

PSM & VPP

May 20th, 2009

Process Safety Management regulation enacted in 1992

- **Performance based, not prescriptive regulations**
- **Applies to all refineries and chemical manufacturing plants with “Highly Hazardous Substances” in excess of a “Threshold Quantity”**
- **Process safety is the operation of facilities that handle, use, process or store hazardous materials in a manner free from catastrophic incidents**
(CCPS: Guidelines for Technical Management of Chemical Process Safety)
- **Process safety management is the application of management systems to the identification, understanding and control of process hazards to prevent process-related injuries and incidents**
(CCPS: Guidelines for Technical Management of Chemical Process Safety)

California Code of Regulations (5189)

- **Employee Involvement**
- **Process Safety Information (PSI)**
- **Process Hazards Analysis (PHA)**
- **Operating Procedures**
- **Training**
- **Contractor Safety**
- **Pre Startup Safety Review (PSSR)**
- **Mechanical Integrity**
- **Hot Work Permits (and other Safe Work Practices)**
- **Management of Change (MOC)**
- **Incident Investigation**
- **Emergency Planning and Response**
- **Illness and Injury Prevention Program**

Traditional workplace health and safety

- **Focuses on the individual actions while considering interaction with equipment**
- **Occupational health exposures**
- **Significant legal and regulatory mandate**

***Objective:* to eliminate injuries and illnesses to personnel**

Process safety management

- **Focuses on process: materials, equipment and systems**
- **Individuals and procedures are considered part of the system**

***Objective:* to eliminate process-related incidents**

Relationship of PSM to VPP

Non PSM Facilities

Objective: Meet PSM requirements

PSM Facilities

Objective: Exceed the minimum PSM regulatory requirements

- Documented owners of each PSM element with well defined roles & responsibilities
- Have information well documented and readily available to impacted personnel
- Strive to have practices worth repeating