TRAINING SESSION ANNOUNCEMENT
317 FUNDAMENTALS OF BIOLOGY AND CHEMISTRY

County: Honolulu
Location: Sand Island WWTP Classroom, 2nd Floor Ops Bldg
1350 Sand Island Pkwy
Dates: September 19 and 20, 2018 [REVISED DATES]
Times: 8:00 a.m. – 11:00 a.m.
Lunch (11:00 a.m. – 12:00 p.m.)
12:00 p.m. – 3:00 p.m.
Audience: Operators
Educational Point: 1.0 CEU
Instructor: Bruce Zhang

COURSE DESCRIPTION
This training program is designed to prepare operators to understand the chemical and biological basis of various treatment processes such as chemical addition, disinfection, chemical odor control, activated sludge, biological nutrient removal, and aerobic/anaerobic digestion. Part 1 covers the fundamentals of chemistry such as stoichiometry, pH, chemical equilibrium, Henry’s Law, coagulation, precipitation and neutralization. Part 2 covers the fundamentals of biology such as types of microorganisms, cell composition, molecular tools, metabolism, nutrient requirements, bacteria yield, stoichiometry, growth kinetics, and aerobic/anoxic/anaerobic reactions. Biological phosphorus removal will be covered in terms of basic principles of luxury uptake of phosphorus, start-up, operation, and maintenance of different types of systems. Part 3 is a brief overview of chemical and biological treatment processes in wastewater treatment plants.

REGISTRATION
All Treatment Plant Personnel (County, State, Private):
TUITION: $110
Please mail application form and tuition directly to the Statewide Wastewater Training Center.
Include a CHECK payable to: RCUH We do NOT accept credit cards or cash
Application form is at: www.wrrc.hawaii.edu/swotc.shtml

Mail to: Statewide Wastewater Operator Training Center
University of Hawaii, Water Resources Research Center
2540 Dole Street, Holmes Hall 283
Honolulu, Hawaii 96822.

Fax: 808-956-5014 Email: uhwwtrainingcenter@gmail.com Deadline: Sep 17, 2018

The minimum enrollment for this class is 5.
If fewer than five students are enrolled by the deadline, the class will be cancelled

EQUAL OPPORTUNITY
Any disabled person requiring special needs will be accommodated. Any disabled person requiring special assistance should contact the Administrator at 956-7298 or uhwwtrainingcenter@gmail.com.