

# LOUIS KEATING

13016 CAMBRIDGE PLACE NE, ALBUQUERQUE, NEW MEXICO  
505-296-6187 OR CELL# 801-440-6586  
EMAIL: [LAKEATING248@GMAIL.COM](mailto:LAKEATING248@GMAIL.COM)

## CAREER SUMMARY

---

Four years experience in the Army's Chemical Demilitarization program and 21 years experience in Process/Manufacturing Engineering and Operations organizations for a number of rocket motor programs and several production areas. Skilled in the government quality system requirements and lean manufacturing practices. Proficient in statistical process control (SPC), problem root cause identification, and corrective action implementation. My strengths include; building strong working relationships, organizing the working environment for the team to succeed, and in developing new processes, new facilities, & better equipment maintenance practices. I'm a can do type of guy.

## PROFESSIONAL EXPERIENCE

---

### **Axis Group (part time employee)**

**Albuquerque New Mexico**

**July 2012 – present**

Perform Maintenance/repair and water well monitoring/sampling of the South Valley Superfund Site.

### **Array Technology (Contract employee - Excel Staffing)**

**Albuquerque New Mexico**

Assemble solar panel components  
Bureau of Indian Affairs (audit)

### **FLSmith Minerals (contract employee)**

**Midvalve Utah**

**May 2012 – December 2012**

Technical Writer for the Installation, Operation, and Maintenance Manuals for the mining equipment

### **Government Civilian Employee (Term)**

**Hill AFB, Ogden Utah**

**May 2011 – November 2011**

Rocket Motor Mechanic for 4<sup>th</sup> Stage Motors

### **EG&G Jan. 2008 – Feb. 2010**

**Tooele Army Depot, DCD**

*TOCDF Mechanical Utility Systems Engineer (TOCD Facility)*

Duties included

- Collaborate with Operations and Maintenance in providing softened water to the chemical demilitarization furnaces and exhaust gas scrubbers. Responsible for the equipment configuration control, maintenance work orders, procedures, and upgrades on the process water, potable, fire water, and sewage treatment systems. Member of the Environmental Leadership Committee at this VPP Facility.

Major Accomplishments

- Installed an Army excess industrial water softener and greatly improved the efficiency from a cost and environmental standpoint. Estimated equipment cost savings of \$80,000 to \$100,000. Reduced water hardness variability to the furnaces and gas scrubbers from approximately 50ppm to less than 5ppm.
- Established a partnership with Tooele Country Road Department to utilize the water treatment effluent on the dirt roads, as dust suppressant. This saved industrial landfill costs at approximately \$100,000 per year.

**SAIC Aug. 2006 – Jan. 2008**

**Tooele Army Depot, DCD**

*Decontamination, Demolition, and Environmental Closure Engineer (CAMDS TSD Facility)*

Duties included

- Collaborate with the Maryland Headquarters personnel in developing the RCRA permit changes and associated closure plan sections of the CAMDS Treatment, Storage, and Disposal Facility closure. Develop new work instructions (procedures) for the safe decontamination, disassembly, and demolition of the chemical equipment and facilities.

**Alliant Techsystems 1985-2006**

**Salt Lake City, Utah**

*Process/Manufacturing Engineer (Navy, Air Force, and Commercial Rocket Motors)*

Duties included

- Developing new the product manufacturing instructions (procedures) & the associated quality control inspection plans to comply with ISO9001 directives
- Implementing controlled change on the shop floor to sustain or improve safety, quality, or efficiency with a focus on PSM directives
- Updating and maintaining the standard operating procedures for the production facility. Providing hands-on manufacturing support for multiple product lines from a chemical, mechanical, and controls standpoint.
- Organize and coordinate process improvements (with multiple organizations) to improve productivity, reduce cost, minimize risk, and achieve compliance goals
- Statistical Process Control – collecting and analyzing process and product data to catch any subtle problems or process changes before they cause significant issues
- Coordinating, performing testing, and qualification activities for ingredient, material, or process changes in the manufacturing process
- Providing formal written and oral presentations to both internal and external customers
- Problem Solving – utilize the Toyota Performance Enterprise System to identify the problem, current state, desired state, and an action plan
- Coordination of safety department, industrial hygiene, & HAZOPs activities in the manufacturing area

Major Accomplishments

- Multiple safety initiatives were successfully implemented to comply with the OSHA, EPA, and Plant Safety mandates involving the safe explosive handling practices, chemical exposure prevention, and ergonomics
- Implemented numerous unique and innovative motor processing changes to minimize product variability, reduce processing time, and improve flow in the area. Estimated savings of \$10,000 per month in utility, man-hours, and/or facility utilization cost savings were achieved
- Thorough and complete document trails were incorporated in the procedure changes, the vendor print files for the equipment, facility manuals, and/or the tooling engineering document files
- Trained new engineers and operations personnel in problem solving, documentation control, equipment checkout, and safe work disciplines

## *AP Grind/Tankfarm/Ingredients and Industrial Boiler Process Engineer*

### Duties included

- Coordinating ingredient deliveries in the tankfarm for the liquid polymers, plasticizers, and isocyanates for the Air Force & Commercial programs. Proof testing the ingredient lot, vendor process, and/or supplier changes in the subscale mix area.
- Trouble shooting equipment problems, preventative maintenance/craft activities, and material/process changes in the area
- Tracking Ammonium Perchlorate process attributes & product acceptance requirements for the Navy, Air Force, and commercial programs. Follow product performance attributes to these process variables and respond to subtle shifts or trends, before they become significant issues
- Providing technical support for the maintenance boiler houses on environmental EPA discharge, process control, and state boiler code compliance issues

### Major Accomplishments

- Implemented new filtering systems, polymer agitation/blending practices, and pump control systems. These changes reduced product quality variability, avoided significant process downtime, and avoided equipment failure
- Implemented loading station, piping, and facility change to save over \$166,000 in raw material costs
- Identified AP grind air flow and feed-rate variables as the cause of propellant burn rate shifts. The resulting process changes (controls) reduced product performance variability (burn rate) by over 25%
- Created mass balance on the boiler water softener systems, to convince the EPA that test results were flawed and recommended this discharge waste for UDOT applications on the state roads
- Implemented wastewater trickle system to the municipal sewer system to aid Magna water plant digester issues and avoid underground pipe line clogging

## *Area Supervisor Bacchus West, Operations Forman and Field Engineer*

### Duties included

- Responsible for the direct supervision of 4-6 technicians and 7-12 wage employees in the 1800 gallon mix/cast and Nitroglycerine/Binder Premix areas
- Accountable for safety, quality, on-the-job training, productivity, and delivery schedules. Communicating expectations clearly, administer counseling, and initiating the necessary actions to ensure the organizational goals and business objectives are accomplished.
- Implement quarterly and yearly PMs between Operations, Maintenance/Craft, and Engineering groups. Thorough checkout of the hydraulics, tooling, control valves, motors, and point-to-point controls.

### Major Accomplishments

- Completed start-up of 4 new production facilities and upgraded 2 existing facilities to the latest safety features and controls. Each facility was valued at over 5 million dollars. Safety was the main emphasis during these efforts. Performed on-the-job supervisor training of the new personnel for production facilities.

## EDUCATION AND PROFESSIONAL TRAINING

---

- BS Chemical Engineering, University of New Mexico graduate 12/1984 (with 2.7gpa/4.0)
  - Sandia/Kirkland physics and chemistry seminar series
  - Nitration/Amination seminars
  - Deming and Lockheed/Martin Statistical Process Control
  - Supervisor training, The Manager is Coach, and What if (hazards assessment)
  - Max1 and Fox distributive process control systems
  - Industrial Boiler Operations (State Code) classes and seminars. The focus was on water quality and understanding of the chemistry in the system.
  - Kepner Tregoe problem analysis & PES (Toyota - Performance Enterprise System)

- Lean Manufacturing, data driven decisions, and product focus. Both systems focus on root cause identification and effective corrective action.
- Chemical Process Safety Management (PSM) and Aerospace Propulsion Standards training and application experience 4 multimillion dollar startup facilities at ATK
  - Lean/6sigma Manufacturing Systems at ATK and Tooele Army Depot
  - HAZWOPER training for the TSDf chemical incineration facility
  - Lifeguard, CPR, and First Aid certified since the age of 14

## Professional References

### Alliant Techsystems

Renee Amicucci 801-774-4337 Engineering Director  
Bill Hooper 801-775-1599 Program Manager  
Dan Hopes 801-839-9909 Program Chief Engineer  
Dr. Dennis Sauer 801-943-0568 Retired Science and Technology Director  
Jeff Evans 801-251-3635 1800 Gallon Mix/Cast Manager  
Ninh Tran 801-251-5093 Quality Assurance Engineer

### EG&G (URS) at Tooele Army Depot South (Deseret Chemical)

Sheila Vance 435-833-7577 Environmental Manager  
Sean McClatchey 835-833-7858 Operations Hazardous Waste Manager  
Bill Bailie 435-833-7417 Government Field Office Engineer  
Gary Hunter 435-833-4413 Government Environmental  
Jim Hunter 435-833-7598 Engineering Supervisor

## PRIOR WORK EXPERIENCE TO COLLEGE GRADUATION

---

1. Fab Steel, Clovis New Mexico – Welder for large gas tank and bridge/structure iron (3 summers, after school, and every spring break)
2. Dairy Farming, Beattie Kansas ( two summers) and raised Holstein calves from 100-1600lbs after school (7 years)
3. West Texas Ethanol, Clovis New Mexico – milled, cooked, and fermented the grain and ran the boiler and distillation columns for the one million gallon per year fuel grade ethanol plant (one summer).
4. Worked at the University of New Mexico's Motor Pool, the Art Department, and the Federal Coroner's Office