

Requesting Organization: Clean Water Services (CWS)

Course Title: Unless Something Goes Terribly Wrong

Date: To be determined/on demand. This training is delivered in-person as crews have availability (e.g. during inclement weather on days that do not allow for field work).

Total Training Time: 90 minutes

Location: Clean Water Services Field Operations Facility, in Beaverton, Oregon

Instructors: Justine Abrook (Senior Process Analyst), Greyson Carkner (Wastewater Plant Operator 2)

CEUs Requested: 0.1-0.2

Course Outline

This documentary follows the operators, mechanics, managers, and apprentices at the Portland Water District East End Wastewater Treatment Plant in Maine, providing an engaging look at the science, operations, and people behind modern wastewater treatment.

Through personal stories, workplace challenges, and the emerging statewide biosolids disposal crisis, participants gain an understanding of how wastewater treatment protects public health and the environment. The film explores watersheds and pollution runoff, biological wastewater treatment processes, biosolids management, PFAS contamination, infrastructure maintenance, regulatory challenges, and system resilience.

Overall Course Training Goals

- Understand the relationship between watersheds, pollution runoff, and water quality protection.
- Increase awareness of wastewater treatment's role in protecting public health and preventing disease.
- Understand the basic functions of microorganisms in biological wastewater treatment processes.
- Gain knowledge of biosolids generation, management, and disposal challenges.
- Increase awareness of PFAS contamination and its impacts on wastewater treatment operations.
- Understand the importance of infrastructure reliability, asset management, and operational resilience in wastewater systems.
- Recognize the essential role wastewater professionals play in protecting public health and the environment.

CEU Summary (Relevancy to Wastewater Operator Certification)

This documentary is directly relevant to wastewater treatment operations and provides education on core principles of wastewater treatment and environmental protection.

Participants are introduced to watershed protection, nonpoint source pollution, biological treatment processes, biosolids management, PFAS contamination, infrastructure reliability, and regulatory challenges facing the wastewater industry.

Full transcript of film available upon request. See film website at:

<https://www.cardboardseagull.com/>

Instructor Information

Justine Abrook, Senior Process Analyst	Justine Abrook is a Senior Operations Analyst at the Clean Water Services Durham facility, bringing over two decades of experience in the wastewater industry. She earned her B.S. in Environmental Science and Forestry from SUNY College of Environmental Science and Forestry and holds a Grade 4 Wastewater System Operator license. After relocating from the East Coast in 1999, Justine began her career with the U.S. Army Corps of Engineers at the Bonneville Dam Project and joined Clean Water Services as an operations trainee in 2003. Over the years, she has operated all four of the agency's treatment facilities, gaining comprehensive, hands-on experience in utility operations. In addition to her work at Clean Water Services, Justine served as Vice Chair of the Oregon Department of Environmental Quality's Operator Certification Advisory Committee, where she contributed her expertise to assisting in the development and refinement of the certification program for the next generation of wastewater professionals.
Greyson Carkner, Wastewater Plant Operator 2	Greyson Carkner has been an Operator with Clean Water Services at the Rock Creek Treatment Plant for 7 years. Greyson co-chairs the 24-member Employee Advisory Council and participates in Career Technical Education presentations at local high schools. He has a bachelor's degree in environmental science from Portland State University. He got into wastewater by securing a job at Alpenrose Dairy months after he graduated. Their system was small and limited, but it served as a great space for him to learn the ropes. He was in charge there for about 2 years and then got hired at Clean Water Services and has been there ever since.

Attendance Tracking Method:

1. Participants sign in upon arrival.
2. Participants sign out at the conclusion of the course.
3. Supervisor verifies attendance.
4. Roster submitted to OESAC by Learning Coordinator for participants who attend the full one-hour training.
5. Attendance records are maintained by the Learning Coordinator.