

COMMON DEFICIENCIES OF THE CALARP/RMP/PSM PROGRAMS AND AGENCY ENFORCEMENT ACTIONS

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Introduction

In recent years, the Occupational Safety and Health Administration (OSHA) and the United States Environmental Protection Agency (US EPA) have both increased the number of inspections performed for all types of facilities in the United States. Agencies have become more aware of potential areas of deficiencies in the Risk Management Plan (RMP) and Process Safety Management (PSM) Programs, including state-specific programs such as the California Accidental Release Prevention (CalARP) Program and Nevada's Chemical Accident Prevention Program (CAPP).

In addition, OSHA and US EPA are both increasing enforcement on violations of the PSM and RMP Programs. Audits are something no facility or Operations Manager wants to endure; however, with some guidance and information, managers can feel more comfortable and confident with their Program during an audit. This paper will review recent enforcement actions by both OSHA and EPA, and any update to protocols or requirements the agencies are enforcing.

Common Deficiencies - Deadlines

One of the most common deficiencies is meeting the anniversary dates, or deadlines, of certain program elements. Some examples include the RMP/CalARP submittals, Standard Operating Procedure (SOP) reviews, Process Hazard Analysis (PHA) sessions, and Triennial Compliance Audits. Implementation is easy to track and verify (making them easy targets for audits by regulatory agencies), but getting the job done can be an elusive part of a busy Safety/Environmental Coordinator's daily/weekly/monthly/annual work schedule.

Meeting the deadline and submittal requirements for a RMP/CalARP submittal, for example, includes revalidation of the information submitted (current Census population,



updated list of sensitive receptors, management/personnel/responsibility changes, etc.). Revised dispersion modeling using current or updated, and approved, models may be needed. Outside of deadlines, but equally important, are administrative changes such as names, titles, and phone numbers of persons responsible for the programs and emergency response. Outdated information is easily discovered during an audit.

SOPs are required by regulation to be certified annually that they are accurate and current. Changes may not be required, but SOPs must be synchronized with operator actions and include common deviations and how to avoid those deviations. Explicit and clear instructions/procedures must be in place for anyone involved in operating the system. The objective is to match each exact action with an individual step on the SOP. Set points and operating parameters should be identified on each procedure for ease of use and reference.

Changes should be made as needed, including, but not limited to, when changes occur to the system, when someone identifies that there is a change needed, or when facility operations change. System changes resulting from inspections and testing are equally important and have deadlines to meet in order to be compliant with maintenance and/or mechanical integrity. Emergency shutdown procedure responsibilities should be outlined to allow responsible personnel to be trained appropriately and be able to reference the responsibilities easily during an emergency.

Common Deficiencies - Current Information

Keeping information current is essential for an effective and compliant program. Administrative changes and technical changes associated with the safety of the covered process should both be current at all times. Administrative changes may occur more often than technical changes due to personnel changes, but both are important. Changes



in management are common and are important to keep updated so personnel and regulators know who is responsible.

Technical changes related to the Process Safety Information (PSI) or Safety Information (SI) sections are very important. Changes to a facility's operation could include changes in equipment, chemicals used, quantities used, etc. Any of these items may affect the validity of relevant engineering drawings, equipment specifications and operating limits, chemical handling procedures, and emergency response. Keeping Piping & Instrumentation Diagrams (P&IDs) up-to-date is essential for reference, operation, and periodic and regulatory required PHAs or Hazard Reviews (HRs).

Documentation for Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) is frequently overlooked, and addresses a facility's requirement to stay updated on safe methods of operation. RAGAGEP may apply to equipment technologies, procedure changes, or chemical use and/or reactivity. Chemical reactivity is another frequently overlooked item for maintaining current documentation. Changing the types of chemicals stored, even if not related to the operating covered process, may still pose a risk and should always be evaluated for safety and reactivity prior to storing on-site.

Common Deficiencies - Recommendations

Recommendations, and their documentation of completion, may be the number one deficiency in all programs. Per regulation, recommendations must be closed out in a "timely manner" and must be documented. "Timely manner" is defined within the CalARP regulations, while the RMP and CAPP programs simply imply "best practice" timelines for completion.

Documentation for recommendations should include the name of the person responsible, the date it was assigned, the date it was completed, a description of how the



recommendation was addressed, and the person who completed the recommendation action items. All recommendations precipitating from any PSM/RMP Program element should be addressed. It is important to remember that Triennial Compliance Audits, Incident Investigations, PHAs or HRs, and Seismic Assessments (California only) may all require recommendations to be addressed after the completion of the initial effort and documentation.

Common Deficiencies – Documentation and Implementation

What may be the second most common deficiency is missing documentation for required elements and completed tasks. It is extremely important to note that if efforts and reports are not documented, then they may not be judged as complete during a regulatory audit. All items required for completion per regulation must be documented to be in compliance. For example, it is not adequate to state that training has been done without the proper paperwork to prove it. In this particular case, sign-in sheets, quizzes, and on-the-job verification with an authoritative signature all qualify as acceptable documentation. The importance of documenting recommendation closure was discussed above.

In addition, key contractor documentation must be kept by the Owner/Operator, even if they are not directly involved in contractor training and procedures. Contractors are called out as specifically responsible for the safety of their own personnel. However, the Owner/Operator of a facility is directly responsible to verify that all required items are in-place, in-practice, and on-file.

To address SOPs and maintenance compliance efforts, WRITTEN procedures, logs, and schedules must be in-place to be compliant with the regulations. Maintenance schedules must be documented and proven to be in-use. Maintenance logs (completed and blank



examples) must also be kept on-file for ease of use and reference, as well as regulatory audits.

Recent Enforcement Actions

Some recent enforcement actions published by OSHA and US EPA have gone into effect recently. OSHA published a RAGAGEP Enforcement Letter, updated May 11, 2016, to address the RAGAGEP application at regulated facilities. The letter goes on to discuss that RAGAGEP applies to equipment, inspections and tests, and the frequency of inspections and tests. All current codes and standards must be met under RAGAGEP, or justification on why existing equipment is acceptable as-is. RAGAGEP takes into account widely adopted codes, consensus documents, non-consensus documents, and internal standards. For the full text, see the letter published on the [OSHA website](#).

Another issues OSHA has brought awareness to, though not officially enforced yet, is the emphasis on response actions and responsibility of facilities to respond to their own emergencies in regards to chemical release. According to 29 CFR 1910.120(l)(1)(iii) and 29 CFR 1910.120(p)(8), an emergency response plan/program is not required if employers evacuate their employees from the worksite when an emergency occurs, and does not permit employees to assist in handling the emergency. With that said, the following is some consideration to take on a case-by-case basis. Some facilities may want to consider having a trained team if they are not in an urbanized area where emergency response teams can reach them in a reasonable time. In this case, consider a rescue program, with appropriate training and drills, in order to protect facility personnel and mitigate emergencies if they should occur. For similarly located facilities or facilities that may wish to protect their employees better, consider providing equipment and training for respirators and/or escape packs (keep in mind that this equipment also falls under other regulatory requirements for use). For most facilities, consider basic shelter-



in-place training and supplying equipment in “dead end” rooms of the facility where there may not be a safe evacuation route to escape. These are awareness issues that are not being strictly enforced, but in an ever-changing regulatory climate it’s best to be prepared.

The US EPA has started a web page for the [National Enforcement Initiative](#) for the 2017, 2018, and 2019 Fiscal Years. The goal is to reduce the risks of accidents and improve response capabilities. The US EPA currently has a plan submitted to Congress for funding. The plan is not published, and very little information is available; however, it is reasonable to assume that more enforcement with the RMP program may be evident within the next few years.

Conclusion

It’s important to note that the most common deficiencies aren’t associated with gaps in technology. The most common deficiencies that exist and that agencies find and issue citations for during regulatory audits are the administrative burden of keeping up with the PSM/RMP Program. It is easy to fall behind on these activities, especially in the constantly morphing landscape of roles and responsibilities that is a truism for any active business. The key focal points for an Owner/Operator has to be ensuring the availability of personnel to keep track of these items, as well as maintaining an overall safety culture that, even if it’s “just paperwork,” it still matters. An important message to remember is that if it’s not written down, it is not compliant.

In addition, with regulatory changes occurring more frequently than in the past, it is important to practice diligence when it comes to a facilities safe operation. More resources for enforcement are available with the different agencies, and it’s important to not overlook the best-practice or RAGAGEP areas of the safety programs on-site.

