

AVTEC FALL 2024/SPRING 2025

ON-CAMPUS AND HYBRID COURSES

The Alaska Energy Authority (AEA), in cooperation with the Alaska Vocational Technical Center (AVTEC), is offering the following Power Plant Operator, Bulk Fuel Operator, and Person in Charge Training courses for the Fall of 2024 and Spring of 2025.

By offering the Power Plant course in a hybrid method, Power Plant Operators (PPO) from rural Alaska can increase their knowledge and skills needed to operate and maintain their power plant while remaining in their community for the majority of the class. Student interacts with an AVTEC instructor online in a pre- scheduled classroom video conference. Additionally, they will self-study each day on their own schedule and take online tests at the end of each week. The amount of time per day a student needs to allocate for self-study is dependent upon their experience and study habits, which is typically one (1) to three (3) hours. The Bulk Fuel Operator (BFO) class and the Person In Charge (PIC) class will be in-person classes at AVTEC.

The online portion of the PPO course can be accessed from anywhere with adequate internet connectivity. A student can use nearly any device including a laptop, desktop computer, tablet, or smartphone to access video conferences and course materials, turn in assignments, and take quizzes.

A certificate is awarded to students who complete each course with a passing grade.

All training is administered by AEA, delivered by AVTEC in Seward, Alaska, and funded by the Denali Commission (DC).

Utility and Tank Farm Managers, if you have operators who need this training please contact AEA Rural Assistance Manager Justin Tuomi at (907) 771-3093 or jtuomi@akenergyauthority.org to enroll them in one of the upcoming courses. Space is limited so please do not hesitate. Your facility's efficiency, reliability, and operation depend on trained and knowledgeable staff.

Bulk Fuel Operator (BFO) Training (On Campus)

In Person: Monday, August 19, 2024 – Friday, August 30, 2024

In Person: Monday, June 3, 2025 – Friday, June 13, 2025

Course Description: This course provides students with the knowledge and skills necessary to safely operate and maintain a bulk fuel storage facility in accordance with state and federal regulations. The program includes bulk fuel storage facility construction, facility operations, tank farm inspection criteria, facility maintenance, inventory control, tank farm safety, firefighting, spill detection, and spill response planning.

Fuel Shore Side Person In Charge (PIC) Training (On Campus)

In Person: Monday, TBD, 1 week class

Course Description: This course will cover United States Coast Guard policy requirements and inspections. Labeling and hazards of gasoline, diesel, and jet fuel. Arrangement of tanks, piping instrumentation, and venting. Product measurements and calculations. Offloading and documentation. Tank cleaning and confined space. Marine pollution, safety, firefighting, and emergency procedures. Marine and terminal casualties and explosions. Fall protection. Lockout tag out. This course is open to all students who work with the storage, transfer, and handling of fuel in bulk in rural Alaska. AEA recommends that students complete the BFO and/or the PPO courses or have extensive experience before enrolling in the PIC course.

Power Plant Operator (PPO) Training (Hybrid – Online and On Campus)

PPO ONLINE: Monday, September 9, 2024 – Friday, November 15, 2024 Monday-Thursday 9 a.m. to Noon Classroom (video conference) time. Test/Quiz on Fridays **In-Person LAB:** Monday, December 2, 2024 – Tuesday, December 17, 2024 (in Seward) **OR In-Person LAB:** Monday, January 6, 2025 – Tuesday, January 21, 2025

PPO ONLINE: Monday, January 27, 2025 – Friday, April 4, 2025 Monday-Thursday 9 a.m. to Noon Classroom (video conference) time. Test/Quiz on Fridays In-Person LAB: Monday, April 14, 2025 – Tuesday, April 29, 2025 (in Seward) **OR** In-Person LAB: Monday, May 12, 2025 – Tuesday, May 27, 2025

Ten (10) weeks of online training and two weeks of Labs to receive the PPO certificate.

Course Description: This is an entry-level course for power plant operators that provides the necessary skills to operate and maintain a power plant. The program includes engine maintenance, troubleshooting, and theory, electrical systems and generators, introduction to electrical distribution systems, diesel-electric set operation, control panels, paralleling generator sets, load management, fuel management, waste heat recovery, plant management, as well as how to integrate both hydro and wind systems. PPOs are encouraged to take BFO and PIC training if they are responsible for fuel handling in the power plant. The PPO course consists of three (3) hours of classroom (Zoom) time, and approximately three (3) hours of homework/personal study time, each instructional day. There is a required, in-person Lab, in Seward, which must be completed in addition to the online training. Homework/personal time depends on study habits, work, and family life. Online and lab must be completed and passed to receive a certificate.