



# RMP

## PSM/RMP/CALARP CURRENT REGULATORY FRAMEWORK & UPCOMING CHANGES

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## CURRENT REGULATIONS

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- CalARP Programs 1, 2, & 3 – no recent changes
- CalARP Program 4
  - Refineries only
  - Effective October 1, 2017
- Federal OSHA PSM – no recent changes



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## RECENT CHANGES TO REGULATIONS


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- Federal RMP updates
  - Final amendments January 13, 2017
  - August 17, 2018 court decision to vacate the effective date delay
  - No additional information on effective date
- “Hot Buttons”
  - RAGAGEP requirements
  - General Duty Clause
  - Emergency Preparedness

## IIAR UPDATES


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- IIAR 9 (draft) – RAGAGEP
  - Public comments wrapping up
  - Another public comment period soon
  - Projection: Early 2019
- IIAR 6 (draft) – Inspections & Testing
  - Public comment period ended August 20, 2018
  - Projection: 2019

  
**RMP**  
**BREAKING BAD HABITS AND  
AVOIDING COMMON  
OVERSIGHTS**

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**KEY TOPICS**


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- Prevention Program Element Overlap
- Periodic Requirements
- Common Program Deficiencies



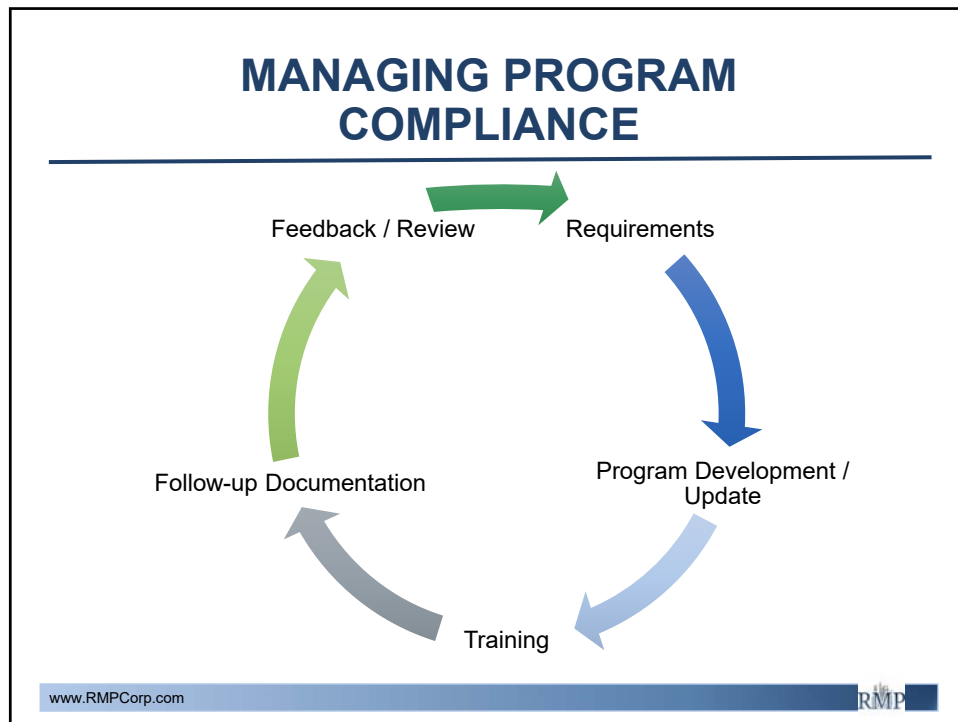
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<b>Prevention Program Overlap</b>				
<b>Section</b>	<b>US EPA RMP (40 CFR)</b>	<b>OSHA (29 CFR)</b>	<b>CalARP (19 CCR)</b>	<b>Cal/OSHA PSM (8 CCR)</b>
Process Safety Information	68.65	1910.119 (d)	2760.1	5189 (d)
Process Hazard Analysis	68.67	1910.119 (e)	2760.2	5189 (e)
Operating Procedures	68.69	1910.119 (f)	2760.3	5189 (f)
Training	68.71	1910.119 (g)	2760.4	5189 (g)
Mechanical Integrity	68.73	1910.119 (j)	2760.5	5189 (j)
Management of Change	68.75	1910.119 (l)	2760.6	5189 (l)
Pre-Startup Safety Review	68.77	1910.119 (i)	2760.7	5189 (i)
Compliance Audit	68.79	1910.119 (o)	2760.8	
Incident Investigation	68.81	1910.119 (m)	2760.9	5189 (m)
Employee Participation	68.83	1910.119 (c)	2760.10	5189 (p)
Hot Work Permit	68.85	1910.119 (k)	2760.11	5189 (k)
Contractors	68.87	1910.119 (h)	2760.12	5189 (h)
Emergency Planning & Response	68.95	1910.119 (n)	Article 7	5189 (n)
Trade Secrets		1910.119 (p)		

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## PERIODIC REQUIREMENTS

- Ongoing, as Changes to Process Occur
- Annual Review/Update
  - Operating Procedures
  - Emergency Plan (EAP or ERP)
- Triennial (Every Three Years)
  - Refresher Training
  - Compliance Audit
- Every 5-Years
  - CalARP / RMP Submittal
  - Hazard Assessment / Off-site Consequence Analysis
  - Process Hazard Analysis / Hazard Review
  - Seismic Assessment (California)



## COMMON PROGRAM DEFICIENCIES

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- Deficiencies include those:
  - observed by industry, consultants, and regulators,
  - from US EPA Enforcement Alert, February 2015, and
  - from Revised CalARP Regulations Effective January 1, 2015

## CALARP / RMP SUBMITTAL

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- Submittal not completed and submitted to the agency in a “timely manner”
- Management System not in-place or not updated
- Changes in ownership or updated contact information
- New accident history information
- New emergency contact information
- Changes in UPA contact information

## HAZARD ASSESSMENT

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- Description of alternative release scenario is not available
  - Should be considered “more likely to occur” than worst-case
  - Consult facility history, industry incidents, and PHA / HR
- Worst-case and alternative release scenarios do not meet requirements in Sections 2750.3 and 2750.4

## PROCESS SAFETY INFORMATION

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- Piping and Instrumentation Diagrams (P&IDs)
  - Missing
  - Do not reflect changes to process or system
- Lack of documentation
  - Relief system design
  - Compliance with RAGAGEP
  - Electrical area classifications and distribution system
  - Chemical reactivity hazards
  - Codes and standards used during design
- Information not kept up-to-date

## PROCESS HAZARD ANALYSIS

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- PHA not conducted by a knowledgeable person
- Identifying hazards properly
  - Include understanding of gap between new industry codes and codes to which facility was built
  - Develop a plan to address safety deficiencies (upgrades?)
  - Emergency shutoff location
  - Missing key controls due to old industry standards
  - Pressure-relief devices located where ammonia could be sprayed on people/personnel

## PROCESS HAZARD ANALYSIS (CONT.)

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- Recommendations not closed in a timely manner:
- Lacking documentation for closed recommendations
  - Must keep for the life of the process
  - Must include completion dates
- Five-year update not completed by anniversary
- Human factors or facility siting not addressed

## PROCESS HAZARD ANALYSIS (CONT.)

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- Revalidations performed more than once consecutively
- Facility siting not based on current design codes/standards
- Industry accepted approach not used, or not used correctly
- Inconsistent consideration of scenarios and risk ranking



## OPERATING PROCEDURES

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- Procedure outdated or annual review not performed
- Written procedures not synchronized with operator actions
- Each phase of operation (i.e., temporary) not listed
- Emergency shutdown procedure job assignments not clear
- Acceptable alarm setpoint range not documented
- Procedures not in the language of the user
- Consequences of deviation not included
- Safe work practices not followed

## TRAINING

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- Documentation of training not on-file
- Training does not cover maintenance procedures
- Records do not verify operators understanding of procedures
- Training not in the language of the operator / user



## MECHANICAL INTEGRITY

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- Written procedures not available, not complete, or not implemented
- Inspection / maintenance not performed or not documented
- Equipment deficiencies not corrected in a safe or timely manner
- Not documenting PM schedule with contractor



## MECHANICAL INTEGRITY (CONT.)

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- Quality assurance plan not in-place
- Sufficient information not available for piping and equipment to understand hazards and develop maintenance program
- Facility does not have adequate ventilation
- RAGAGEP issues are not addressed

## MANAGEMENT OF CHANGE

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- Procedure not used
- Prevention Program documentation not updated to reflect changes
- Personnel not adequately notified of the change
- The need for modifications to existing operating and / or maintenance procedures or whether new procedures are needed is not assessed
- MOC procedure not completed prior to startup

## PRE-STARTUP SAFETY REVIEW

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- Procedure not documented
- Documentation not kept on file or not completed following implementation
- Documentation not completed or signed prior to start-up
- PSSR not documented and conducted independently of the MOC

## COMPLIANCE AUDIT

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- Recommendations not corrected / completed
- Audit not completed by anniversary date
- No documentation included regarding audit scope, methods used, or findings
- Program implementation not verified with facility personnel
- Completion dates of recommendations not included in documentation
- Not keeping most recent two (2) audits on-file

## INCIDENT INVESTIGATION

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- No follow-through on recommendations
- Findings not shared with affected personnel
- Investigation not initiated within 48 hours of the incident
- Required information not documented during investigation or in report
- No investigation or documentation of near-misses
- Completion dates not documented for recommendations / deficiencies

## EMPLOYEE PARTICIPATION

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- Written plan not documented and/or shared with facility personnel
- Personnel involved with covered process operations not aware of location of CalARP / RMP / PSM documentation and procedures
- Personnel not involved with program development
- Documentation not in the language of the operator / user

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## HOT WORK PERMIT

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- Personnel not trained or knowledgeable on the procedure(s)
- Records are not documented or not kept on-file
- Hot work area is not field-verified by a supervisor



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## CONTRACTORS

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- No documentation regarding contractors training or procedures for conducting work/maintenance on the covered process
- Lack of contractor/visitor safety training
- Lack of periodic evaluation of contractor(s)

## EMERGENCY PLANNING & RESPONSE

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- Emergency Response Plan vs. Emergency Action Plan
  - Not knowing the difference
  - Not having the correct plan in-place
  - Not meeting emergency response requirements by other agencies
- Contact information not up-to-date
- Annual review not completed/documented
- Training not performed/documented

## EMERGENCY PLANNING & RESPONSE (CONT.)

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- Coordination with local agency/agencies not documented
- No written response procedures
  - Informing and interfacing with public and local responders
  - Documentation of proper first-aid and emergency medical treatment
  - Procedures related to chemical release
  - Checking/inspecting emergency equipment
  - ICS training for relevant employees

## RECOMMENDATION FOLLOW-UP

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- Assign an individual to follow-up on recommendation completion
- Assign anticipated date of completion to every recommendation
- Document actions taken to address recommendation, label “closed” when addressed, and record the date of completion

## MOST COMMON, PROGRAM-WIDE DEFICIENCIES



**RECOMMENDATION FOLLOW-UP**

**DOCUMENTATION**

**If these are missing, there's a deficiency!**

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# QUESTIONS?

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