

# TIMOTHY BANCROFT, P.E.

## Principal

## Chemical Engineering

### PROFESSIONAL EXPERIENCE

Mr. Bancroft has over twenty years of Environmental, Hazardous Materials and related Chemical Engineering experience, including an extensive regulatory background focusing on hazardous materials handling, waste treatment and code compliance (e.g., California & International Building, Fire and Mechanical Codes.). His experience has involved conducting compliance audits, developing regulatory guidelines, and performing building occupancy and related chemical process plan reviews. He has actively participated on code rewrite and adoption committees. In addition, Mr. Bancroft has engineering design experience in hazardous materials and specialty process piping systems, as well as planning and design for biopharmaceutical laboratories and manufacturing facilities.

### PROJECT EXPERIENCE

#### Regulatory Experience

Consultant to various authorities having jurisdictions, providing plan review and inspection services as well as providing Hazardous Materials program management for CUPA compliance for the cities of Burlingame, Fremont, Hayward Livermore/Pleasanton, Santa Rosa, and Tracy California. Mr. Bancroft also provides specialized forensic consulting to the environmental crimes team for the police department.

#### Hazardous Locations & Equipment

Provided engineering designs, specifications and consulting services for specifying and certifying rated (classified) electrical areas and equipment, as well as explosion control and mitigation. This comprises various systems for dust handling applications, flammable gases and flammable solvents, including cannabis extraction skids utilizing volatile solvents.

#### Professional Engineer Certification (PE)

As a California Registered Professional Engineer; provided 3<sup>rd</sup> part certification per 22 CCR 66265.192 for hazardous waste tank assessment. Qualified Industrial Stormwater Practitioner (QISP- CBPELSG). Cannabis Odor mitigation plan, 3<sup>rd</sup> party and standards (Non UL-listed equipment) extraction equipment both Non-flammable and Flammable closed loop Cannabis Manufacturing systems. Provided consulting services for a carbon dioxide enrichment system for an indoor cannabis cultivation facility.

#### Consulting Subject Matter Expert (SME)

Consultant to Major Corporations: Applied Materials, Intel, Apple, Amgen, Abbott, Novartis, Genentech, Roche, Headway Technology, California State and UC Systems, Princeton University, Bayer, Gallo Winery, & Tesla Motors.

#### Permitting

Permitting and regulatory requirements for SPCC plans, HMBPs, HMIS, RMPs, USTs, ASTs, SWPPP, wastewater discharge permits, air quality discharge permits, the Toxic Gas Ordinance (TGO), Building, Fire, and Mechanical codes, Air District (BAAQMD, Valley Air), EPA, DTSC, RCRA, Microbiological, biomedical laboratories (CDC Levels), CAL-OSHA and GMP standards.

#### Design & Controls

Mechanical design of process piping distribution systems, instrumentation and controls, P&ID's, PLC's, & HMIs. Extensive experience with analytical laboratory equipment, Liquid & Gas chromatography, HPLC, GC, MS. Lab planning and layout of custom laboratory space, equipment, casework, flow, exiting, and safety equipment (eye-wash/shower).



### EDUCATION

B.S. Chemical Engineering  
San Jose State University  
B.S. Chemistry  
California State University, Chico

### PROFESSIONAL REGISTRATION

State of California Registered Professional Engineer, Chemical, License No. CH6225, NCEES record #46770.  
40-Hour Hazardous Waste Site Worker CFR Section 1910.120(e)(9), Management and Supervision of Hazardous Waste Operators per CFR 1910.120(e)(4), and as a Qualified Trainer per CFR 1910.120(e)(5).  
State of California Qualified Industrial Storm Water Practitioner (QISP)

### YEARS AT IES

Principal in 2001

### PROFESSIONAL AFFILIATIONS

National Fire Protection Association (NFPA)  
International Society Pharmaceutical Engineering (ISPE)  
Contra Costa County Hazardous Materials Commission, (Public Seat, Alternate Commissioner)

### ABOUT IES

Founded in Silicon Valley in 1995, Integrated Engineering Services (IES) is an engineering and design firm specializing in innovative designs for the Microelectronics, Green Tech, and Life Sciences industries. Our experienced team of professionals provides cost-effective and timely solutions that meet our clients' engineering and business objectives—from project inception through completion and on-going operations.

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