Certified Treatment Designer Exam Blueprint

The Certified Treatment Designer (CTD) Exam consists of 150 multiple choice questions related to the tasks needed to correctly configure point-of-use and point-of-entry water treatment systems for residential applications or troubleshoot such existing systems.

The tasks reflect the following domains and knowledge areas:

Treatment Application	17% of exam
Gather the necessary information to guide treatment system configuration	
Recognize pitfalls and limitations of treatment technologies and equipment	
Determine the appropriate treatment technology solution and equipment size	

Diagnosis of Existing Systems	17% of exam
Collect the necessary information to determine the purpose of the treatment system and evaluate sizing and treatment selection concerns	
Recognize premature component failure	
Use knowledge of treatment equipment operations to determine diagnostic steps	

Problem Resolution (Existing Systems)	13% of exam
Determine the cause behind treatment failure and recommend appropriate resolution	

Water Quality	13% of exam
Apply the knowledge of contaminant behavior and water chemistry to determine appropriate treatment	
Apply the knowledge of water source characteristics to determine contaminants of concern	

Product Operating Parameters (Treatment)	16% of exam
Recognize potential problems at the installation site that may interfere with equipment operation	

Regulatory Knowledge/Product Certification	7% of exam
Recognize how local regulations such as discharge and installation permits may impact treatment selection and application	
Recognize how certified product requirements impact treatment selection	
Understand product certification standards and testing process	

Market Knowledge	6% of exam
Apply the knowledge of emerging and unregulated contaminants to treatment selection	
Apply the knowledge of available treatment technologies to determining treatment solutions	
Apply WQA Code of Ethics marketing guidelines	

Treatment Maintenance Procedures	6% of exam
Use the knowledge of required maintenance procedures that impact equipment operation	
Provide guidance on what maintenance is required for proper equipment operation	

Product Operations (Software)	5% of exam
Recognize and resolve potential problems with applying WiFi-enabled systems	

Exam Eligibility

Eligibility requires either the completion of the WQA Water Treatment Design course and a minimum of 1 year's field experience, or a minimum of 3 years' field experience and the completion of the WQA Ethics course.

Study Materials & Courses

The exam assumes a level of proficiency that draws on both field experience and basic knowledge of point-of-use/point-of-entry water treatment. Use of the recommended study materials or completion of WQA's training courses does not guarantee success on the exam.

1. WQA Online Knowledge Base
   The articles found in the following WQA Online Knowledge Base categories are recommended.

   Glossary of Terms
   Understanding Water
   Water Contaminants
   Treatment Methods & Technologies
   Designing Treatment Systems
   Sizing Water Treatment Devices

   Environmental Considerations
   Installing Water Treatment Devices
   Troubleshooting Water Treatment
   Understanding the Law
   Serving the Customer – Why Ethical Decisions are Hard

   WQA members have complimentary access to the online Knowledge Base (wqa.org/kb) and may use that resource as study material for the exam.

2. WQA Water Treatment Design course
   The Water Treatment Design course consists of 4 modules and can be taken as an instructor-led version from the CWS program beginning with Assessing Water Quality Problems, or as self-study, delivered online through the WQA Water Treatment Learning Center. The course addresses the Knowledge Base topics indicated in item 1 above in a stepwise, interactive manner. CTD exam candidates with less than 3 years of experience must complete this course in full before registering for the exam.

   CTD exam candidates with 3+ years of experience do not have to complete the course in full and may purchase a three-month access at a reduced fee for the purpose of review. Use the CTD Exam registration form to order the course for review.

3. Personnel who have completed the Water Treatment Design course in full may request a one-time 90-day complimentary access to their learning path after registering for the exam. Access to the online Knowledge Base is included with the course. Please select *Complimentary Access* in the payment information section of the CTD Exam registration form to order.