Training Evaluation Request
Oregon Environmental Services Advisory Council
Watura
Chemical Reactions in Water Treatment

Course title: Chemical Reactions in Water Treatment
Drinking Water CEUs: 1.0 h
Wastewater CEUs: 0 h

Instructor bio: **Maelle LIMOUZIN** is a Water Resources and Environmental Engineer who studied at UT Austin. She spent 10 years working in a consulting company for drinking water and wastewater public utilities and 3 years in a company that manages drinking water and wastewater facilities. Currently, she uses her technical expertise and experience to train public and private organizations in managing their drinking water and wastewater systems.

Course description: Water chemistry plays a crucial role in understanding water quality and managing water treatment. This course explores key water chemistry concepts, including pH, acid-base reactions, redox reactions, water mineralization, hardness, alkalinity, and solubility.

Learning goals:

- Describe the key water chemistry concepts
- Describe the role of chemical reactions in water treatment

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: Chemical Reactions in Water Treatment

Initial Test		10 min
1. Acid-Base Reactions	1.1. Course Overview	1 min
	1.2. pH	5 min
	1.3. Acid-Base Reactions	5 min
	1.4. Chapter 1 - Fact Sheets	1 min
	Chapter final test	3 min
2. Key Concepts of Redox Reactions	2.1. Oxidation and Reduction	5 min
	2.2. Redox Reactions	5 min
	2.3. Chapter 2 - Fact Sheets	1 min
	Chapter final test	3 min
3. Water Chemistry Basics	3.1. Water Mineralization	5 min
	3.2. Water Hardness	4 min
	3.3. Alkalinity	4 min
	3.4. Solubility	4 min
	3.5. Course Glossary	3 min
	3.5. Chapter 3 - Fact Sheets	2 min
	Chapter final test	6 min
Total Learning Time		67 min
Requested Contact Hours		1.0 h