NEW SAFETY PROGRAM FOR THE CHEVRON REFINERY

PART OF THE CITY’S CUPA PROGRAM

Presented by: Steve Koester
Environmental Safety Manager – El Segundo Fire Department
City of El Segundo’s Hazardous Material CUPA (Certified Unified Program Agency) Program Overview

- Hazardous Material Emergency Response Plan
- Underground Tank Program
- Aboveground Petroleum Storage Tank Program
- Hazardous Waste Generator Program
- California Accidental Release Prevention Program
Hazardous Material Emergency Response Plan
Underground Tank Program
Aboveground Petroleum Storage Tank Program
Hazardous Waste Generator Program
California Accidental Release Prevention Program

- A Program to protect the community from extremely hazardous materials being handled by businesses
- Applies to chemicals that have the potential for offsite consequences
- Requires a written plan to be prepared by the business
- The plan currently has three tiers or levels
THE CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM (CalARP)

NEW PROGRAM 4 FOR REFINERIES
Effective July 1, 2017
The 2014 Governor’s report on Refinery Safety

Improving Public and Worker Safety at Oil Refineries


Edmund G. Brown Jr. Governor
California’s CalARP Program 4 Elements for Refineries

1. Damage Mechanism Reviews - Existing
2. Hierarchy of Hazard Controls Analysis - Existing
3. Human Factors - New
4. Management of Organizational Change - New
5. Root Cause Analysis - New
6. Safeguard Protection Analysis - Existing
7. Process Safety Culture Assessment - New
Human Factors Program

At a minimum, the Human Factors program shall take into account the complexity of tasks. The level of training and expertise of employees. The human-machine and human-system interface. The physical challenges of the work environment in which the task is performed, employee fatigue, and other effects of shiftwork and overtime.
What are human factors?

- Human-Human
- Procedures
- Ergonomics
- Human-Machine
- Fatigue Management

Human Factors
Management of Organizational Change

The employer shall develop, implement and maintain written procedures to manage organizational changes prior to reducing staffing levels or making other changes that could affect occupational safety and health.

The areas to which these procedures shall apply include, but are not be limited to, operations, engineering, maintenance, health and safety, and emergency response.

This requirement shall also apply to employers using contractors in permanent positions.
Root Cause Analysis

This type of analysis focuses on identifying the underlying causes of an incident and then recommending corrective actions to prevent a reoccurrence.

For example, an incident that appears to be the result of worker inattention might, following a root cause analysis, reveal underlying pressures in the organizational work environment that motivate workers to cut corners.

The recommendations from the investigation would focus on these aspects of the work environment, rather than solely on strategies to improve worker vigilance.
Process Safety Culture Assessment

The owner/operator shall conduct an effective PSCA and produce a written report and action plan within 18 months of the effective date.

A group's culture reflects the attitudes, beliefs, perceptions, and values that employees share in relation to safety.

Safety culture assessments are used to determine whether and to what extent management encourages a culture that values safety.
US Nuclear Regulatory Agency’s (NRC) Definition of: “Safety Culture”

“The core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.” (SECY-11-0005, January 5, 2011)
Preparation for the New Regulations

- Fire Department staff continues to stay engaged with State officials and the new regulation
- Staff has taken specialized training on Human Factors
- Next Month additional training on Root Cause Analysis is scheduled
- ESFD is reviewing staffing needs as well as fee structures needed to support Program 4
El Segundo will continue to work with the Chevron refinery to improve safety elements of the operations and to better protect the surrounding community.

The City will not have to be reliant on OSHA, a State agency, to ensure the refinery continues its proactive approach towards safety.

The fire department will be more involved with the routine day-to-day activities that are known to prevent incidents, supporting a “Safety Culture” at Chevron.
Questions