

Training Evaluation Request
Oregon Environmental Services Advisory Council
Watura
Wastewater Pumps Operation

Course title: Wastewater Pumps Operation

Drinking Water CEUs: 0 h

Wastewater CEUs: 2.0 h

Instructor bio: With a background in electromechanical engineering, **Christian CALON** began his career as an operator in a water and wastewater utility. He then became a professional trainer in water and wastewater systems, specializing in pumping. Later, he joined the Compagnie des Eaux et de l'Ozone (Water and Ozone Company), starting as a Regional Technical Director before advancing to lead the national research unit. After the company merged with Veolia, he was appointed as the leading expert in pumping systems.

Course description: This course covers various types of pumps used in wastewater systems, including centrifugal pumps, Archimedes screw, and pneumatic ejector pumps. It provides detailed instruction on the installation and commissioning of centrifugal pump systems, with a focus on different installation types, such as wet wells and dry wells.

Learning goals:

- Distinguish between the different types of pumps used in wastewater systems
- Install and operate a centrifugal pumping unit in a wastewater system

Tracking attendance method:

The e-learning platform offers a highly interactive experience designed to engage learners at every stage. It begins with an initial test to assess knowledge and tailor the learning journey. The course includes short, focused videos interspersed with mandatory training quizzes that reinforce key concepts and ensure active participation. Students are required to watch every video entirely and to answer practice questions before advancing to the next course module. Students cannot skip course content. A final quiz at the end of each chapter evaluates overall comprehension and certifies the learner's mastery of the material. Students must obtain a minimum score of 70% for every chapter's final quiz to successfully complete the course and obtain the certificate of attendance. The platform automatically tracks each learner's learning time. The real learning time is indicated alongside the delivered credits in the course completion certificate.

Course outline: Wastewater Pumps Operation

Initial Test		18 min
1. Different Types of Pumps Used in Wastewater Treatment	1.1. Different Types of Impellers	6 min
	1.2. Sealing in Centrifugal Pumps	4 min
	1.3. Improving the Mechanical Seals in Pumps	4 min
	1.4. Cooling Wastewater Pump Motors	4 min
	1.5. Chapter 1 - Fact Sheets	3 min
	Chapter final test	6 min
2. Installation and Commissioning of a Centrifugal Pump System in Wastewater Treatment Plants	2.1. Different Types of Pump Installations	6 min
	2.2. Wet Well Installation Instructions and Operating Guidelines	5 min
	2.3. Dry Well Installation Instructions and Operating Guidelines	5 min
	2.4. Commissioning and Winterization of Wastewater Pumping Systems	5 min
	2.5. How to Operate Centrifugal Pumps in Series or Parallel	5 min
	2.6. Pumps in Parallel: Points to Watch Out For	5 min
	2.7. Installation of Vertical Axial Flow Pumps	5 min
	2.8. Chapter 2 - Fact Sheets	4 min
	Chapter final test	12 min
3. Other Types of Pumps	3.1. Archimedes Screw Pumps	5 min
	3.2. Pneumatic Ejectors	5 min
	3.3. Chapter 3 - Fact Sheets	1 min
	Chapter final test	4 min
Total Learning Time		112 min
Requested Contact Hours		2 h