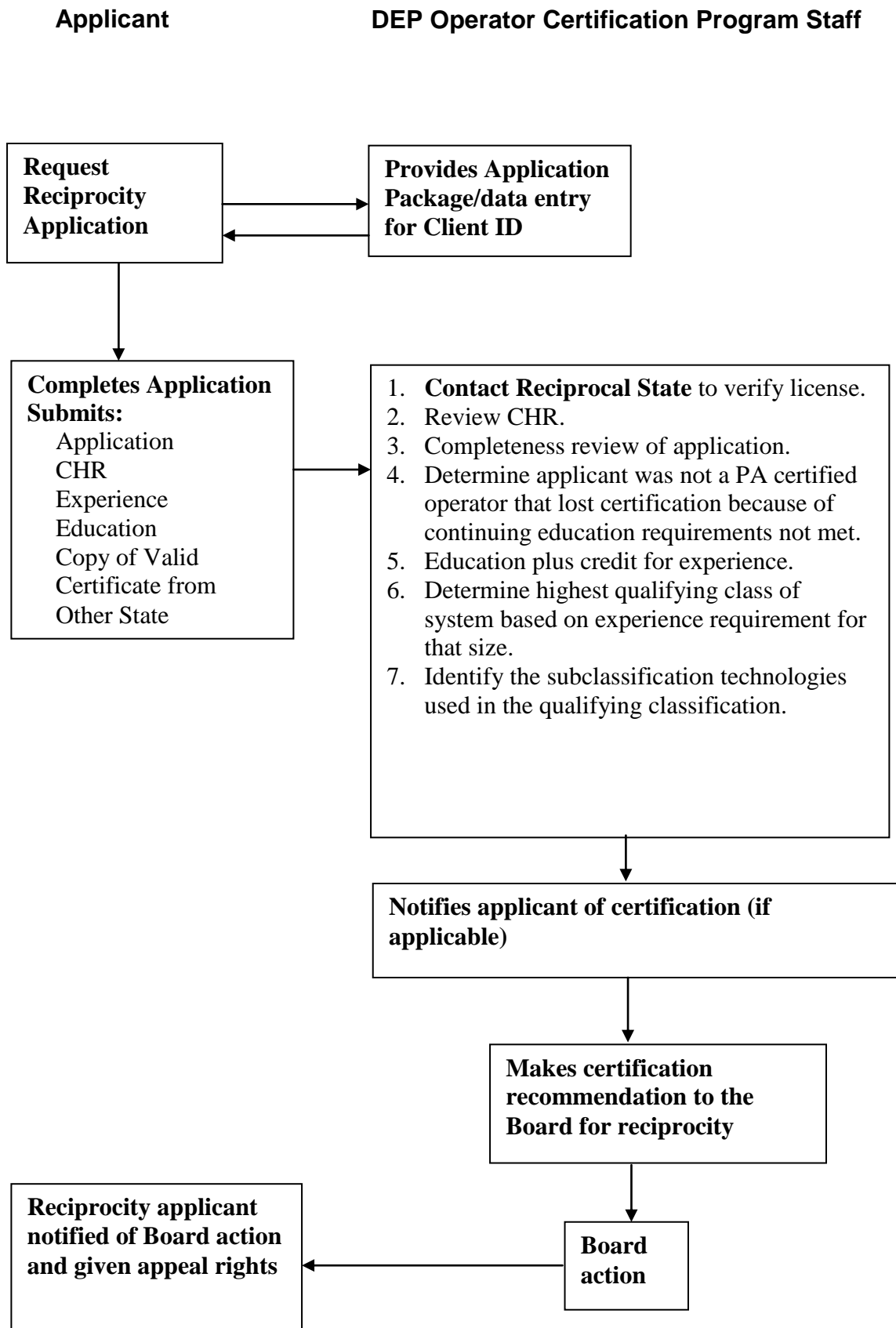


### *Step 5. Identify any additional subclassifications that meet the experience requirement*

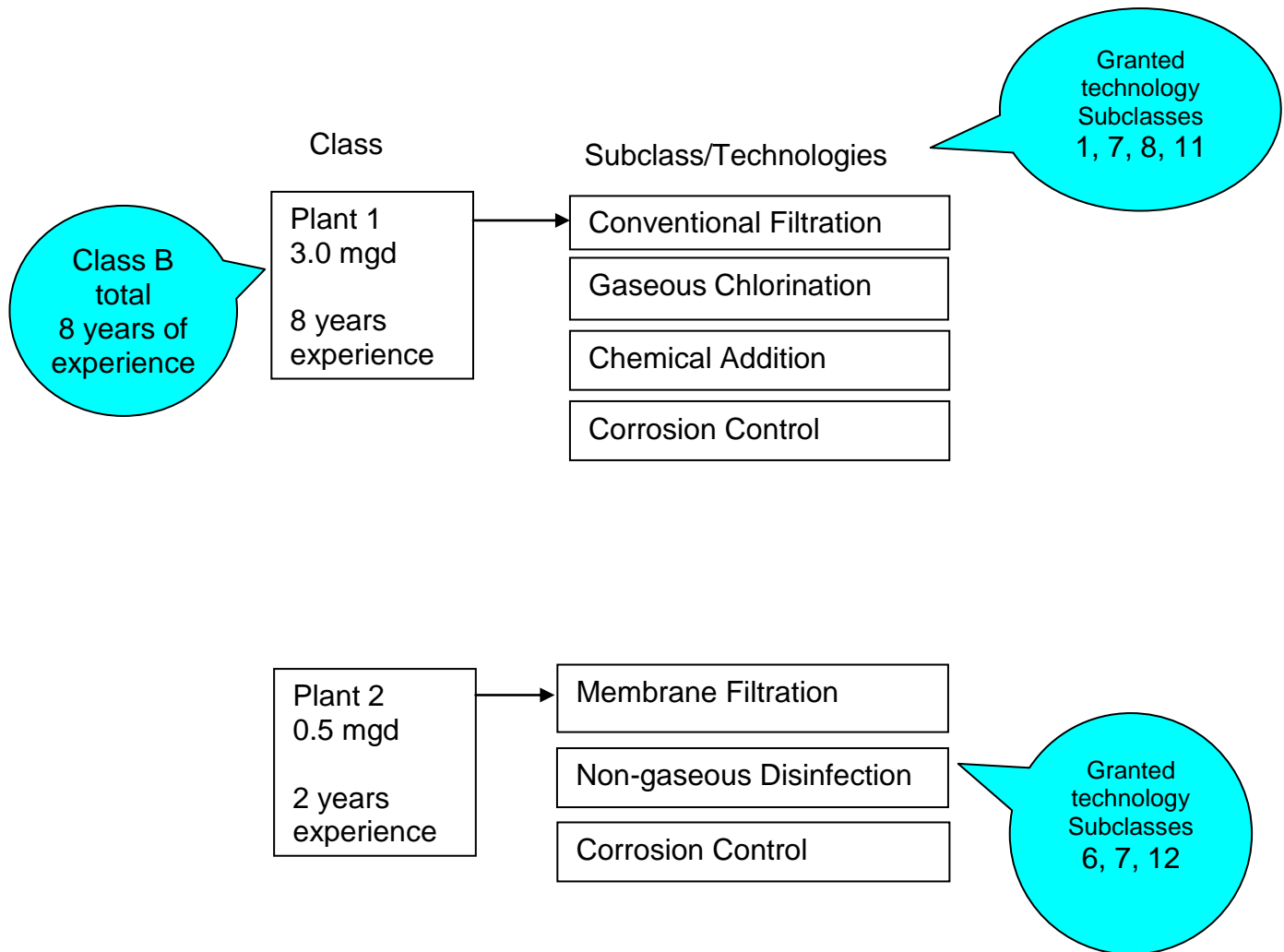
Identify what additional subclassifications the applicant may obtain through testing. This is based on meeting a one-year experience requirement for that specific technology



## Processing Procedures for Reciprocity

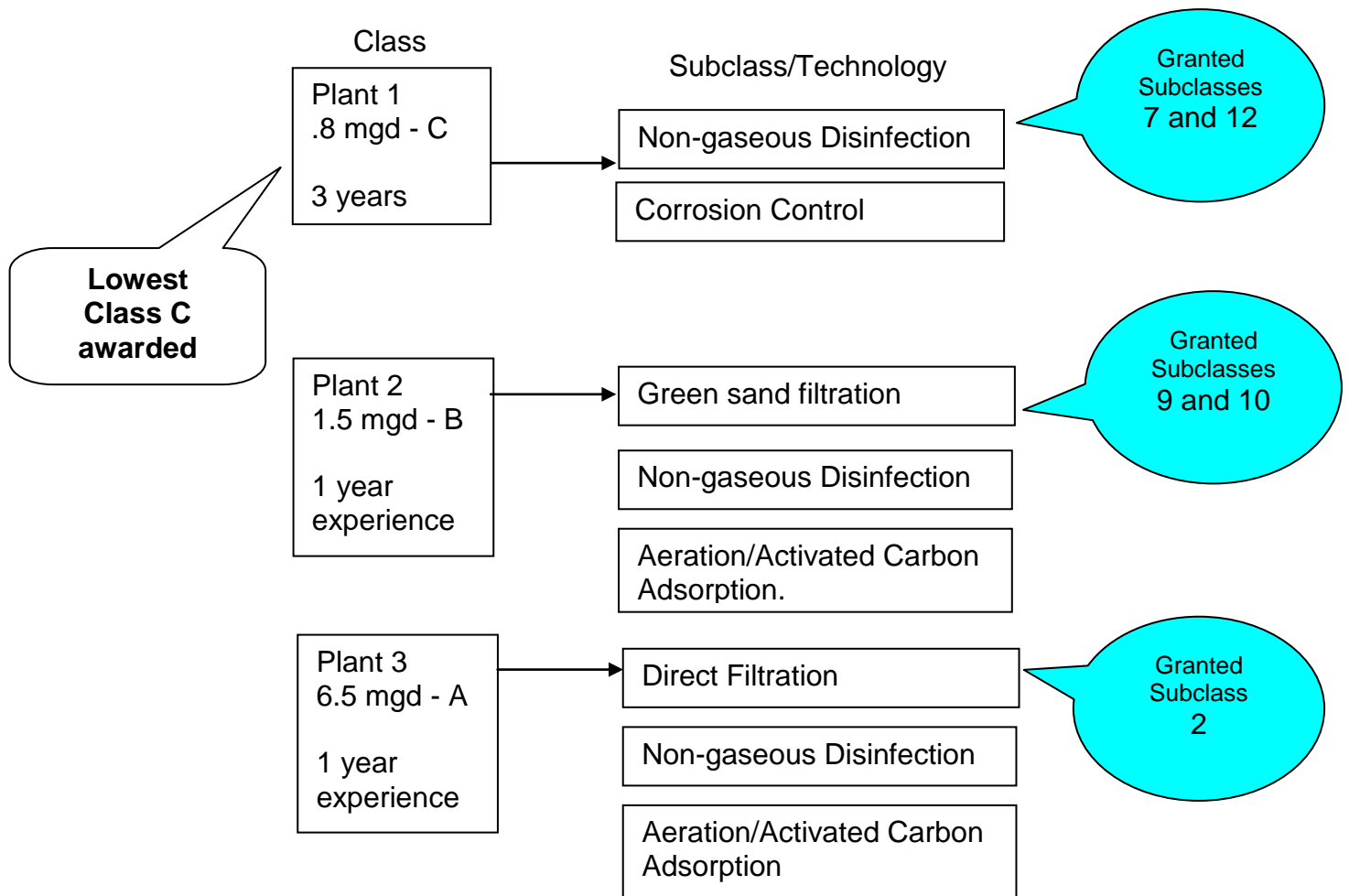


## Drinking Water System Example 1 Track I



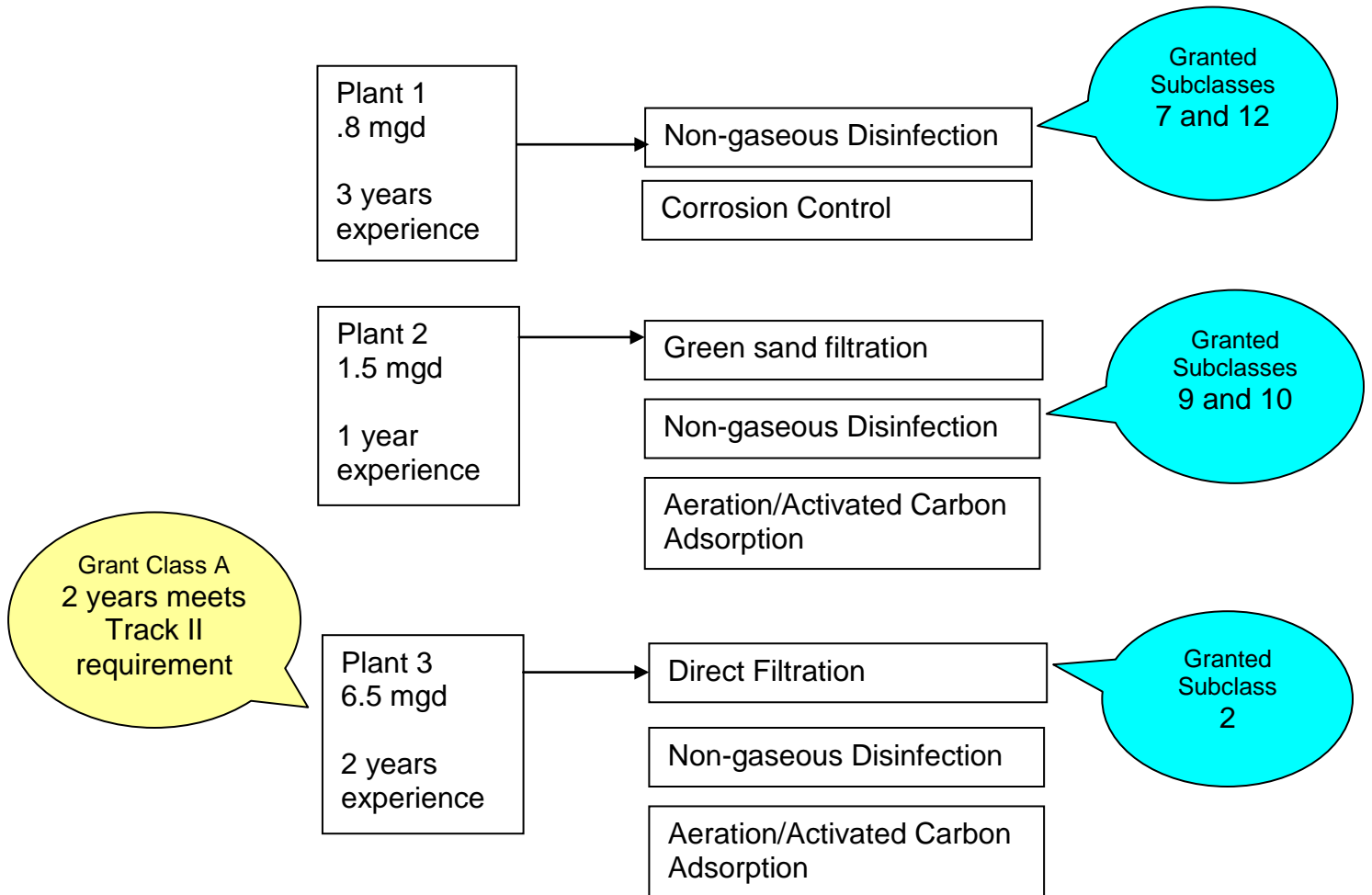
This applicant for reciprocity is granted a Water System **Class B**, (highest class meeting experience) and Subclassifications **1, 6, 7, 8, 11 and 12** (all technologies operated meeting the one year experience requirement). Once this applicant passes PA exams for subclasses 2, 3, 4, 5, 6, 9, and 10, the applicant is also given experience for these treatment technologies as provided by 25 Pa. Code Chapter 302. This reciprocity action is based on the licensing state indicating that their state examination did not contain specific examination material matching the skills, knowledge and abilities on the proper operation of each of the technology subclassification requested.

## Drinking Water System Example 2 Track I



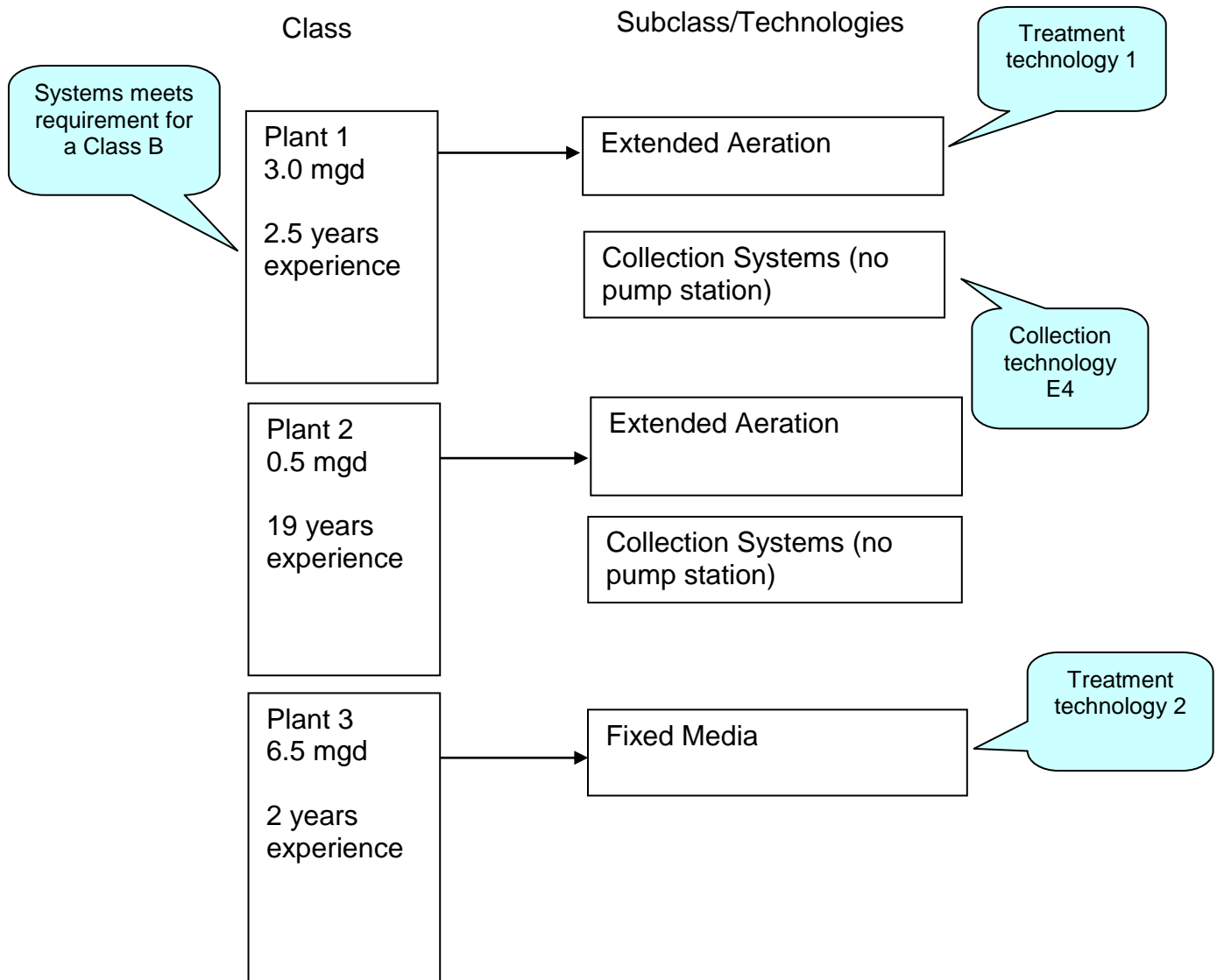
This applicant for reciprocity is granted a Water System **Class C**, and Subclassifications **2, 7, 9, 10 and 12** (based on all technologies meeting the one year experience requirement). The applicant is given experience requirements for other related treatment technologies as provided by 25 Pa. Code Chapter 302. However, the applicant must pass the technology examinations for subclassifications requested. Experience granted includes subclassification 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.

**Drinking Water System  
Example 3  
Track II - Bachelor Degree  
Biology**



This applicant for reciprocity is granted a Water System **Class A**, (experience requirement for Track II) and Subclassifications **2, 7, 9, 10 and 12** (all technologies operated meeting the one year experience requirement). The applicant is given experience requirements for other related treatment technologies as provided by 25 Pa. Code Chapter 302. However, the applicant must pass the technology examinations for subclassifications requested. Experience granted includes subclassifications 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.

**Wastewater System  
Example 4  
Track II  
Associate Degree**



This applicant for reciprocity is granted a Wastewater System **Class BE**, (meets experience requirement for Track II) and subclassifications **1, 2, 4** (all technologies operated meeting the one year experience requirement). The applicant is given experience requirements for other related treatment technologies as provided by 25 Pa. Code Chapter 302. However, the applicant must pass the technology examination for the subclassification requested. Experience granted includes subclassification 3 (lagoon and ponds).

# APPENDIX F

## DECISION MATRIX – Board/DEP Staff Actions

	OCP	BOARD SECRETARY	BOARD	SEND LETTER	BOARD RE-CONSIDER
<b>INITIAL CERTIFICATION</b>					
Return for Incomplete Application	X	X			
Ineligible Due to Test Failure	X	X		X	
Denial for CHR			X	X	X
Ineligible - Didn't Meet Requirements	X	X	X	X	X
<b>CERTIFICATION RENEWAL</b>					
Return for Incomplete Application	X	X			
Denial for Renewal Due to Insufficient Continuing Education Contact Hours		X	X	X	X
<b>RECIPROCITY</b>					
Return for Incomplete Application	X	X			
Denial for CHR			X	X	X
Ineligible - Didn't Meet Experience Requirements		X	X	X	X
Ineligible due to Non-valid Certification		X		X	
<b>UPGRADES/ DOWNGRADES</b>					
Return for Incomplete Application	X	X			
Ineligible - Didn't Meet Experience Requirements	X	X		X	X
Ineligible - Didn't Pass the Test		X		X	
Issue Upgrade (Class or Subclass)	X		X	X	X
Issue Downgrade with Lower Class Certificate	X	X	X	X	X

Incomplete Application – No CHR, no payment, not notarized, no experience listed, no cert requested, no supervisor signature.

OCP – Operator Certification Program, Division of Training, Technical and Financial Assistance, Bureau of Safe Drinking Water.

# Appendix G

3900-FM-BSDW0479 9/2012



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF SAFE DRINKING WATER

## OPERATOR COMPLIANCE REPORT

### Operator Information

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Client ID (if certified) & Certification Level: \_\_\_\_\_

If Operator is a Circuit Rider, Identify Name of Circuit Rider Business: \_\_\_\_\_

What Facility is the Operator currently employed at: (Name & Permit ID#): \_\_\_\_\_

	<u>Yes (how many)</u>	<u>No</u>
Any NOV's issued to this operator?	_____	_____
Any Fines issued to this operator?	_____	_____
Any Orders issued to this operator?	_____	_____
Any Violation of State/Federal laws associated with the operation of a water/wastewater treatment system?	_____	_____

Explain why you believe this operator should not be certified (problems or issues in performing operator duties and responsibilities, incompetence, falsifying records, negligence)?

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\_\_\_\_\_  
Operations Chief or Operations Manager

\_\_\_\_\_  
Date

Complete and mail this signed report to:

State Board for Certification of Water and Wastewater System Operators  
Attention: Board Secretary  
PO Box 8454  
Harrisburg, PA 17105-8454