William Ray

EDUCATION

1972, Bachelors in Chemistry, University of California at Irvine 1986, Masters in Chemistry, California Polytechnic University at Pomona

AWARDS, FELLOWSHIPS, GRANTS

California Water Environment Association, Crystal Crucible award California Water Environment Association, Laboratory Committee Chair California Water Environment Association, San Francisco Bay section, Quality Assurance Person of the year US Department of Justice, Commendation

CURRENT POSITION

Currently President/Owner of William Ray Consulting, LLC a laboratory compliance consulting business formed in 2010

Prior Experiences

1973—1981, Jacob's Laboratories (formerly Pomeroy, Johnston and Bailey). Initially a bench chemist, rose to Laboratory Director.

1981—1985, California Regional Water Quality Control Board, Colorado River Region. Sole operator of the Board's laboratory. Also conducted laboratory audits of permitted facility laboratories.

1985-1995, Department of Health Services, Sanitation and Radiation Laboratory and the Environmental Laboratory Accreditation Program. Bench chemist in the Sanitation and Radiation Laboratory. Lead assessor for ELAP.

1995 to 2013, State Water Resources Control Board. Manage the Board's quality management program.

Experiences

19 years of quality assurance program management.

15 years of laboratory bench experience conducting environmental testing for bacteria, physical properties, general chemistry, metals, and radiochemistry.

- 9 years of assessor experience.
- 5 years laboratory compliance consulting

PUBLICATIONS

"Legally Defensible", Water Environment Laboratory Solutions, v16, issue 4, August/ September, 2009

"Twin Time Bombs in the Proposed Methods Update Rule", Water Environment Laboratory Solutions, v18, issue 2, April/May, 2011

"The J flag doesn't Mean 'Junk", Water Environment Laboratory Solutions, v18, issue 3, June, July, 2011

"Neither Here nor There" A discussion on the final language of 40CFR Part 136.7, Water Environment Laboratory Solutions, v19, Issue 5, October, November, 2012

TRAINING GIVEN (NOT A COMPLETE LIST)

"Responding to Deficiencies", AWWA, May, 2010
"Essential QC Workshop:, CWEA, November 2010 (co-teacher)
"2010 Methods Update Rule", CWEA, April, 2011
"Alternate Test Procedures", CWEA, March 2012
"Improving Audit Experiences", CWEA, September 2013
"The California Experience", TNI, August 2014
"How to make a Training Video", September 2015
"Field Sampling and Analysis", November 2015

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REFERENCES

Will be supplied upon request.