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## **COMMENTS OF THE AMERICAN PETROLEUM INSTITUTE AND THE AMERICAN FUEL & PETROCHEMICAL MANUFACTURERS**

California Office of Emergency Services, Proposed New Article 6.5 of the  
California Accidental Release Prevention Program, *Program 4 for Petroleum Refineries*

Submitted September 15, 2016

The American Petroleum Institute (API) and the American Fuel & Petrochemical Manufacturers (AFPM) submit these comments in response to the California Office of Emergency Services (CalOES) Proposed New Article 6.5 of the California Accidental Release Prevention Program, entitled *Program 4 for Petroleum Refineries* (July 15, 2016) (hereinafter referred to as the “proposed CalARP regulations,” or the “proposed standard”). API represents over 650 oil and natural gas companies, leaders of a technology-driven industry that supplies most of America’s energy, supports more than 9.8 million jobs and 8 percent of the U.S. economy and, since 2000, has invested nearly \$2 trillion in U.S. capital projects to advance all forms of energy, including alternatives. AFPM is a trade association whose members include approximately 400 companies that encompass virtually all of the U.S. refining and petrochemical manufacturing capacity.

API and AFPM members own and operate facilities throughout the country, including California, which will be directly affected by the proposed standard. API and AFPM and their members want to ensure that any final standard that may be adopted by the Office of Emergency Services (CalOES) is authorized under California law, reflects reasoned decision making, and is otherwise appropriate, flexible, cost-effective, and provides the clarity necessary to support effective compliance management systems.

### **I. INTRODUCTION**

U.S. and California refineries are safer than they have ever been in history. Key safety indicators, including Total Recordable Incident Rates (TRIR) and Fatality/Days Away from Work F/DAW rates, demonstrate that refinery safety has significantly improved over the past two decades. Indeed, the refining industry has steadily reduced its average total recordable incident rates by 70% over the past 15 years, much of which has been

achieved through voluntary programs and performance-based standards, rather than command and control, regulation. The U.S. refining industry as a whole has similarly reduced its average Fatality/Days Away from Work (F/DAW) rate by 85% over this same 15-year period.

According to the 2014 Bureau of Labor Statistics (BLS), the total recordable incident rate for the manufacturing sector as a whole is 3.4 job-related injuries and illnesses per 100 full-time employees. The 2014 AFPM Occupational Injury & Illness Report total recordable incident rate for both company employees and onsite contractors working at petroleum refining facilities was 0.5 incidents per 100 full time employees. Out of these recordable incidents, 79% of injuries were minor in nature and allowed the worker to return to work immediately.

API and AFPM members continuously work to minimize the risk of serious injuries at refineries since their goal is to have no serious injuries or fatalities. BLS data indicates refining businesses have been reducing the risk of all injuries – including serious injuries and fatalities - for the last 20 years. Based on 2012 data from AFPM, the petroleum refining sector suffered only 0.0042 fatalities per every 100 full-time employees.

In the table below, which is based on BLS data, we provide a comparison of the injury rates for 2014 for the petroleum refining sector nationally to all industries (including state and local government), private industry (which performs better than the combined industry/government cohort), the construction industry, taxi service, and florists, all of which exhibit higher injury rates than the petroleum refining sector according to BLS. Indeed, the refining industry is among the best performing of industries for which BLS provided 2014 data.

Industry Sector	Total recordable cases	Cases with days away from work, job transfer, or restriction			Other recordable cases
		Total	Cases with days away from work	Cases with job transfer or restriction	
All industries, including state and local government	3.4	1.8	1.1	0.7	1.6
Private industry	3.2	1.7	1.0	0.7	1.5
Construction	8.6	4.2	3.0	1.3	4.4
Taxi service	3.0	2.1	1.8	0.3	0.9
Florists	1.6	0.6	0.4	0.2	1.0
Petroleum Refining	0.7	0.4	0.2	0.1	0.3

The refining industry, including California refiners, has instituted a series of practices and programs as individual companies and through API and AFPM for continuous improvement in process safety. For example:

- AFPM hosts an industry safety online educational resource that contains important government agency reports on previous incidents, presentations from safety conferences, safety alerts, statistical reports, and other analytical resources to help members continuously improve process safety.
- AFPM hosts meetings for a variety of safety committees and networks more than 30 times throughout the year. These groups include a general safety committee that consists of corporate safety leaders as well as site safety management, an industrial hygiene group, and process safety regional networks that are site level process safety practitioners.
- AFPM and API hold safety-focused workshops with government agencies and the unions.
- API's Global Industry Services department offers a formal service that uses qualified, highly experienced 3<sup>rd</sup> party assessors to evaluate and provide feedback on plant process safety systems.
- API maintains more than 600 standards in the form of recommended practices, specifications, codes, technical publications, reports, and studies that cover all aspects of the oil and natural gas industry, including 160 focused on refinery operations.

The combination of these (and many other) industry efforts coupled with existing regulatory requirements work well to make the U.S. refining and petrochemical industry among the safest manufacturing sectors.

Of course, the industry strives for 100% success in the area of safety and supports regulatory agencies' goal of continuous performance improvement. Our concern is that the proposed standards, though well intended, will not achieve improvements and may actually be counterproductive, while at the same time imposing enormous costs.

A fundamental error in the premise of CalOES's reasoning is that, in its Initial Statement of Reasons, CalOES states it has used the existing Contra Costa County Industrial Safety Ordinance (ISO) as a "proxy for the purpose of estimating" the benefits from the proposed GISO. Initial Statement of Reasons (ISOR) at 71. "It is not unreasonable to assume," CalOES asserts that "California refinery incident rates under the proposed regulation will be similar to or lower than those of ISO refineries." *Id.* The disconnect is that, as noted above, the refining industry has steadily reduced average TRIR by 70% over the past 15 years, a performance that mirrors the reduction achieved by the three

Contra Costa County ISO refineries but was achieved in the absence of the county's ISO. Similarly, as also noted, the reduction in F/DAW nationwide refinery performance also matches that achieved by the county's ISO refineries.

That the rates for refineries subject to the ISO do not meaningfully differ from other refineries that are *not* subject to the ISO undercuts – indeed, invalidates – the conclusion that establishing a regulation modeled on the ISO will result in the benefits claimed.

While its asserted goals may be laudable, the rule is fundamentally flawed with respect to its use of over-broad definitions that, due to their imprecise wording, will trigger numerous responses and actions under the standard, requiring the expenditure of resources with no resulting safety improvement. In some cases, the requirements may even prove to be counterproductive. Examples of this include, among others, the definitions of “major incident,” “major change,” and “highly hazardous material.” The requirement to undertake a Damage Mechanism Review, a Hazard Controls Analysis, Management of Change, and a host of other actions under the proposed standard are driven by these definitions, underscoring the need that those definitions be precisely tailored. Thus, while one might agree that a *major* incident or a *major* change implicating a *highly hazardous* material should in fact trigger these activities, under the over-broad terms CalOES has proposed, the definitions would embrace *minor* incidents and *minor* changes, indeed even trivial activities as well as materials that are *not highly hazardous*.

The consequence is that the rule will be extraordinarily costly, requiring tremendous expenditure of resources on processes that have already been appropriately completed and will not contribute to improving safety. Indeed, by requiring the highly skilled (and not widely available) personnel to spend their time conducting these activities when they are not necessary, the standard will actually impair safety because these limited resources will then be unavailable to work on what would be higher priority safety issues, since refiners will be forced to allocate resources to these regulatory requirements first and foremost if this regulation is adopted.

At the other extreme, certain provisions in the proposed rule are so vague and so lacking in the use of precise terminology, in common use and as understood by the industry, that the result are requirements with which compliance, as a practical matter, would be effectively impossible. Refineries would thereby be deprived of due process.

Compounding the problem, the ISOR accompanying the proposal lacks meaningful explanation or rationale as to why particular requirements are necessary. Both the industry and the public have therefore been deprived of the opportunity to provide informed comments. CalOES's failure to set forth in the ISOR its rationale for the proposed standard is but one of several instances in which CalOES's rulemaking has failed to conform to the Administrative Procedures Act (APA). The proposed standard fails to satisfy the APA's requirements for “clarity” and “non-duplication.”

Finally, API and AFPM respectfully submit that CalOES does not have authority to issue this regulatory revision, and, even if it did possess the authority, it has failed to satisfy the statutory requirements to support such a rulemaking under the APA, Government Code §§ 11340-11361. Accordingly, CalOES is required by statute and regulation to withdraw the proposed GISO. As is explained below, the proposed standard is both substantively flawed and procedurally defective, and those errors cannot be corrected simply by revising the proposed standard and explaining those changes in a Final Statement of Reasons (FSOR). Rather, it is incumbent on CalOES, at a minimum, to withdraw the proposed standard, reconsider its approach in light of the comments set forth herein, and if it chooses to proceed with rule revisions, to issue a new proposal that comports with California law and provides affected parties with an opportunity to provide informed comments.

## II. DISCUSSION OF KEY CONCERNS<sup>1</sup>

Government Code § 11342.2 provides that “[w]henever by the express or implied terms of any statute” a California agency has “authority to adopt regulations to implement, interpret, make specific or otherwise carry out the provisions” of that statute, “no regulation is *valid or effective* unless consistent and not in conflict with the statute” and “*reasonably necessary to effectuate the purpose* of the statute” (emphases added). On judicial review, a regulation “may be declared invalid” where the court finds that the “agency’s determination that the regulation is reasonably necessary to effectuate the purpose of the statute is *not supported by substantial evidence*” (emphasis added).<sup>2</sup>

Further, pursuant to Government Code § 11349.1(a), the California Office of Administrative Law (OAL) reviews all regulations adopted, amended, or repealed pursuant to the APA to ensure that such regulations satisfy six specified standards: “necessity,” “authority,” “clarity,” “consistency,” “reference,” and “nonduplication.” Each is a defined term. “Necessity,” “clarity,” and “non-duplication” are of the most relevance here.

“Necessity” is defined in terms that correspond in part to the provisions of Government Code § 11342.2. Specifically, “necessity” means that the “record of the rulemaking proceeding demonstrates by substantial evidence *the need for a regulation to effectuate*

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<sup>1</sup> As is discussed elsewhere herein, API and AFPM believe that the entire proposal is legally defective and that it does not conform to the APA’s rulemaking standards. It is, at best, questionable that CalOES is authorized by the Health and Safety Code to adopt the proposed standard, and even if it is, no showing has been made that the rule is “reasonably necessary to effectuate the purpose” of the Health and Safety Code. These are fundamental flaws that cannot be corrected through the notice and comment process.

<sup>2</sup> Government Code § 11350(b)(1)

*the purpose of the statute*, court decision, or other provision of law that the regulation implements, interprets, or makes specific, taking into account the totality of the record.”<sup>3</sup> For purposes of this standard, “evidence includes, but is not limited to, facts, studies, and expert opinion.”<sup>4</sup> The term “clarity” means that the regulation is “written or displayed so that the meaning of regulations will be easily understood by those persons directly affected by them.”<sup>5</sup> In addition, “nonduplication” is defined as follows:

“Nonduplication” means that a regulation does not serve the same purpose as a state or federal statute or another regulation. This standard requires that an agency proposing to amend or adopt a regulation must identify any state or federal statute or regulation which is overlapped or duplicated by the proposed regulation and justify any overlap or duplication. This standard is not intended to prohibit state agencies from printing relevant portions of enabling legislation in regulations when the duplication is necessary to satisfy the clarity standard in paragraph (3) of subdivision (a) of Section 11349.1. This standard is intended to prevent the indiscriminate incorporation of statutory language in a regulation.<sup>6</sup>

In reviewing regulations, the OAL is “restrict[ed] . . . to the regulation and the record of the rulemaking proceeding.”<sup>7</sup> A regulation will be approved only if “it complies with the standards set forth in this section and with this chapter.” *Id.*

As discussed below, compared to these standards, the proposed CalARP regulations do not conform to California’s administrative requirements and should be rejected by OAL unless CalOES re-proposes the standard to cure these deficiencies.

**A. Coordination with the Occupational Safety and Health Standards Board’s Proposed General Industry Safety Order § 5189.1 and with the Federal Revisions to the Occupational Safety and Health Administration Process Safety Management Regulations.**

It is critical that CalOES and the California Occupational Safety and Health Standards Board (the Board) ensure consistency between the draft CalARP regulations and the Proposed General Industry Safety Order (GISO) § 5189.1 Process Safety Management

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<sup>3</sup> Government Code § 11349(a) (emphasis added).

<sup>4</sup> *Id.*

<sup>5</sup> Government Code § 11349(c).

<sup>6</sup> Government Code § 11349(f).

<sup>7</sup> Government Code § 11349.1(a).

for Petroleum Refineries -Version 5.0 (hereafter referred to as the draft CalPSM Regulation) currently under development by the Board. Otherwise, refinery owners and operators will be unable to implement consistent strategies and procedures to effectively comply with both regulatory schemes. When California Governor Jerry Brown formed an Interagency Working Group on Refinery Safety (Working Group) to examine ways to improve public and worker safety at refineries, that group issued an initial status report finding that:

Multiple regulatory agencies have responsibility for oversight of aspects of refineries, sometimes with overlapping jurisdiction. Agency actions and efforts to...avoid potential duplicative action are insufficient.<sup>8</sup>

The Working Group elaborated that “[i]mproved coordination, communication and oversight are essential and will result in smarter, more targeted enforcement, while avoiding the potential for inconsistent and unnecessary regulatory requirements.”<sup>9</sup>

Unfortunately, as currently written, the draft CalARP regulations have elements that are inconsistent with the draft CalPSM Regulation to the point that the two regulatory schemes may be un-manageable when applied to the regulated community. For example, applicability of the draft CalARP regulations and the draft CalPSM Regulation could vary significantly between the rules. Similarly, companies would not be able to develop a single process hazard analysis (PHA) to satisfy both rules because the draft CalARP regulations requires a separate process for conducting safeguard protection analysis (SPA), while the draft CalPSM Regulation integrates the processes into a single element. There are other examples of inconsistent language and organization between the draft CalPSM Regulation and the draft CalARP regulations in their current form that are identified in the comments on the respective rules.

Similarly, federal OSHA is currently undertaking a process to revise its PSM regulations and has actively begun stakeholder outreach. On top of that, EPA is in the process of revising its RMP regulations and expects to issue those regulations by the end of the year. Both of these federal rules overlap with CalOES’s proposed CalARP regulations, and regulated entities will be left to sort out the potential redundancies and conflicts. Moreover, the compliance process for the federal rules will lag the process for complying with the proposed standard, such that companies will have to undertake serial compliance processes and incur significant additional costs. At this point in time, CalOES should defer to the federal standards and the Cal/OSHA rulemaking and then once those

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<sup>8</sup> Improving Public and Worker Safety at Oil Refineries, Report of the Interagency Working Group on Refinery Safety at 1 (Feb. 2014).

<sup>9</sup> *Id.* at 16

rulemakings are completed, CalOES should evaluate any additional requirements that it can justify as necessary under the relevant provisions of the Government Code.

### **B. Confusing Applicability Provisions.**

The proposed standard retained a confusing applicability provision that states that the standard applies to “all portions of the petroleum refinery,” except “process plant laboratories or laboratories that are under the supervision of a technically qualified individual,” while at the same time also providing that “[t]his Article shall apply to processes within petroleum refineries.” *See* 19 C.C.R. § 2762.0.1(b), (a). This approach is ambiguous, inconsistent, and unnecessary. The problem is that CalOES fails to appreciate that there are important distinctions reflected in the language used in subsections (a) and (b). That is, the application of CalARP provisions to “processes within petroleum refineries” (subsection a) is very different than an “applicability” provision that speaks to “all portions of the petroleum refinery” (subsection b). A literal reading of subsection (b) would not be limited to process-related portions of the refinery; instead, it significantly expands the scope beyond what is delineated in subsection (a).

The ISOR states that subsection (b) applies to portions of refineries “to the extent that they are part of a process.”<sup>10</sup> This, however, does not correspond to the literal language of subsection (b) as it is currently drafted. The ISOR’s explanation provides critical context and therefore, the ISOR’s language needs to be included explicitly in the text of the final rule itself. Otherwise, requiring the regulated community to review extraneous information in order to interpret the regulation will likely result in confusion and inconsistent application of the rule.

### **C. Definitions of Key Terms Dramatically Expanding the Scope of Requirements.**

A principal concern with the proposed standard is its use of certain defined terms that are so imprecise and so overly broad that the result would be that refinery operators would be required to undertake activities that, while costly and time-consuming to implement, would not result in any safety improvements. As noted above, while a safety process/requirement, such as a PHA, may be appropriate in theory, the key determination of reasonableness depends on when and how such requirements apply. The proposed definitions of “major change” and “major incident” are key examples. Used throughout the proposed standard, the terms serve as the trigger for requiring refinery operators to undertake a number of different activities such as Damage Mechanism Review, Hazard Controls Analysis, Management of Change, *etc.* Due to the over-breadth of these

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<sup>10</sup> ISOR at 5

definitions and the fact that they are propagated throughout the proposed standard, a refinery will be forced to conduct extensive analyses for every piece of new process equipment or brief deviation from safe operating limits, without regard to whether there are actual implications for process safety. The result will be meaningless, if not counterproductive, paper exercises that will divert critical process safety personnel from other duties that would actually improve process safety.

To illustrate the concern using the definition of “major incident,” the proposal would define the term to mean:

An event within or affecting a process that causes a fire, explosion or release of a highly hazardous material and which has the potential to result in death or serious physical harm (as defined in Labor Code Section 6432(e)), or which results in an officially declared public shelter-in-place, or evacuation order.<sup>11</sup>

This would significantly expand the standard beyond what was envisioned by state legislators, adding a multitude of events that could not reasonably lead to the types of releases that were intended to be covered. Such a result would be burdensome and overwhelming without resulting safety improvement. In fact, as proposed, the definition may negatively impact overall safety. The unmanageable nature of the proposed language is compounded by the definition of “process safety hazard,” which is defined to mean a “characteristic of a process that, if unmitigated, has the potential to cause a fire, explosion, or release of a highly hazardous material which could result in death or serious physical harm or a major incident.”<sup>12</sup> In other words, a “process safety hazard” includes any hazard “that has the potential for causing” a “release of a highly hazardous material ... which has the potential to result in death or serious physical harm.” This further attenuates the likelihood of harm and dilutes the ability of refineries to focus finite resources on real process safety risks. There should at least be an “imminent” and “substantial” risk of death or serious physical harm, as Congress itself has recognized. By adopting the overbroad definition, CalOES would risk creating scenarios in which so many incidents must be addressed and evaluated that the refineries will have to divert limited resources away from those potential incidents that truly do present an imminent and substantial endangerment because they must address all that have “potential” for serious injury. It is possible that CalOES actually intends “potential” to mean “imminent and substantial endangerment,” which include both a temporal (imminent, rather than at some point) component and a magnitude (substantial likelihood and impact, not merely possible). If that is the intent, CalOES should use that language instead.

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<sup>11</sup> Proposed 19 C.C.R. § 2735.3(hh) (Definition of “major incident”).

<sup>12</sup> Proposed 19 C.C.R. § 2735.3(zz).

In sum, rather than imposing onerous requirements through vaguely worded definitions, “major incident” must be limited to appropriately severe consequences in keeping with the intent of the standard, and should not include sweeping language regarding “potential” consequences. Otherwise, refinery process safety resources will be unable to focus on developing quality analysis and recommendations for hazards that pose true potential for major accidents, a stated goal of the proposed standard.

The proposed definition of “major change” provides another example of an overly broad provision that propagates throughout the regulation and expands its scope without providing corresponding benefits. Under the proposed standard, a “major change” may trigger a number of time-consuming and labor-intensive activities, including a “damage mechanism review,” a “hazard controls analysis,” a “management of change,” and an analysis of human factors. See proposed 19 C.C.R. §§ 2762.5(e)(3); 2762.6(c); 2762.13(b)(2); 2762.15(b). Under the proposed definition of “major change,” each of these activities will need to be conducted for routine or minor equipment changes, such as the replacement of a minor piping flange.

Specifically, the proposed “major change” definition would include:

1. Introduction of a new process; or
2. New process equipment, or new regulated substance that results in a change in safe operating limits; or
3. Any alteration in a process, process equipment, or process chemistry that introduces a new hazard or increases an existing hazard.

This definition is so overly broad that implementation of the many subsections incorporating this language will require more resources than currently exist at any refinery or within qualified hiring pools in the refining industry. At the same time, no improvement in process safety would result. For this reason, the proposed definition of “major change” would result in the proposal’s failing to “effectuate the purpose of the statute,” thus failing to meet the Government Code’s “necessity” standard.

The ISOR provides no explanation why defining “major change” to include all “new process equipment” or “any change in operation outside of established safe operating limits” is reasonably necessary to “effectuate the purpose” of the California Health and Safety Code. The ISOR states only that “Major Change” is “defined by section 2735.3, subsection (gg), as any of the following,” and then sets forth the regulatory definition verbatim with no further explanation. ISOR at 30. This is wholly inadequate under the APA. The ISOR also provides no explanation as to what it means to “increase” an existing process safety hazard. Moreover, in defining the term “change,” the proposal uses the term “any alteration” – without defining “alteration.” The first definition of “change” in Merriam-Webster’s Dictionary is “alter,” yet it is unclear what CalOES

means by adding this word in subparagraph (3). The definition is also internally inconsistent in that the term is “major change” yet the items listed are far from “major,” encompassing “any” alteration in a process, process equipment, or process chemistry. The ISOR provides no explanation as to why the listed items in the subparagraphs are deemed to constitute “major” changes much less why these definitions are “necessary” for effectuating the statutory purpose.

It is essential that CalOES limit the circumstances that constitute a “major change” to where process safety is clearly implicated in a meaningful way. The ISOR does not explain why defining “major change” to include all “new process equipment” or “any alteration in a process, process equipment, or process chemistry that introduces a new hazard or increases an existing hazard” is reasonably necessary to “effectuate the purpose” of the California Health and Safety Code.

Similarly, the inclusion of “[a]ny change in operation outside of established safe operating limits” as a “major change” is inappropriate because such an event may not be a major change as commonly understood in the industry. Equipment may temporarily operate “outside established safe operating limits” due to a brief upset in a separate process unit before returning to normal operation. This scenario is already addressed under the CalARP’s *Operating Procedure* requirements, which requires procedures to establish “[s]teps required to correct or avoid [operating limit] deviation.” It is possible that CalOES would not interpret the phrase “any change in operation outside of established safe operating limits” in this manner, *e.g.*, intending it to apply only to intentional and permanent changes. If that is the case, the proposal requires clarity that it does not include temporary changes in order to satisfy “clarity” requirements. If CalOES does intend this interpretation, the proposed definition would fail to satisfy the Government Code’s requirement for “non-duplication,” under which regulations must not “serve the same purpose as ... another regulation.”

As discussed, the regulation uses the “major change” definition to trigger numerous substantive, time-consuming, and costly requirements, including a Damage Mechanism Review (DMR), an Hierarchy of Controls Analysis, an Management of Change, and human factors analysis.<sup>13</sup> Again, it is unclear whether CalOES interprets the proposed “major change” definition to require that each of these activities be conducted for routine or minor equipment changes, such as the installation of a single piping flange, yet the proposed definition of “process equipment” and “process safety hazard” could create ambiguities. This lack of clarity is a fundamental flaw in the ISOR that must be cured, through re-proposal to provide the public with the required opportunity to comment on

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<sup>13</sup> See proposed 19 C.C.R. §§ 2762.5(e)(3); 2762.6(c); 2762.13(b)(2); 2762.15(b).

the regulations. If CalOES does not intend this interpretation, the proposal fails to meet the “clarity” and “necessity” standards.<sup>14</sup>

As another example, the lengthy requirements of a full Hierarchy of Hazard Controls Analysis (HCA) conducted on a minor equipment change would be very time-consuming but ultimately yield no process safety improvements. Fundamentally, the costs associated with this effort will not result in a material improvement in process safety and may actually hamper process safety improvement.

Similarly, the proposed standard’s definition of “Highly Hazardous Material” (HHM) raises a separate key concern because this term dictates applicability of the entire standard. The proposal fails to employ a clear and straightforward definition of HHM; instead, it defines HHM as being comprised collectively of four other substances. These four terms are themselves defined individually, not by the proposed rule, but with reference to the Department of Industrial Relations’ Hazard Communication Standard. This approach will significantly complicate the applicability analysis for California refineries attempting to determine coverage for various processes, resulting in an unmanageable and costly burden without any improvement in process safety.

#### **D. Undefined Standards.**

In numerous instances, the proposed standard includes language that appears aimed at allowing inspectors discretion to define a violation based on their own opinion. For example, the proposed CalARP regulations repeatedly impose requirements with the modifier “effective.” Proposed § 2762.1(a) requires that information pertaining to the hazards of the process be “effectively communicated” to all affected employees. Proposed § 2762.2(a) requires employers to perform and document an “effective” PHA “appropriate to the complexity of each process.” Proposed § 2762.2(c)(7) requires consideration of facility siting “in order to effectively protect employees and the public” from hazards. The list goes on. The ISOR provides no explanation as to how CalOES will enforce this “effectiveness” requirement and how companies complying with it will be judged or what barriers there will be to inspectors requiring additional steps of companies because in their estimation, the company’s efforts are not “effective.” Such an undefined standard fails the “clarity” requirement of the APA. There are numerous examples of this problem in the proposal which must be remedied before issuance of the rule. Moreover, because the proposed rule does not provide information regarding the intent of many of these terms, API and AFPM respectfully submit that a new ISOR must be issued that sufficiently explains the intent so that regulated entities can provide meaningful comment.

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<sup>14</sup> Government Code § 11349.1, § 11349(c).

Further, some of the proposed standard contains provisions that are so poorly conceived that compliance with such provisions would be essentially impossible. One example of this is the proposed standard's requirement that refineries develop a system to "document" a lengthy list of information, including "recommendations to partially shut-down an operation or process," "partial or complete shut-down of an operation or process," and "written reports of hazards and the employer's response." Proposed § 2762.16. The terms employed by this provision are neither defined nor commonly understood by the refining industry, so the regulated community will be susceptible to potential liability for documenting interactions between its employees of which it is not aware. While a company can provide the system for reporting and encourage reporting, holding the employer responsible for documenting these interactions is impractical and likely to be unsuccessful. This provision plainly fails the "clarity" requirement.

#### **E. Inappropriate Allocation of Responsibilities and Rights to Certain Employees.**

*Stationary Source Manager Responsibilities:* Proposed § 2762.16(a) provides that the "stationary source manager shall be responsible for compliance with this Article." The intent of this provision is unclear, but to the extent it means to make the stationary source manager personally responsible in terms of liability and potential sanctions (including criminal sanctions), it is impermissible. The provision is incompatible with the provision's statutory basis and arbitrarily bestows responsibility for the most complex process safety regulatory scheme in history on a single individual without any analysis of how this will affect process safety. Furthermore, this requirement dangerously discourages involvement in granular safety issues at the highest levels.

In seeking to arbitrarily assign responsibility to an individual employee for compliance with all elements of CalARP, the provision runs counter to the regulation's enabling statute, which focuses on "owners and operators" of covered facilities. The provision further seeks impractically to overburden one individual with sole responsibility for a complex and multifaceted program that is more appropriately divided among a broad team composed of members with relevant skills, training, and qualifications. Apart from being statutorily unauthorized, the requirement has not been shown to be "reasonably necessary" in any event.<sup>15</sup> The ISOR does not provide any basis for this requirement, and in reality, the provision may in fact decrease effective accountability where qualified individuals will be discouraged from accepting a role as "stationary source manager" based on a regulatory and legal responsibility that is disproportionate to the reality of managing an effective facility. API and AFPM respectfully submit that CalOES is without authority to impose such requirements on an individual.

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<sup>15</sup> Government Code § 11342.2.

*Employee Representative Designation:* We are also concerned with the definition of employee representative because it will not accomplish the goals that CalOES states it is trying to achieve. The proposed definition is:

A union representative, where a union exists, or an employee-designated representative in the absence of a union. The term is to be construed broadly, and may include the local union, the international union, or an individual designated by these parties, such as the safety and health committee representative at the site.<sup>16</sup>

To achieve the results that CalOES believes would occur through increased participation of employee representatives and to avoid adverse consequences that are not intended by CalOES, the definition of “employee representative” needs to be limited to employees of the refinery and where there is a union, also local union members that are refinery employees. The proposed regulation has several elements where the “employee representative(s)” would be included, for example, “at the earliest possible point, in performing PHAs, DMRs, HCAs, MOCs, Management of Organizational Change (MOOCs), Process Safety Culture Assessment (PSCAs), Incident Investigations, SPAs and PSSRs.”<sup>17</sup>

API and AFPM understand that CalOES desires effective participation by employee representatives. To achieve that, CalOES must ensure that the selection of employee representatives is limited to people who can fulfill that role in practice. Because the proposed regulation would not allow the employer to control the selection of the employee representative(s), the regulatory language needs to ensure that minimum qualifications are met by such representatives.

API and AFPM are concerned that the proposal would allow non-local union personnel (and non-employees) to be selected as employee representatives. California refineries maintain positive relationships with local union employee representatives, who are appropriately employees at the facility and generally reflect the positions of co-workers. As an example, allowing selection of a member of the “international union,” who might not even be a refinery employee, for participation in process hazard analysis would be inappropriate because such individuals would have no understanding of the specific hazards associated with the process equipment at the facility. It is critical that the employee representative for PHAs be an actual employee of the refinery in order to

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<sup>16</sup> Proposed 19 C.C.R. § 2735.3(t) (Definition of “employee representative”).

<sup>17</sup> Proposed 19 C.C.R. § 2762.10(a)(1).

ensure that the resulting analysis and recommendations are based on an understanding of the design, operation, and maintenance of the specific process equipment for which the PHA is being conducted. The same is true of Pre-Startup Safety Reviews, MOCs, Management of Organizational Changes, DMRs, and other PSM processes, which require familiarity with the particular facility and its operations to provide for “effective” participation. The statement in the definition that “employee representative” is to be “construed broadly” and the inclusion of the term “international union” at least suggests that CalOES is contemplating that a representative could be a person who has never set foot in the refinery. Given the nature of the processes in which the employee representative would be involved, this is inappropriate. Moreover, we are certain that it is not CalOES’s intent to create a regulation that would allow a union to disrupt refinery operations for purposes other than improving safety. By not requiring that the employee representatives meet minimum qualifications to make them effective in their participation, the regulation would invite abuse in situations where an entirely separate dispute between management and a union (*e.g.*, overtime pay) is at issue. The potential negative impacts on facility management and reliability of refinery operations partially resulting from this definition are discussed in further detail in our comments regarding subsection 2762.10(a), Employee Participation. Given the policy underlying the National Labor Relations Act to protect equality of the collective bargaining process, the definition of “employee representative” must be limited to exclude a third party individual who is not connected with or affected by this process.<sup>18</sup>

The ability to designate non-employee “employee representatives” is also problematic because it risks inappropriate disclosure of confidential business information and trade secrets to persons who are not otherwise obligated to maintain confidentiality. For example, the proposed mechanical integrity provisions require that “procedures and inspection documents developed under this subsection shall be readily accessible to ... employee representatives.”<sup>19</sup> Mechanical integrity data is highly confidential and proprietary information that has the potential to result in significant competitive harm if disclosed to the broader industry. As CalOES is aware, mechanical integrity information necessarily includes proprietary design data, maintenance strategies and scheduling, and

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<sup>18</sup> See 29 U.S.C. § 151 (“Experience has proved that protection by law of the right of employees to organize and bargain collectively safeguards commerce from injury, impairment, or interruption, and promotes the flow of commerce...by restoring equality of bargaining power between employers and employees. Experience has further demonstrated that certain practices by some labor organizations, their officers, and members have the intent or the necessary effect of burdening or obstructing commerce by preventing the free flow of goods in such commerce through strikes and other forms of industrial unrest or through concerted activities which impair the interest of the public in the free flow of such commerce. The elimination of such practices is a necessary condition to the assurance of the rights herein guaranteed.”) (emphasis added).

<sup>19</sup> Proposed 19 C.C.R. § 2762.5(a)(2).

material throughput information, all of which would allow competitors to avoid their own costly research and development while trading off the efforts of the refinery whose information was compromised. The regulation provides no limitations on the non-employee employee representatives' use or disclosure of this information, and the risks to employers of losing control of such information if contractor and international union members receive it is significant. CalOES has failed to establish why this unprecedented expansion of the "employee representative" is necessary to achieve the statutory purpose in light of the substantial risks created.

The ISOR is inadequate under the APA because it fails to explain why the definition of "employee representative" is necessary. Indeed, the ISOR contains no discussion at all as to why CalOES has chosen to define this term in this manner, stating only that "Employee Representative" is defined by section 2735.3(t) "to mean" and then setting forth the regulatory definition verbatim with no further explanation.<sup>20</sup> The APA demands more than this. Moreover, the ISOR fails to address the concerns regarding the dilution of quality in critical process safety systems like process hazard analysis due to a lack of training, qualification, and accountability. For this reason alone, the proposed rule fails to satisfy APA requirements and must be withdrawn and re-proposed (or at least revised and subjected to an additional 15-day comment period). Fundamentally, the definition must be revised to limit "employee representatives" to employees of the refinery in order to ensure that trained and qualified individuals participate in critical process safety systems, while also supporting an equalized collective bargaining process.

#### **F. Ability to Use Qualitative Methods for SPAs.**

Proposed § 2762.2.1 provides that for each scenario in the PHA that identifies the potential for a major incident (which as discussed above, includes minor incidents as proposed), the employer shall perform an effective written SPA to determine the effectiveness of existing safeguards. Subsection (b) requires that all independent protection layers for each failure scenario shall be independent of each other and independent of initiating causes, and subsection (c) requires the use of a "quantitative or semi-quantitative method, such as Layer of Protection Analysis or an equally effective method to identify the most protective safeguards." It goes on to require that the risk reduction obtainable by each safeguard "be based on site-specific failure rate data, or in the absence of such data, industry failure rate data for each device, system or human factor."

API and AFPM read proposed subsection (c) to require either a quantitative or semi-quantitative method to identify the most protective safeguards or an "equally effective

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<sup>20</sup> ISOR at 43.

method” to identify the most protective safeguards. We interpret this language to allow for purely qualitative methods where appropriate. This is important to ensure that employers have the most effective tools at their disposal to reduce risks pursuant to the SPA. Qualitative methods should be permitted in appropriate circumstances. Insofar as CalOES actually intends to prohibit purely qualitative methods, such a prohibition would be inappropriate in that it would not be possible to justify precluding these very effective methods as necessary to achieve legitimate goals of the regulations.

Indeed, determination of risk and weighing various options inherently includes qualitative analyses. As the regulatory language recognizes, quantitative analyses are not always practical because they utilize exact inputs and values that may not always be realistically assigned to the weight of various safeguards individually or combined. In contrast, qualitative analysis uses informed judgment by those who understand the process based upon information that may not be quantifiable because it is impossible to capture with numerical inputs, such as process knowledge, equipment history, subject matter expertise, and confidence in the various measurements that are utilized in quantitative analysis. A strong precedent exists for using qualitative analysis in the process safety context. For example, risk matrices often include qualitative descriptions of event likelihood, such as “unlikely to occur during the process lifecycle,” as opposed to assigning it a quantitative value, such as “probability of occurrence is less than X.” The value of this approach is that it may be more readily understandable to the team assessing risk to consider practical qualitative terms, and thus their analysis will be more effective.

By including such considerations as a method to approach SPA, CalOES improves the utility of the SPA and an employer’s ability to make rational decisions regarding protective safeguards. For example, an operator may have a routine duty to periodically check that a block valve upstream of a pressure relief device (“PRD”) is locked open. This is an administrative control that is a safeguard. The risk reduction coming from reduced likelihood of an overpressure event due to a blocked PRD can be best evaluated qualitatively. Furthermore, quantitative data does not exist for human performance evaluations, and inspection and maintenance safeguards do not lend themselves to quantitative analysis. Thus, it would have been inappropriate for CalOES to limit SPA teams’ ability to utilize the most effective analysis in such a case because it would materially and negatively impact process safety at refineries.

The benefit of qualitative analysis becomes particularly evident in the context of processes or equipment that are not engaged in “traditional” hydrocarbon processing. For example, a SPA will be significantly more effective in considering safeguards and layers of protection for covered equipment whose primary material is water through a qualitative analysis, because the hazards associated with such equipment and processes will not be effectively reduced to numerical values and risk matrices. Because CalOES has included specific coverage of utilities under the proposed standard, the inclusion of

qualitative analysis is even more critical. As a result, any final regulation must continue to include the ability to use other methods, like qualitative analysis, in addition to quantitative or semi-quantitative analysis.

We note that the ISOR states that the purpose of the SPA “is to determine the overall effectiveness of the safeguards for each of the failure scenarios that have the potential for a major incident.”<sup>21</sup> Protection layers are required to be independent of one another and initiating causes in order to “isolate safeguards and prevent sequential failure.” The ISOR does not explicitly recognize that the regulation allows for other equally effective methods, but the ISOR should do so. Moreover, the FSOR should not elevate quantitative or semi-quantitative measures above qualitative measures that are effective, and if it were to do so, it would need to explain why it is necessary that the owner/operator use quantitative or semi-quantitative methods to identify safeguards and what benefits are derived from such a restriction.

#### **G. Overbroad Hazard Controls Analysis Provisions, Which Should Be Limited to the Design Phase.**

Proposed Section 2762.13 requires a HCA as a standalone analysis for all existing processes on a set schedule; when a PHA team identifies the potential for a “major” incident (which, as defined, includes minor incidents); and as part of a MOC review, whenever a “major” change (which, as defined, includes minor changes) is proposed, *i.e.*, before the change is implemented. It also requires an HCA during the design phase of new processes, new process units, and new facilities, and their related process equipment.

API and AFPM oppose the requirement of a standalone HCA because it is redundant and unnecessary, and the suggestion that it will improve safety is unsupported by the record. Owners/operators will need to dedicate significant and costly resources to review existing processes that have already undergone robust risk analyses via other mechanisms. For example, PHAs have been implemented and honed by refiners for more than two decades to become a highly effective tool for assessing and reducing risk. By requiring refiners to perform a standalone analysis, CalOES limits the flexibility of what should be a performance-based rule without any commensurate increase in safety. The ISOR merely notes the HCAs “are to be performed in conjunction with the PHA schedule,” ISOR at 49, but does not demonstrate how a standalone analysis is necessary to improve safety. The proposed requirement is not shown, therefore, to be “reasonably necessary.”<sup>22</sup>

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<sup>21</sup> ISOR at 15.

<sup>22</sup> Government Code § 11342.2.

API and AFPM are further concerned that the requirement's broad language will dilute HCAs such that the analyses will not offer any meaningful process safety improvement. The proposed rule requires owners/operators to conduct HCAs for PHA and incident investigation recommendations, as well as part of routine MOC review. Pursuant to Subsection (c), CalOES is also requiring that refiners revalidate an HCA in conjunction with the PHA schedule. These provisions are incompatible and undermine the effective strategy EPA and OSHA took when they established PHAs as scheduled safety analysis and MOCs as routine operational risk assessment requirements. Either an HCA is a standalone assessment that should be reviewed and considered broadly on a scheduled basis, or it is a day-to-day risk management tool.

API and AFPM are concerned that requiring an owner/operator to conduct HCAs in these circumstances is unsustainable and will result in superficial HCAs that do not offer any meaningful process safety improvements. PHAs, incident investigations, and MOCs are frequently conducted, and we estimate the annual combined number of PHA and investigation recommendations and MOCs to be in the thousands. It is unreasonable that refiners be required to consistently complete a corresponding number of HCAs per year, given the extensive effort required to meet the CalOES's stated requirements. A structured and mandated HCA should not be required separately for established process safety systems, such as MOCs and incident investigation recommendations that already assess risk in a manner designed to eliminate hazards wherever possible.

API and AFPM further emphasize that an HCA will only cost-effectively drive safety improvement during the design phase for a new plant or process before fundamental construction and investments have been completed. Once a facility unit or process has been constructed and is in operation, the ability to effectively compare and implement a hierarchy of hazard controls is greatly reduced without demolishing the process or facility.

Given the foregoing, the HCA requirements as proposed fail the necessity requirement. And, as noted, because the definitions of "major change" and "major incident" are impermissibly vague, the HCA requirements also fail the clarity requirement.

#### **H. Ability of Employer to Manage Facility Decision Making.**

Related to the concerns discussed above regarding employee representatives, API and AFPM are concerned with Proposed § 2712.16(e)(4), which addresses the circumstances and process for accepting or rejecting a recommendation of a PHA, SPA, DMR, HCA, Incident Investigation, or Compliance Audit. CalOES's proposed requirement regarding documentation of team member comments is impractical and will stifle open and honest dialogue about recommendations. For example, PSSR items and HCA recommendations often number in the hundreds and are most effectively developed over multiple

discussions during the engineering and design stages. Many recommendations may be informally discussed during process safety team meetings, and are inappropriate for formal documentation and tracking. Certainly, CalOES has failed to make any showing that such a burdensome requirement is “reasonably necessary.”<sup>23</sup>

Moreover, employees have expressed concern about retention and documentation of comments, and owners/operators should not be required to document conversations against the wishes of the employee. Employees will be reluctant to express true opinions out of fear of being second-guessed by the authorities at a later date. This may have a chilling effect on discussions regarding recommendations, as well as general willingness to participate on process safety teams. Absent evidence that a lack of documentation of employee conversations in developing recommendations has contributed to process safety hazards, CalOES has failed to demonstrate a sufficient basis for this requirement. As proposed, it is unclear whether employees would be allowed to remain anonymous during this process. This is a particularly salient ambiguity, in light of the practical employee dynamics at issue. In this regard, therefore, the proposal fails to satisfy the “clarity” standard as well.

We note that a determination of infeasibility is generally a multi-faceted decision. Rarely is an employer faced with a recommendation in which the *sole* basis for a determination of infeasibility would be cost. A situation may arise, however, when the flexibility to reject a recommendation due to cost is critical, particularly in the context of the separate HCA provisions. As noted above, API and AFPM expect that if an HCA team with varying levels of experience and expertise is asked to “analyze and document” inherent safety measures and safeguards from a wide array of untested sources and then attempt to “eliminate hazards to the greatest extent feasible,” that team may develop recommendations that are inappropriate, untested, or impractically redundant. An employer would have almost no options for rejecting a process safety recommendation that is wholly redundant with other recommendations or existing safeguards. Ultimately, this will force a refiner to expend significant resources on layers upon layers of first and second order inherent safety measures that offer little to no increase in safety, while diverting resources away from large-scale investments or improvements that would meaningfully improve safety.

Ultimately, employers should be able to adopt alternative measures that provide sufficient risk reduction and decline recommendations that are unnecessary to protect employees. Under a literal reading of the proposed standard’s language, the CalOES’s requirement imposes potentially onerous costs on employers without any demonstrated benefit to safety.

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<sup>23</sup> Government Code § 11342.2.

## **I. Definition of Recognized and Generally Accepted Good Engineering Practices (RAGAGEP).**

Currently, the concept of RAGAGEP is aligned with the performance-oriented nature of process safety systems and provides flexibility to owners/operators in implementing industry guidance and internal practices applicable to individual operations. CalOES's inclusion of a prescriptive definition for RAGAGEP is incompatible with process safety and may limit innovative development of maintenance practices under the proposed rule's mechanical integrity element. CalOES should not seek to prescriptively define the concept of RAGAGEP, which has been highly successful in driving innovation and improvements to process safety through flexible incorporation of recognized and generally accepted practices.

CalOES has failed to provide any rationale or explanation for the "necessity" that the regulation set forth a prescriptive definition of RAGAGEP.<sup>24</sup> The ISOR states that RAGAGEP "has been the source of some confusion in existing regulations."<sup>25</sup> However, a prescriptive RAGAGEP definition based on a limited list of industry standard-setting organizations will only serve to limit the ability of operators to address site-specific hazards, and will thereby create the potential to increase risks. While an operator or unlisted organization may identify a more advanced, safer maintenance strategy than any developed by CalOES selected organizations, this would not be considered RAGAGEP under the proposal due to the prescriptive, list-based approach.

It is unclear whether the CalOES's list of identified standard-setting organizations is intended to be exhaustive, preferred, or merely examples of potential sources of RAGAGEP. If it is intended to represent the exhaustive or preferred list of what CalOES views as RAGAGEP, it is clearly incomplete. Many other organizations develop and issue scientifically based methodologies for conducting technical engineering and maintenance activities at refineries. The proposed definition thus creates an ambiguity and thereby fails to satisfy the "clarity" standard.

Finally, not all industry codes and standards from one source can be considered "recognized and generally accepted" simply by virtue of their being issued by a well-known organization. Although newly drafted codes and recommended practices may form a starting point from which an operator derives its individual RAGAGEP based on engineering analysis, such documents do not become RAGAGEP until they have been the subject of broad industry review and acceptance. Accordingly, RAGAGEP should remain a flexible, performance-based concept that not only allows owners/operators to

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<sup>24</sup> Government Code § 11349.1, § 11349(a).

<sup>25</sup> ISOR at 10.

tailor process safety activities to the unique hazards and complexities of each facility but encourages them to do so. The record lacks justification for ignoring these important aspects of the performance-based RAGAGEP approach that has historically been successful.

#### **J. Public Reporting of Major Incident Investigations.**

Subsection (j) of Proposed 2762.9 provides that the Unified Program Agency (UPA) “shall make reports from investigation of major incidents available to the public by posting the final report on the Unified Program Agency’s website within 30 calendar days of receipt.” API and AFPM strongly oppose this requirement. CalOES’s statutory mandate is to “reduc[e] regulated substance accident risks.”<sup>26</sup> The ISOR explains that public posting of major incident investigation reports is “necessary for the purpose of demonstrating to the local community that a full investigation occurred, and that changes were made to prevent future incidents.”<sup>27</sup> This, however, is not within CalOES’s statutory mandate. The ISOR does not explain how publishing the full report would enhance safety or prevent accidental releases, rather than to simply satisfy public curiosity. CalOES has neither demonstrated why this provision is “reasonably necessary to effectuate the purpose of the statute” nor how this requirement is even within its statutory authority.<sup>28</sup>

#### **K. Independent UPA PSCA, Incident Investigation, Evaluation of ARP Management System, and Human Factors Analysis.**

Subsection (n) of Proposed § 2762.9 authorizes the UPA to perform independent safety analyses. API and AFPM oppose this requirement as burdensome and costly without a demonstrated safety benefit. CalOES has not proposed any parameters on how a third-party process safety analysis would be conducted. The proposed rule lacks specificity regarding who would conduct the analysis, how and when it would be conducted, and it does not include limits on duration or cost.

Contrary to the assertions of the ISOR, owners and operators have the resources to ensure impartiality during the investigation of a major incident. Refiners have access to qualified, objective subject-matter experts with significant operational knowledge employed within the company. The CalOES proposal undervalues the role of an internal process safety analysis, which provides valuable learning opportunities and fosters institutional, process-specific knowledge. Though third-party auditors can provide “fresh

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<sup>26</sup> Health and Safety Code § 25531(e).

<sup>27</sup> ISOR at 41.

<sup>28</sup> Government Code § 11349.1(a)(2), § 11346.2(b).

eyes,” the same benefit can be achieved through use of cross-facility or cross-operational employee auditors. CalOES has not demonstrated that the potential benefits of an internal audit are outweighed by evidence that a third-party analysis is a necessary and more effective way to ensure worker safety. For this reason, it has not been shown that the requirement is “reasonably necessary.”<sup>29</sup>

Finally, it is hardly obvious that there is any statutory basis for the requirement that the owner or operator “shall pay the costs of the independent analysis” or that such a requirement is even lawful. In the ISOR, CalOES states simply that the “owner or operator must also pay the costs of the independent analysis” without otherwise identifying the statutory authority on which CalOES relies for imposing such a requirement.<sup>30</sup> At a minimum, CalOES should identify its authority in a new 15-day notice and solicit comment on the issue so that the public can evaluate any identified statutory provision on which OES relies in promulgating such a requirement. Indeed, Health and Safety Code § 25535.5 provides that “[a]ny fee imposed on any stationary source to cover the administering agency’s cost of implementing the accidental release prevention program pursuant to this article shall be imposed only through the single fee system established pursuant to Section 25404.5.” In the FSOR, CalOES must explain how the requirement that owners and operators “shall pay the costs of the independent analysis” can be reconciled with the provisions of Section 25404.5.

#### **L. Root-Cause Analysis Identification of “Management System Causes.”**

Subsection (e) of Proposed § 2762.9 specifies that the “incident investigation team shall implement the owner or operator’s root cause analysis method to determine the underlying causes of the incident,” and this “analysis shall include identification of management system causes, including organizational and safety culture causes.” Any root cause requirement should be consistent with industry practices and the current regulatory requirement to evaluate the factors that contributed to an incident. It is inappropriate to include a presumption of management system and organizational and safety culture “causes” where the underlying cause of an incident may result from any number of issues. Such a presumption is counterintuitive and unsuitable, as the results of a root cause analysis may identify human factors as a primary cause. It is simply inappropriate to conclusively presume that a management system “cause” will always be implicated after an incident.

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<sup>29</sup> Government Code § 11342.2.

<sup>30</sup> ISOR at 42.

#### **M. CalOES Lacks Statutory Authority to Issue the CalARP Program 4 Regulations.**

Article 2 of Chapter 6.95 establishes the “accidental release prevention program,” referred to as CalARP. Health and Safety Code §§ 25531 *et seq.* CalARP is California’s analog to the federal risk management program (RMP) that addresses accidental releases of regulated substances as required under § 112(r) of the Federal Clean Air Act. 42 U.S.C § 7412(r).

CalOES relies on Health and Safety Code § 25531 and § 25534.05 as statutory support for its proposed Program 4 regulations.<sup>31</sup> However, neither of these provisions, nor any other sections of Article 2 of Chapter 6.95, provides the requisite authority for CalOES’ proposed Program 4 regulations.

Section 25531 explains the legislative goals of the CalARP program are “reducing regulated substances accident risks and eliminating duplication of regulatory programs.” Health and Safety Code § 25531(e). The California Legislature determined the best way to achieve these goals was through “implementing the federal risk management program in the state, with certain amendments that are specific to the state.” *Id.* Thus, the legislature enacted Article 2 of Chapter 6.95 to allow the state to “seek and receive delegation of the federal program for prevention of accidental releases of regulated substances established pursuant to Section 112(r) of the federal Clean Air Act . . . by implementing the federal program as promulgated by the Environmental Protection Agency, with certain amendments that are specific to the state.” *Id.*

Section 25534.05(a) establishes the scope of permissible accidental release activity regulations. This universe is limited to five discrete areas: (1) stationary source registration; (2) RMP receipt, review, revision and audit; (3) resolution of disputes between stationary sources and local administering agencies; (4) providing for public availability of RMPs; and (5) technical assistance to stationary sources subject to the RMP program.

On its face, the plain language of § 25534.05(a) constrains Cal OES’ authority to implementation of the federal RMP while accounting for circumstances “specific to” California. Health and Safety Code § 25531(e). *See also* Health & Safety Code § 25531.2 (“The legislature finds and declares that as the state implements the federal accidental release prevention program pursuant to this Article . . . .”) Such amendments include ministerial changes such as replacing references to the U.S. EPA with CalOES and

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<sup>31</sup> *See* CalARP Program 4 Notice and Informative Digest Version 2016, p. 1 available at <http://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/california-accidental-release-prevention>.

addressing concerns unique to California, such as seismic concerns. *See* Health and Safety Code § 25534.05(c). The statute does not otherwise authorize CalOES to unilaterally single out the refining industry – an industry that is *not* specific to California – for additional regulation. Likewise, nothing in the federal RMP program gives CalOES authority to promulgate refining industry specific accidental release requirements. Only until U.S. EPA’s proposed refinery-related RMP requirements should become final,<sup>32</sup> will CalOES be authorized to adopt such refinery-specific requirements. *See e.g., In re Murray Energy Corp.*, 788 F.3d 330, 334 (D.C. Cir. 2015) (Proposed CAA rules are not final agency action because they are not the “consummation of the agency’s decision making process,” and do not determine “rights or obligations,” or impose “legal consequences.”) (quoting *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997)). At that time, CalOES should provide an opportunity for informed comment based on the final federal requirements.

Moreover, the accidental release prevention requirements of Chapter 6.95 apply to “regulated substances.” *See, e.g.,* Health and Safety Code §§ 25532(i) (regulated substance definition); 25534(a) (“For any stationary source with one or more covered processes, the administering agency shall make a preliminary determination as to whether there is a significant likelihood that the use of *regulated substances* by a stationary source may pose a *regulated substances* accident risk.”) (emphases added). While it concedes that the CalARP program is intended to “prevent accidental releases of regulated substances,” CalOES nonetheless admits that its proposed Program 4 regulations are “intentionally much broader” and are “designed to go beyond a list of regulated substances.” *See* Initial Statement of Reasons at 7. CalOES offers no statutory support for this expansion because there is none.

The proposed Program 4 regulations also run afoul of the statutory mandate requiring coordination between the CalARP and Cal/OSHA PSM programs to ensure a “single, unified inspection and enforcement program.” Cal. Health and Safety Code §§ 25404.2(a)(4), 25542. *See also* Health and Safety Code § 25533(b). The proposed Program 4 and refinery PSM programs are replete with inconsistencies that prevent a single unified program. Fundamentally, the applicability of the two programs is inconsistent. Rather than adopt the approach used in the proposed PSM regulations and unequivocally say the proposed Program 4 regulations apply to processes within petroleum refineries, CalOES insists on muddying the waters by adding language attempting to identify areas excluded from the proposed Program 4 requirements. Proposed § 2762.0.1(b).

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<sup>32</sup> 81 Fed. Reg. 12,638 (March 14, 2016).

**N. CalOES Has Not Shown That the Proposed CalARP Regulations are Reasonably Necessary to Effectuate the Purpose of Health and Safety Code § 25531 and § 25534.05.**

Assuming (notwithstanding the foregoing) that CalOES has express or implicit authority under the California Health and Safety Code to adopt the proposed standard as a final regulation, CalOES has failed to establish that the regulation is “reasonably necessary to effectuate the purposes” of the statute. For this reason, API and AFPM respectfully submit that CalOES should withdraw the proposal.

As was noted, in its July 15 Notice, CalOES stated that Health and Safety Code § 25531 “requires the adoption of standards that are at least as effective as the federal Risk Management Program (RMP) standards under the Clean Air Act 112(r), and Title 40 of the Code of Federal Regulations Part 68,” and that the “proposed regulations implement, interpret, and make specific Government Code Section 8585 and Health and Safety Code Sections 25531 and 25534.05.” CalOES cited no other statutory provision under which it is authorized to adopt the regulation.

As relevant here, Health and Safety Code § 25531(c) provides that the “Legislature finds and declares that the goals of reducing regulated substances accident risks and eliminating duplication of regulatory programs can best be accomplished by implementing the federal risk management program in the state” with “certain amendments that are specific to the state.” Further, in relevant part, Health and Safety Code § 25534.05(a) provides that CalOES is to “adopt regulations” for the following specific activities: (1) stationary source registration; (2) RMP receipt, review, revision and audit; (3) resolution of disputes between stationary sources and local administering agencies; (4) providing for public availability of RMPs; and (5) technical assistance to stationary sources subject to the RMP program. In other words, the plain language of § 25534.05(a) constrains CalOES’s authority to implementation of the federal RMP while accounting for circumstances “specific to” California. Health & Safety Code § 25531(e). See also Health & Safety Code § 25531.2 (“The legislature finds and declares that as the state implements the federal accidental release prevention program pursuant to this Article . . . .”) CalOES’s authority is limited to adopting the federal RMP. The only permissible deviations are “for amendments that are specific to the state.” Health & Safety Code § 25531(e). Such amendments include ministerial changes such as replacing references to the United States Environmental Protection Agency with CalOES and addressing concerns unique to California, such as seismic concerns. *See* Health & Safety Code § 25534.05(c).

Thus, the California Legislature has, *by statute*, identified the specific regulatory provisions that the CalARP regulations are to contain. Given that the proposed standard departs so significantly from the plain terms of the Health and Safety Code in adding new regulatory elements for which there is no express statutory authorization, it is particularly

important that CalOES demonstrate that the proposed regulation is “reasonably necessary to effectuate the purpose” of the statute and provide some explanation why the existing regulation is no longer sufficient to achieve that purpose. CalOES has neither made that demonstration nor provided such explanation.

To the contrary, in the ISOR, CalOES explains that the proposed standard is intended to “implement[] the recommendations” of the February 2014 report of the Governor’s Interagency Working Group on Refinery Safety and are intended to “function in parallel with changes to the PSM program that are proposed by Cal/OSHA.” ISOR at 3. Laudable as this goal is, the issue here is not whether the proposed standard effectively implements recommendations from the Governor’s report or other outside experts. Instead, it is incumbent on CalOES to exercise *its own judgment* to determine that the various requirements that the new standard would impose are “reasonably necessary” to achieve the statutory purposes of the Health and Safety Code.

Assuming CalOES has made that determination, it is not reflected anywhere in the rulemaking record. Nor has CalOES adduced substantial evidence to support such a determination. Given this failure, API and AFPM have, at a minimum, been deprived of their opportunity to comment meaningfully on a fundamentally significant aspect of the proposed standard.

**O. Because the ISOR Provides Neither an Adequate Explanation of Why the Proposed Regulation Is Reasonably Necessary, a Proper Enumeration of the Benefits, Nor a Meaningful Explanation of the Alternatives that CalOES Considered, the Proposed Regulation Must Be Withdrawn.**

During the workshop process for CalOES’s proposed regulations, many comments had been submitted on the draft regulation, and it had been hoped that the proposed regulatory text and ISOR would either incorporate recommended changes or explain why CalOES’s proposed regulatory provisions were preferable in at least some level of detail. Unfortunately, the ISOR contains little explanation of the rationale for the regulatory provisions or even explanation of how CalOES intends the proposed provisions to be interpreted.

As was noted previously, no regulation adopted by a California agency to “implement, interpret, make specific or otherwise carry out the provisions” of an authorizing statute will be deemed “valid or effective” unless such regulation is “consistent and not in conflict” with that authorizing statute and “reasonably necessary to effectuate” the statutory purposes. Government Code § 11342.2. To that end, Government Code § 11346.2 further requires that a proposed regulation be accompanied by an ISOR, which initial statement shall include, at a minimum, a “statement of the specific purpose” of the rule, the “problem the agency intends to address,” and the “*rationale for the*

*determination* by the agency” that the regulation is “*reasonably necessary* to carry out the purpose and address the problem” for which the regulation is proposed.”<sup>33</sup> That is to say, the agency must do more than merely state that it has determined that the proposed regulation is “reasonably necessary.” The agency must provide in the ISOR its “rationale” – *i.e.*, a reasoned explanation – as to why it has so determined.

Further, where the proposed regulation requires the use of “specific technologies or equipment,” or otherwise imposes “prescriptive standards,” the agency must explain in the ISOR why such mandates or prescriptive standards are necessary.<sup>34</sup> The agency must also consider alternatives to its proposed approach, providing in the ISOR a “description of reasonable alternatives” along with the agency’s reasons for rejecting those alternatives.<sup>35</sup> “Reasonable alternatives” that the agency must consider will include, but are not to be limited to, “alternatives that are . . . less burdensome and equally effective in achieving the purposes of the regulation,” while at the same time “ensur[ing] full compliance with the authorizing statute.”<sup>36</sup>

In particular, the “imposition of performance standards shall be considered as an alternative” to a regulatory approach that “prescribe[s] specific actions or procedures.”<sup>37</sup> This comports with the California Legislature’s explicit preference for performance standards over prescriptive standards.<sup>38</sup>

Finally, the Agency is required in the ISOR to “enumerate the benefits anticipated from the regulatory action,” including the “benefits or goals provided in the authorizing statute.”<sup>39</sup> These “benefits” may include “nonmonetary benefits such as the protection of the public health and safety” and “worker safety,” but they must be specifically identified.<sup>40</sup>

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<sup>33</sup> Government Code § 11346.2(b)(1) (emphases added).

<sup>34</sup> Government Code § 11346.2(b)(1).

<sup>35</sup> *Id.* § 11346.2(b)(4).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> See Government Code § 11340(d) (“The imposition of prescriptive standards upon private persons and entities through regulations where the establishment of performance standards could reasonably be expected to produce the same result has placed an unnecessary burden on California citizens and discouraged innovation, research, and development of improved means of achieving desirable social goals.”)

<sup>39</sup> Government Code § 11346.2(b)(1).

<sup>40</sup> *Id.*

The ISOR accompanying the proposed standard fails to meet these basic requirements. As described in more detail below, for major elements of its proposed standard, CalOES provides at most only cursory assertions, which do not rise to the level of a true explanation or “rationale” for its determination that the particular regulatory approach reflected in a given provision is “reasonably necessary” to achieve the intended result. The ISOR’s purported “enumeration” of the “benefits” that are said to result from the proposed regulation is similarly cursory. The ISOR asserts, without directly identifying any specific evidence for the assertion, that the “proposed regulations *will improve* safety at California refineries, *which will* in turn result in fewer major process incidents and fewer releases of hazardous materials from refineries.”<sup>41</sup> The ISOR then continues that, “[b]ecause the number of major refinery incidents *may* be reduced under the proposed regulation, it *could provide* safety and health benefits to workers and the public in nearby communities as well as other economic benefits for businesses.”<sup>42</sup> On its face, the ISOR appears on the one hand to assert (albeit without identifying the basis for the assertion) that the proposed regulation “will” improve refinery safety, but then on the other hand, goes on to suggest little more than that the regulation “may” reduce refinery incidents and releases, which then “could” result in benefits.

In any event, absent CalOES’s providing any specific basis for its assertion that safety will be improved and incidents will be reduced, it is impossible to evaluate and ultimately credit such benefits to the proposed standard. Under Government Code § 11346.2(b)(3), the ISOR is required to set forth the “technical, theoretical, and empirical study, report, or similar document, if any” upon which the agency’s proposed regulation relies. In apparent compliance with this requirement, the ISOR lists a series of materials on which CalOES purportedly relied. *See* ISOR at 54. Nowhere in the ISOR, however, does CalOES specifically draw on any information or analysis contained in any of those materials in support of a claim that a particular proposed regulatory provision can reasonably be assumed to achieve the desired result.

The ISOR relies on a flawed cost –benefit analysis prepared by RAND<sup>43</sup>. The approach to estimate implementation costs of the proposed regulation by surveying refiners is flawed. The survey questionnaire is deficient and fails to correctly ascertain cost data. Uncertainty surrounding implementation and enforcement led to a wide variation in survey responses and, likely an underestimate of regulatory costs. This is reinforced by RAND’s \$58 million best estimate for annual industry costs being significantly below estimated annual industry benefits of \$220 million in avoided costs. RAND’s

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<sup>41</sup> ISOR at 68 (emphases added).

<sup>42</sup> *Id.* (emphases added).

<sup>43</sup> “Cost-Benefit Analysis of Proposed California Oil and Gas Refinery Regulations.” RAND Corporation. 2016. [http://www.rand.org/pubs/research\\_reports/RR1421.html](http://www.rand.org/pubs/research_reports/RR1421.html)

methodological approach to measure economy wide impacts of the proposed regulation contains flawed results, and an overestimate of economy wide impacts because they appear to rely on a bad assumption related to upstream (oil and natural gas extraction) sectors. Simulating economic impacts with IMPLAN (2013 data) indicates around 36% of economy wide impacts reported by RAND are related to upstream segments. It is a bad assumption that upstream industry segments will experience these negative impacts resulting from an unplanned refinery outage.

In summary, industry has indicated large variability in implementation costs and the range and point estimates calculated by RAND are likely too low. The economy wide benefits are likely overestimated, as the impacts reported by RAND rely on a bad assumption. Making directional changes to the estimates for costs and benefits, all else equal, would require a larger reduction to the risk of a refinery incident, than estimated by RAND at 7.3%, to make the proposed regulations economically justifiable.

Finally, the ISOR's treatment of the "alternatives" to the proposed standard that were considered by CalOES lacks credibility. Only two alternatives are cited: "maintain the status quo" and the so-called "safety case model." The latter alternative, which is described as an approach in which "facilities . . . explain what they will do in order to try to ensure their safety," and the "regulatory authority is charged with determining whether a facilities' explanation or effort is acceptable or effective," is rejected as requiring an undue commitment of resources, particularly on the part of the regulatory authority. ISOR at 74-75. (API and AFPM agree that the safety case should be rejected.)

Not found in the ISOR is any indication that CalOES considered the alternative of a regulatory approach that relies less on prescriptive standards and more on performance standards, for which the California Legislature has already expressed a preference, as noted above. With CalOES's having apparently not considered the application of performance standards in the development of the proposed regulation, it was in no position to assess whether the same ends could be achieved without resorting in the first instance to the prescriptive approach that is reflected throughout the proposed regulation.

### **III. Conclusion**

For at least the foregoing reasons, API and AFPM cannot support CalOES's Proposed New Article 6.5 of the California Accidental Release Prevention Program, *Program 4 for Petroleum Refineries*. In addition, CalOES should not interpret our silence on a particular issue or question as our agreement with Cal/OSHA's proposed changes.

API and AFPM share a common goal with CalOES in creating and maintaining safe workplaces for California's refinery employees and our surrounding communities, but we contend that this proposal will not only hamper efforts at improving safety, it will have the unintended consequence of driving the refining industry out of the State.

Should you have any questions about the API and AFPM comments, please contact Ron Chittim at 202/682-8176 ([Chittim@api.org](mailto:Chittim@api.org)) or Susan Yashinskie at 202/552-8478 ([SYashinskie@afpm.org](mailto:SYashinskie@afpm.org)). Thank you for the opportunity to provide input on these important topics.

Sincerely,



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