

# Three Operator Misconceptions About Licensing



John Murphy, MassDEP  
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# #1 – Sequential License Exams

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- **The Board of Certification recommends the exams are taken in sequential order.**
- **Operator - “...In a few years when the shift supervisor retires, then I will take the Grade 5/6 Exam, pass, and apply for the vacant position...”**



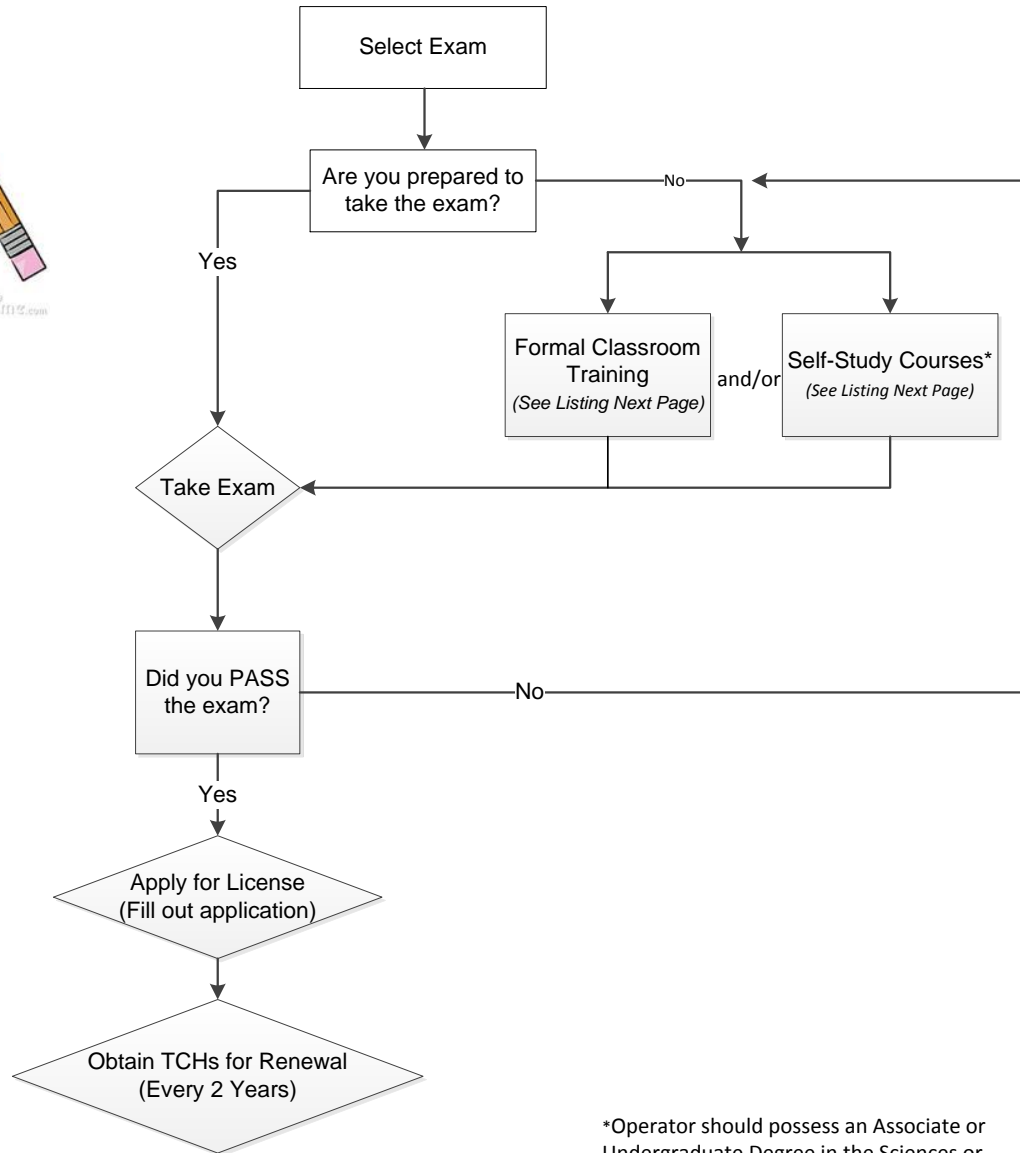
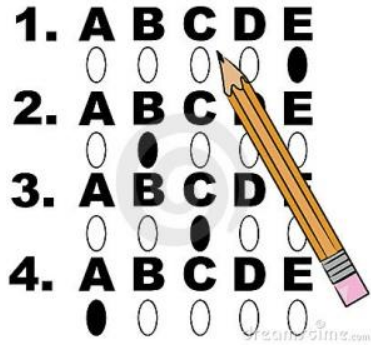
# Building a knowledge base

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- **Each wastewater exam passed and grade level achieved for your license provides a foundation to build upon for being able to pass a more advanced wastewater exam.**
- **Grades 1/2 present operational basics**
- **Grades 3/4 cover standard facilities**
- **Grades 5/6 detail the advanced techniques.**



# Recommended Preparation for a WWTP Operator's License Examination



\*Operator should possess an Associate or Undergraduate Degree in the Sciences or Engineering for the Self-Study Path

## **RECOMMENDED COURSES FROM NEIWPCC AND MWPCA**

### **MUNICIPAL LICENSES**

#### **Grades 1M-2M:**

- Basic Operation of Municipal WWTP (6 Sessions)
- Basic Wastewater Math (3 Sessions)
- Basic Wastewater Laboratory Procedures (4 Sessions)

#### **Grades 3M-4M:**

- Intermediate Operation of Municipal WWTP (3 Sessions)
- Basic Math Review for Operators
- Municipal Wastewater Operation Review
- Process Control Laboratory

#### **Grades 5C-6C:**

- Advanced Operation of Municipal WWTP (3 Sessions)
- Advanced Math Review for Operators
- Review for Industrial Certification Exams (Grades 11-21)
- Mass. Wastewater Management Program
- Advanced Pump Course

### **INDUSTRIAL LICENSES**

#### **Grades 1I-2I:**

- Basic Industrial WWT (5 Sessions)
- Review for Industrial Certification Exams (Grades 11-21)

#### **Grades 3I-4I:**

- Advanced Industrial WWT (3 Sessions)

## **TRAINERS FOR TYPICAL SELF-STUDY COURSES**

- University of California Sacramento
- CEUPlan.com
- RoyCEU.com
- Skillworks
- WEF Online

## **OTHER NEW ENGLAND TRAINING PROVIDERS**

- Falcone Environmental Services
  - NEWWTA
  - Peterson School
  - Practical Applications
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# Why these courses?

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- **Introduce terminology**
- **Cover the basics: operations, laboratory testing, math**
- **Teach a “Problem Solving Approach”**
- **Typical exam practice questions**
- **Learn how to use the ABC Formula Sheet**



## **#2 – Just take a review course to pass the exam**

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- **Many operators believe that they only need to take the review course to pass the examination.**
- **Operator – “...Just take the review course and you will pass. No need to study or take other courses, the exam is easy...”**



# What are review courses?

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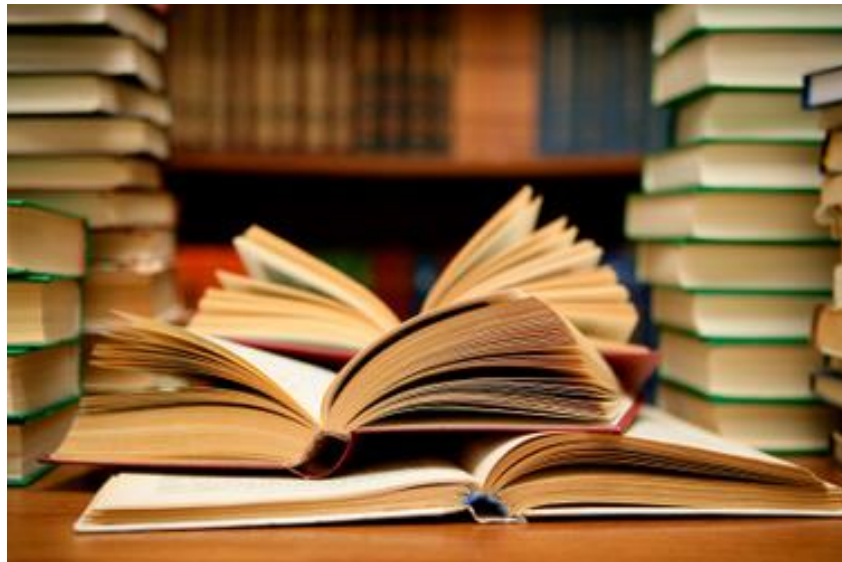
- **These courses “review” the major areas, not “teach” exam material.**
- **Set up to fill in the gaps and refresh concepts that may have been forgotten.**
- **Need to have the base knowledge and aware of areas that need strengthening.**
- **Operators need to study additional material to prepare for the exam.**



## #3 – Training will cover all exam material

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- **Operator – “...If it is on the exam, we will review it in class. I don’t need any other courses or studying to prepare...”**





# The Exam

- License examinations can have questions from as many as 30 different content areas.
- This is why the emphasis is on developing and building your knowledge base.

Massachusetts Board of Certification of Wastewater Treatment Plant Operators

**SCORE REPORT**

COMBINED WASTEWATER TREATMENT PLANT OPERATOR - GRADE 6 EXAMINATION

UNITED STATES OF AMERICA

CANDIDATE ID NUMBER: [REDACTED]  
EXAMINATION DATE: [REDACTED]  
CONTROL ID: [REDACTED]

You have passed this examination. Your score is 71% correct.  
The passing score is 70%.

Content Area	Your Score / Max Score
1. Administration	2/04
2. Chemical Treatment	0/02
3. Collect Samples	2/02
4. Evaluate Equipment	13/13
5. Evaluate Wastestream	2/04
6. Interpret Lab Analyses	1/02
7. Additional Treatment	0/01
8. Chemical Addition	3/03
9. Disinfection	2/04
10. Secondary Treatment	11/16
11. Solids Handling	4/07
12. Tertiary Treatment	2/03
13. Operate Equipment	11/14
14. Perform Lab Analyses	1/03
15. Perform Maintenance	8/10
16. Rules & Regulations	4/04
17. General Safety	1/03
18. Security	2/03
19. Sources	2/02
<b>TOTAL</b>	<b>71/100</b>

See page 2 for additional information.

This examination was developed solely by the Certification Committee for Environmental Professionals (CCPEP), Boards of Certification (ABC) for the Massachusetts Board of Certification of Wastewater Treatment Plant Operators. The exam was provided by Applied Measurement Professionals, Inc. (AMP).

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# Preparing for the Licensing Exam

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- **The licensing exams should be taken in sequential order as education is a building block process.**
- **Training courses should also be taken in the proper sequence.**
- **In addition to taking training courses, operators will need to study at home, or at work, to prepare for the exam.**
- **Some operators will need to take additional courses to prepare for the exam.**



# Preparing for the Exam

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- **NEIWPCC and the state associations offer additional training courses to prepare for the exam or maintain TCH compliance.**
- **Regulations can be found on the State web sites. Massachusetts operators should review sections:**
  - **314 CMR 12: O&M Standards for WWTP**
  - **257 CMR 2.00: Certification of Operators**
  - **NEIWPCC's Basic and Intermediate Operation of MWTP courses review the above regulations.**

# Educate your Manager

- **Need approval and support for training courses.**
- **Need to budget training costs and schedule staff time off.**
- **Current and future training needs.**



**Thank you for your time.**

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