

N E W S R E L E A S E

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Landmark Workplace Safety and Health Regulation Approved to Reduce Risk of Major Incidents at Oil Refineries in California

Oakland—The Department of Industrial Relations’ (DIR) Occupational Safety and Health Standards Board today approved a landmark regulation to strengthen workplace safety and health at oil refineries across the state. The new regulation provides a framework for anticipating, preventing and responding to hazards at refineries.

“This is the most protective regulation in the nation for the safety and health of refinery workers and surrounding communities,” said DIR Director Christine Baker. “This new regulation will ensure California’s oil refineries are operated with the highest levels of safety possible and with injury and illness prevention in mind.”

The approved regulation introduces a [new refinery safety order](#) enforced by Cal/OSHA’s Process Safety Management (PSM) Unit, adding section 5189.1 to Title 8 of the California Code of Regulations. The elements outlined in the regulation require refinery employers to:

- Conduct *Damage Mechanism Reviews* for processes that result in equipment or material degradation. Physical degradation, such as corrosion and mechanical wear, are common technical causes of serious process failures.
- Conduct a *Hierarchy of Hazard Controls Analysis* to encourage refinery management to implement the most effective safety measures when considering competing demands and costs when correcting hazards.
- Implement a *Human Factors Program*, which requires analysis of human factors such as staffing levels, training and competency, fatigue and other effects of shift work, and the human-machine interface.
- Develop, implement and maintain written procedures for the *Management of Organizational Change* to ensure that plant safety remains consistent during personnel changes.
- Utilize *Root Cause Analysis* when investigating any incident that results in, or could have reasonably resulted in, a major incident.
- Perform and document a *Process Hazard Analysis* of the effectiveness of safeguards that apply to particular processes and identify, evaluate and control hazards associated with each process.

- Understand the attitudes, beliefs, perceptions and values that employees share in relation to safety and evaluate responses to reports of hazards by implementing and maintaining an effective *Process Safety Culture Assessment* program.

Most refineries in California have adopted some of the practices outlined above over the past decade. Those refineries have seen significant improvement in safety performance. However, the industry still experiences major incidents that pose a risk to workers, nearby communities and cause disruption to fuel services. The regulation represents a comprehensive safety performance standard for the state's refinery sector. Now that the Standards Board has approved the regulation, [the Office of Administrative Law](#) has 30 working days to review and approve it.

The new rules are part of a package of complementary regulations intended to make California refineries safer for both workers and surrounding communities. The companion regulation strengthens the [California Accidental Release Prevention \(CalARP\) program](#), designed to prevent the accidental release of hazardous substances that could harm public health and the environment. The revised CalARP regulation will also be submitted to the Office of Administrative Law for approval in the coming weeks.

Following a [chemical release and fire at the Chevron refinery](#) in Richmond in 2012, the Governor's Interagency Working Group on Refinery Safety called for the establishment of an [Interagency Refinery Task Force](#). The task force was mandated to improve workplace safety and health, emergency preparedness and response procedures at refineries. The California Environmental Protection Agency formed the task force in August 2013, which includes DIR, eight other state agencies, the US Environmental Protection Agency, as well as local and regional agencies from across the state that have refineries in their jurisdictions.

Cal/OSHA's [PSM Unit](#) is responsible for inspecting refineries and chemical plants that handle large quantities of toxic and flammable materials. Health and safety standards enforced by the PSM Unit, including adequate worker training and participation, are intended to prevent catastrophic explosions, fires, and releases of dangerous chemicals, which could harm workers.

Prior to 2012, Cal/OSHA's PSM Unit conducted on average two to three planned refinery inspections per year, taking a single investigator approximately 80 hours to complete. Cal/OSHA has subsequently increased staffing of the PSM Unit from 10 to 24 staff members, including support personnel and investigators. The PSM Unit now has the resources to conduct more thorough inspections, deploying four to five inspectors at the four annual planned refinery inspections with an average of over 2000 hours at each planned inspection. In addition, the PSM unit invests 900 hours on average at each of the four turnaround inspections conducted at refineries each year. Turnarounds are

scheduled operations where an entire process unit at a refinery is taken offline for an extended period for revamp or renewal.

Cal/OSHA helps protect workers from health and safety hazards on the job in almost every workplace in California. [Cal/OSHA's Consultation Services Branch](#) provides free and voluntary assistance to employers to improve their health and safety programs. Employers should call (800) 963-9424 for assistance from Cal/OSHA Consultation Services.

Employees with work-related questions or complaints may contact DIR's Call Center in English or Spanish at 844-LABOR-DIR (844-522-6734). The California Workers' Information line at 866-924-9757 provides recorded information in English and Spanish on a variety of work-related topics. Complaints can also be filed confidentially with [Cal/OSHA district offices](#).

Members of the press may contact Erika Monterroza or Peter Melton at (510) 286-1161, and are encouraged to [subscribe to get email alerts](#) on DIR's press releases or other departmental updates.

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The [California Department of Industrial Relations](#), established in 1927, protects and improves the health, safety, and economic well-being of over 18 million wage earners, and helps their employers comply with state labor laws. DIR is housed within the [Labor & Workforce Development Agency](#). For general inquiries, contact DIR's Communications Call Center at 844-LABOR-DIR (844-522-6734) for help in locating the appropriate [division or program](#) in our department.