Proposed Amendments to the California Accidental Release Prevention (CalARP) Regulations
Title 19, Division 5, Chapter 2, California Code of Regulations

INITIAL STATEMENT OF REASONS

I. Introduction and Background

The California Environmental Protection Agency (CalEPA) hereby provides this initial statement of reasons (ISOR) for proposed amendments to the California Accidental Release Prevention (CalARP) Program 4 regulations in compliance with Government Code section 11346.2(b).

CalEPA proposes certain regulatory amendments to the provisions set forth in Chapter 2 of Division 5 of Title 19 of the California Code of Regulations. CalEPA is conducting this rulemaking pursuant to the court-approved resolution of the following two pending actions:

- *Western States Petroleum Association v. California Occupational Safety and Health Standards Board, California Division of Occupational Safety and Health, and California Environmental Protection Agency*[1] (Sacramento Super. Ct., Case No. 34-2019-00260210)
- *Western States Petroleum Association v. California Occupational Safety and Health Standards Board, and The California Environmental Protection Agency*[2] (E.D. Cal., Case No. 2:19-cv-1270-JAM-DB)

The proposal would:

- Amend and clarify the definitions of highly hazardous material, process, major change, and employee representative;

[1] The state court lawsuit originally named the Governor's Office of Emergency Services (Cal OES) as a party to the suit. With the transition of the CalARP program to CalEPA, CalEPA was substituted in as a defendant on October 7, 2021, in place of Cal OES.

[2] The federal court lawsuit originally named the Governor's Office of Emergency Services (Cal OES) as a party to the suit. With the transition of the CalARP program to CalEPA, CalEPA was substituted in as a defendant on September 23, 2021, in place of Cal OES.

- Amend and clarify the requirements pertaining to the Hierarchy of Hazard Control Analysis;
- Amend and clarify, with respect to employee participation in Accidental Release Prevention element activities, how owners and operators will allow for effective participation by employees engaged in such activities; and
- Amend a footnote to address an error in a reference citation.

CalEPA also proposes certain amendments to the regulations that do not materially alter any requirement, right, responsibility, condition, prescription, or other regulatory element of any California Code of Regulations provision (e.g., changes without regulatory effect). These amendments without regulatory effect include changes made for purposes of revising structure, syntax, renumbering, or relocating regulatory provisions.

A. Background

Public awareness of the potential danger from accidental releases of hazardous chemicals continues to increase as accidents have occurred around the world. In response to public concern, and recognizing that chemical hazards exist, the United States Environmental Protection Agency (U.S. EPA) initiated a Chemical Emergency Preparedness Program (CEPP) in 1985, as part of U.S. EPA's Air Toxics Strategy. In 1986, Congress adopted many of the elements of CEPP in the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA). EPCRA dealt with incident reporting and chemical inventories and did not directly address accident prevention. Consequently, in 1986, U.S. EPA established a chemical accident prevention program to collect information on chemical accidents, work with other groups to increase knowledge of prevention practices, and encourage industry to improve the safety of chemical facilities. This program resulted in the enactment of a federal law for the prevention of chemical accidents.

Section 112(r) of the amended Clean Air Act (CAA), signed into law on November 15, 1990, mandated the new federal program focusing on the prevention of chemical accidents. The objective of section 112(r) is to prevent serious chemical accidents that have the potential to affect public health and the environment. Under section 112(r), U.S. EPA promulgated a final rule for the prevention of accidental releases of hazardous substances in Title 40 of the Code of Federal Regulations, Part 68, on June 20, 1996. The rule includes a list of regulated substances that, in the event of an accidental release, could cause death, injury, or serious adverse effects to human health and the

environment. The rule requires owners or operators of facilities with more than a threshold quantity of a regulated substance in a process to develop and implement an accident prevention program. The program must include a hazard assessment, prevention program, and an emergency response program. Each regulated business is required to develop and submit a risk management plan (RMP)to the agencies implementing the program. The federal program is also known as the Risk Management Program.

The California State Legislature, recognizing the need for a chemical accident prevention program for California, enacted a new Article 2 for Chapter 6.95 of the Health and Safety Code (HSC) in 1986. HSC section 25531(e) states, "the Legislature finds and declares that the goals of reducing regulated substance 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 specific to the state." HSC section 25533 specifies, "[t]he program for prevention of accidental releases of regulated substances adopted by the Environmental Protection Agency pursuant to subsection (r) of section 112 of the Clean Air Act (42 U.S.C. Section 7412(r)), with the additional provisions specified in this article, is the accidental release prevention program for the state." This program is referred to as the California Accidental Release Prevention, or CalARP, program. The CalARP program reflects the requirements of the federal section 112(r) program and includes additional more stringent, state-specific requirements.

B. Overview of California' Unified Program for Hazardous Materials Management

The CalARP program is one of several elements of the State of California's broader Unified Program for Hazardous Materials Management, known as the Unified Program, which is overseen by CalEPA. The purpose of the CalARP program is to prevent the accidental releases of regulated substances that can cause serious harm to the public and the environment, and to minimize the damage if releases do occur.

CalEPA broadly oversees the implementation of the Unified Program and certifies local agencies to implement the program as Unified Program Agencies (UPAs). Pursuant to Health and Safety Code section 25533, CalEPA also has direct authority to implement the CalARP element of the Unified Program, including through inspection and enforcement authority. Additionally, pursuant to Health and Safety Code section 25534.05, CalEPA has authority to adopt regulations for the CalARP program that govern certain processes of stationary sources, including petroleum refineries. The California Office of Emergency Services (Cal OES) previously oversaw and implemented the CalARP program,

however, program implementation and responsibility were transferred to CalEPA in July of 2021 through Assembly Bill 148 (Chapter 115, Statutes of 2021).

CalARP requires certain facilities (referred to as "stationary sources") which handle, manufacture, use, or store any regulated substances above threshold quantities to take actions to proactively prevent and prepare for accidental releases. Petroleum refineries in California are subject to CalARP Program 4 regulations, which set forth specific requirements tailored to preventing accidental releases at refineries. "Petroleum refinery" means a stationary source engaged in activities set forth in North American Industry Classification System (NAICS) code 324110.

Following the August 2012 pipe rupture, chemical release and fire at the Chevron, Richmond oil refinery (2012 Chevron Richmond Refinery fire), Governor Brown formed an Interagency Working Group on Refinery Safety (Interagency Working Group) to examine ways to improve public and worker safety through enhanced oversight of refineries, and to strengthen emergency preparedness in anticipation of any future incident. The Interagency Working Group released a final report titled "Improving Public and Worker Safety at Oil Refineries" in February of 2014. (Brown, 2014.) That effort eventually led to Cal OES promulgating and adopting the Program 4 regulations to prevent major incidents at petroleum refineries and to protect the health and safety of communities and the environment. These regulations became effective on October 1, 2017. Petroleum refineries are also subject to the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) Process Safety Management (PSM) program under Title 8 of the California Code of Regulations (CCR) section 5189.1. The PSM program for petroleum refineries under 8 CCR section 5189.1 aims to reduce the risk of major incidents and eliminate or minimize process safety hazards to which employees may be exposed.

The CalARP Program 4 regulations, as originally adopted, were designed to function in parallel with the PSM program. The proposed amendments to the CalARP Program 4 regulations will similarly function in parallel with changes to the PSM program that are proposed by Cal/OSHA.

Petroleum refineries may also be subject to the Industrial Safety Ordinance (ISO) in Contra Costa County, where refineries are located, and an ISO in the City of Richmond.

II. The Problem that the Proposal is Intended to Address

CalEPA proposes to amend the Program 4 regulations to provide clarity to the public, the UPAs, and the regulated petroleum refineries for activities addressed under the CalARP program. CalEPA also proposes the changes to address stakeholder concerns about inconsistent application of the regulations.

Petroleum refineries have stated that certain terms and provisions of the CalARP regulations are vague and confusing, making it difficult for them to comply. CalEPA is proposing to amend these regulations to 1) ensure that regulatory requirements are clearly articulated and understood by the regulated petroleum refineries, UPAs, and the public, and 2) to provide clarity and consistency in program implementation. Also, CalEPA is proposing to amend these regulations to retain consistency between CalARP Program 4 and anticipated proposed amendments to the PSM program regulations for petroleum refineries under 8 CCR section 5189. Pursuant to the court-approved resolutions in *Western States Petroleum Association v. California Occupational Safety and Health Standards Board, et al.* (federal court suit) and *Western States Petroleum Association v. California Occupational Safety and Health Standards Board, and The California Environmental Protection Agency, et al*. (state court suit), Cal/OSHA will submit a rulemaking package for the PSM Amendments to California Occupational Safety and Health Standards Board (OSHSB) according to the typical rulemaking process required.

III. The Specific Purpose and Necessity of Each Proposed Amendment

California Government Code section 11346.2(b)(1) requires "[a] statement of the specific purpose of each adoption, amendment, or repeal, the problem the agency intends to address, and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed."

The overarching purpose of the proposed regulation is to prevent accidental releases of regulated substances and prevent major incidents at petroleum refineries to protect the health and safety of the employees, the public and communities, and the environment. Additionally, the purpose of the proposed regulation is to enact safeguards to better mitigate the impacts to employees, the public and communities, and the environment if a release of a regulated substance occurs. (Health & Saf. Code, § 25531.)

The sections below describe the purpose and necessity for the amendments.

A. Section 5050.3(t) - Definition of Employee Representative

Specific purpose and necessity of the amendments:

Section 5050.3 defines various terms used throughout the CalARP regulations. Subdivision (t) defines the term "employee representative".

This section currently defines "Employee representative" as "a union representative, where a union exists, or an employee designated representative in the absence of a union that is on-site and qualified for the task. 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."

CalEPA proposes to amend this section to define "employee representative" as a person who is "on-site and qualified for the task" and either selected by a union or, where there is no union, selected by the employees. CalEPA proposes to amend this section to clarify that the definition is focused on the requirement to have a person "on-site and qualified". Employees that are on-site and qualified are often in the best position to understand and explain the details of day-to-day operation, and to know and understand how procedures are carried-out in practice. (See, Initial Statement of Reasons, 2016, p. 43.) Petroleum refineries and UPAs generally understand that the current definition of employee representative requires that a non-union representative be "on-site and qualified for the task," whereas a union may designate an employee

representative without regard for the individual's qualifications or employment connection to the refinery. Thus, CalEPA proposes amendments to allow for uniformity in application and understanding of the definition of employee representative.

Additionally, CalEPA proposes to add a new sentence to the end of section 5050.3(t) stating that nothing in the text of subdivision (t) supersedes an employee representative selection process in a collective bargaining agreement. CalEPA proposes this clarification to ensure that section 5050.3(t) does not impede compliance with the National Labor Relations Act (29 U.S.C. §§ 151-169) and to protect the bargaining rights of employees.

B. Section 5050.3(y) – Definition of Highly Hazardous Material

Specific purpose and necessity of the amendments:

Section 5050.3 defines various terms used throughout the CalARP regulations. Subdivision (y) defines the term "highly hazardous material". Currently, "highly hazardous material" is defined without reference to a threshold quantity. As a result, processes in a refinery that contain a highly hazardous material could be subject to regulation under Program 4, regardless of the amount of highly hazardous substance contained within a process. Program 4 regulates highly hazardous materials at refineries to address the potential these materials create for release of one or more regulated substances. Petroleum refineries have stated that the current text in subdivision (y) has resulted in over-inclusive regulatory responsibilities for processes using minimal amounts of highly hazardous materials that are not located near other vessels containing regulated substances. Petroleum refineries contend that regulation of highly hazardous materials, without regard to threshold quantities, results in regulation of highly hazardous materials in circumstances where there is no meaningful potential for release of a regulated substance could occur.

Amendments to this section are needed to clarify that a highly hazardous materials will not include any substances in quantities below the thresholds set forth in the California Hazardous Materials Business Plan rule at California Health and Safety Code § 25507(a)(1)(A) (55 gallons for materials that are liquids, 500 pounds for solids, or 200 cubic feet for compressed gas) or the regulated substances thresholds in Tables 1, 2, and 3 of the Chapter, whichever is lesser. These amendments would exclude parts of the refinery from regulation that do not pose meaningful accidental release risks, while still applying low thresholds for highly hazardous materials to achieve the statute's safety goals. The proposed amendment would provide petroleum refineries with clear thresholds and avoid any ambiguity over whether a substance is or is not a "highly

hazardous material." These amendments would also provide clarity to UPAs and the public. Petroleum refineries are already required to inventory regulated substances through the Hazardous Materials Business Plan program (HMBP) in threshold quantities and hazardous materials that meet the HMBP thresholds. (HSC 25507(a)(1)(A).).

Thus, the proposed changes would clearly delineate a petroleum refinery's regulatory responsibility as to highly hazardous materials. Applying the HMBP thresholds thus allows for ease of implementation and clarity, while still effectuating the purpose of Program 4 to minimize the potential for accidental releases of regulated substances at refineries.

C. Section 5050.3(hh) – Definition of Major Change

Specific purpose and necessity of the amendments:

Section 5050.3 defines various terms used throughout the CalARP regulations. Subdivision (hh) defines the term "major change". As currently defined, petroleum refineries have stated that the term "major change" is overbroad, and state that this has resulted in inconsistent applications by petroleum refineries and UPAs. Therefore, amendments to this section will provide clarity on when there is a "major change" and will facilitate consistent application of the regulation. To that end, CalEPA proposes to make three changes to section 5050.3(hh).

First, CalEPA proposes to add the word "introduction" at the beginning of the second and third subdivisions, and proposes to restructure the section to add a new subdivision (hh)(3). CalEPA proposes these changes to clarify that a major change occurs specifically during the introduction of new process equipment or introduction of a new regulated substance that results in any operational change outside of established safe operating limits. The proposed change is nonsubstantive and would address syntax and grammar.

Second, because of the renumbering noted above, CalEPA proposes to change the third subdivision to become the fourth subdivision. These changes are made for the purpose of renumbering and thus are nonsubstantive and without regulatory effect.

Additionally, CalEPA proposes to revise the end of section 5050.3(hh)(3) – which would become (hh)(4) – with text to clarify that a major change also includes any alteration in a process, process equipment, or process chemistry that results in any operational change outside of established safe operating limits. CalEPA

also proposes to add that an alteration in process or process equipment does not include a replacement in kind. Petroleum refineries have stated that this change is necessary because as currently written, it is not clearly understood what is meant by "a new hazard or an increase in an existing hazard". Petroleum refineries have also stated that this has been broadly interpreted to apply when there is a change in operating limits or procedures. The proposed amendment only clarifies current requirements for refinery practices and operations in subdivision 5050.3(h)(h).

Lastly, CalEPA proposes to include a new sentence at the end of section 5050.3(hh) clarifying that some of the enumerated types of major changes must result in an operational change outside of established safe operating limits to be defined a "major change". The proposed change is necessary because the definition of major change applies to all CalARP program levels, not just Program 4. Amendments are needed to specify that for the purposes of Program 4, an introduction of new process equipment or alteration in process or process equipment must result in an operational change outside of established safe operating limits to be considered a major change.

D. Section 5050.3(yy) – Definition of Process

Specific purpose and necessity of the amendments:

Section 5050.3 defines various terms used throughout the CalARP regulations. Subdivision 5050.3(yy) defines the term "process". Currently, a "process", as applied to petroleum refineries regulated under Program 4, is defined as petroleum refining activities that involve a highly hazardous material. (19 CCR § 5050.3(yy).) CalEPA proposes to make two edits to this section to align the definition of "process" with the CalARP statute as well as to clarify the applicability of Program 4 to refinery activities.

First, CalEPA proposes to remove express reference to a "highly hazardous material" in the first sentence and replace it with "regulated substance". As noted earlier, the CalARP program is the state-level analog to the United States Environmental Protection Agency's Risk Management Program for prevention of accidental releases of regulated substances, with CalARP Program 4 implementing further state-specific requirements. (Health & Saf. Code, §§ 25531(d),(e), 25533(a).) The Legislature made it clear in the Health and Safety Code that California's accidental release program was directly tied to the federal program and that it shared the same purpose of preventing accidental releases of regulated substances: "The program for prevention of accidental releases of regulated substances adopted by the United States Environmental Protection Agency pursuant to subsection (r) of Section 112 of the federal Clean

Air Act (42 U.S.C. Sec. 7412(r)), with the additional provisions specified in this article, is the accidental release prevention program for the state." (Health & Saf. Code, § 25533(a).) The proposed amendment is necessary to align the Health and Safety Code's focus on regulated substances and to implement the corresponding Program 4 regulations.

Second, CalEPA proposes to add a sentence clarifying that any petroleum refining activities involving a highly hazardous material shall also be considered part of a process. This proposed change is necessary to further clarify which petroleum activities are subject to Program 4 requirements, and to provide consistency in application and understanding by refineries and UPAs.

"Refineries, chemical plants and other facilities that routinely handle large quantities of highly hazardous chemicals are not like conventional workplaces; the consequences of a single system failure anywhere in the system can be catastrophic". (Jordan Barab, 2010.) Due to the highly inter-connected nature of refinery processes and the type of risks posed by highly hazardous materials (e.g., reactive and flammable substances), the presence of a highly hazardous material when located near other vessels poses the risk of a potential release of a regulated substance. ("Vessel" as defined in 19 CCR 5050.3(aaaa).) By nature, flammable substances are those that will ignite and burn when exposed to an ignition source and reactive substances are those that readily interact with other substances and have the potential to cause a reaction. For the purposes of Program 4, flammable liquid, flammable gas, and reactive substance are all defined pursuant to 19 CCR 5050.3(y). The interconnected nature of refinery processes therefore creates a risk of cascading consequences involving flammable and reactive substances that could result in the release of a regulated substance. As a result, refinery activities involving a highly hazardous material are appropriately considered part of and embedded in a "process" and therefore subject to regulation due to the potential for the release of a regulated substance.

The potential for cascading consequences to occur at a petroleum refinery in the event of an incident has been demonstrated repeatedly. On April 26, 2018, an explosion and subsequent fire occurred at Husky Energy's Superior Refining Company LLC refinery in Superior, Wisconsin. The explosion caused debris to be propelled 1,200 feet from the original location into the surrounding operating areas. (U.S. Chemical Safety and Hazard Investigation Board. (2022). *FCC Unit Explosion and Asphalt Fire at Husky Superior Refinery: Investigation Report* (No. 2018-02-I-WI).) Explosion debris punctured a nearby asphalt tank at the refinery, spilling hot asphalt that flowed outside of the tank's containment area. Approximately 17,000 barrels of hot asphalt spread through the refinery and ignited causing fires to erupt at multiple operating areas of the refinery. The City

of Superior's evacuation was based on the potential risk of a release of highly toxic hydrofluoric acid, which was stored at Husky Superior Refinery and used in the refinery's HF alkylation unit. Although the HF storage tank was not damaged by debris from the explosion and no release of HF occurred, the asphalt tank punctured by the explosion debris was located farther away from the point of the explosion than the refinery's HF storage tank. Debris from the explosion could have punctured the HF storage tank, given its closer proximity to the point of explosion. (U.S. Chemical Safety and Hazard Investigation Board, 2022.)

On July 19, 2009, a hydrocarbon gas release occurred in the CITGO Corpus Christi East Refinery hydrogen fluoride alkylation unit in Corpus Christi, Texas. The release ignited causing extensive damage; the ensuing fire burned for several days. The incident occurred when violent shaking in the process recycle piping broke two threaded connections, releasing highly flammable hydrocarbons. The shaking was caused by nearly complete flow blockage, which occurred due to the sudden failure of a control valve. The cloud of releasing hydrocarbons reached an adjacent unit and ignited. The ensuing fire caused multiple failures, releasing HF. (U.S. Chemical Safety and Hazard Investigation Board. (2009). *Urgent Recommendations* (No. 2009-14-I-TX-1).)

On September 20, 2022, at approximately 6:46 p.m., a vapor cloud ignited causing a flash fire at the BP-Husky Refining LLC refinery in Oregon, Ohio. The vapor cloud formed when two BP Products North America Inc. (BP) employees released flammable liquid naphtha from a pressurized vessel to the ground. As a result of the fire, both BP employees, who were brothers, were fatally injured. In addition, the events of the day caused approximately $597 million in property damage including loss of use. BP estimated over 23,000 pounds of naphtha were released during the event. At the time, this incident was the largest fatal incident at a BP operated petroleum refinery since the fatal accident at the BP Texas City Refinery in 2005, which resulted in the deaths of 15 workers and injured 180 other people. The vessel typically contained only vapor (fuel gas for furnaces and boilers). However, during the incident, the vessel filled with liquid naphtha when an upstream tower overflowed naphtha into a vapor bypass line directly to the vessel. The upstream tower overflowed liquid naphtha through the vapor bypass line after a board operator opened a closed valve sending liquid naphtha to the tower operating in a vapor-only mode. Other refinery units had been shut down due to a loss of containment incident that occurred earlier that morning. The initial process upset, the subsequent events and operational decisions made on September 20, 2022, led to liquid naphtha filling the vessel, which normally contained fuel gas. The vessel then overflowed into vapor piping feeding downstream furnaces and boilers. While draining the overflowing vessel as fast as they could pursuant to the board operator's directive communicated via radio, the BP employees opened the vessel and released liquid naphtha to

the ground. (U.S. Chemical Safety and Hazard Investigation Board. (2024). *Fatal Naphtha Release and Fire at BP-Husky Toledo Refinery* (No. 2022-01-I-OH).)

Other recent refinery incidents in California include the 2015 explosion that occurred at ExxonMobil in Torrance, in the refinery's Electrostatic Precipitator (ESP). The near-miss event occurred in the modified hydrofluoric acid (MHF) alkylation unit when explosion debris nearly hit tanks in close proximity to the ESP, each containing hydrofluoric acid, water, hydrocarbons, and a chemical additive intended to reduce the amount of hydrofluoric acid vaporized during a loss of containment event. (U.S. Chemical Safety and Hazard Investigation Board. (2017). *ExxonMobil Torrance Refinery Electrostatic Precipitator Explosion Torrance, California* (No. 2015-02-I-CA).)

Another example includes the 2012 incident at the Chevron U.S.A. Inc (Chevron), Refinery in Richmond. The refinery experienced a catastrophic pipe rupture leading to the release of flammable and high temperature process fluid which then partially vaporized into a large, opaque vapor cloud that engulfed 19 Chevron employees, which subsequently lead to ignition and burning of the fluid. The release, ignition, and subsequent burning of the hydrocarbon process fluid resulted in a large plume of vapor, particulates, and black smoke, which traveled across the surrounding area. In the weeks following the incident, approximately 15,000 people from the surrounding communities sought medical treatment at nearby medical facilities for ailments including breathing problems, chest pain, shortness of breath, sore throat, and headaches. Approximately 20 of these people were admitted to local hospitals as inpatients for treatment. (U.S. Chemical Safety and Hazard Investigation Board. (2015). *Final Investigation Report Chevron Richmond Refinery Pipe Rupture and Fire* (No. 2012-03-I-CA).)

The incidences described above all demonstrate how the interconnectedness and close proximities of refinery processes must be considered when aiming to prevent and mitigate the impacts of cascading consequences from occurring and subsequent release of a regulated substance. The incidences described above are, unfortunately, only some of many examples demonstrating the potential for cascading consequences to occur during a refinery incident. As demonstrated in the examples above, flammable and reactive substances were largely and typically involved in incidents at refineries, which subsequently lead to the release of regulated substances or demonstrated near misses of release of regulated substances. Therefore, in order to most adequately prevent the accidental releases of regulated substances, CalEPA must make clear that any petroleum refining activities involving a highly hazardous material shall be considered part of a process, and therefore subject to regulation under CalARP Program 4 unless specifically exempted.

E. Section 5110.1(b) – Applicability

Specific purpose and necessity of the amendments:

Section 5110.1 states that Program 4 requirements found in Title 19, Article 7, apply to petroleum refinery processes. Subdivision (b) of that section states the types of processes that the regulations do not govern. Non-substantive amendments to subdivision (b) are being proposed to improve clarity, readability, and sentence structure. The proposed change would remove the first part of subdivision (b) and replace the text with more direct and clear language. Consistent with the current regulatory text, the proposed amendment would state that processes at plant laboratories or laboratories that are under the supervision of a technically qualified individual as defined in section 720.3(ee) of 40 CFR are not subject to the Program 4 regulations in Article 7. The proposed amendment would not change the meaning of subdivision (b) and is a nonsubstantive change that does not materially alter any existing requirement.

F. Section 5110.13(a) and 5110.13(b) – Employee Participation

Specific purpose and necessity of the amendments:

Section 5110.13 outlines provisions for employee participation relating to activities at a petroleum refinery. The regulations currently require refinery owners and operators, in consultation with employees and employee representatives, to develop, implement, and maintain a written plan to effectively provide for employee participation in Accidental Release Prevention elements. Accidental Release Prevention elements include, but are not limited to, the establishment and implementation of varying safety precautions and procedures in order to prevent accidental releases. Amendments to these subdivisions are intended to be harmonized with the proposed amendments to subdivision 5050.3(t) (definition of "Employee Representative").

CalEPA proposes to amend subdivisions 5110.13(a) and (b) to ensure that they do not impede compliance with the National Labor Relations Act (29 U.S.C. §§ 151-169) and to protect the bargaining rights of employees.

Additionally, CalEPA proposes to add new subdivision (a)(4) to further clarify requirements for employee participation in Accidental Release Prevention element activities. The proposed amendments require that the owner or operator will allow for "effective participation" by employees in such activities if it provides advance notice of each such Accidental Release Prevention

element activity and considers input provided by individuals participating in each such activity, including the employee representative. Further, if the notice is provided as required, owners and operators are not required to delay Accidental Release Prevention element activity due to the failure by a union, or employees in the absence of a union, to select an employee representative, or the failure of a selected employee representative to participate in the noticed activity. CalEPA also proposes to clarify that nothing in the subdivision shall be construed to require owners and operators to accept recommendations or findings of employee representatives. Adding subdivision (a)(4) would allow for employee participation that does not impede compliance with federal labor laws.

Lastly, CalEPA proposes to replace existing subdivision (b) with amended text that would clarify how employees can participate in the Accidental Release Prevention program. The proposed amendment states that a written employee participation plan will determine how employees will be selected to participate in overall Accidental Release Prevention program development and implementation planning, and how employees will be selected to participate in Accidental Release Prevention teams and other activities. The proposed amendment also states that employees shall be on-site and qualified for the task for which they are selected and shall be subject to all provisions of 5110.13(a). Subdivision (b) is being proposed to harmonize with the amendments proposed to section 5050.3(t). Employees that are on-site and qualified are often in the best position to understand and explain the details of day-to-day operation, and to know and understand how procedures are carried-out in practice. (See, Initial Statement of Reasons, 2016, p. 43.).

G. Section 5110.16(e)(3) – Hierarchy of Hazard Control Analysis

Specific purpose and necessity of the amendments:

Section 5110.16(e)(3) refers to provisions regarding the Hierarchy of Hazard Control Analysis (HCA). The HCA is required to be conducted by petroleum refineries every five years for existing processes, as well as in response to certain activities that trigger the requirement for an HCA to be conducted. Section 5110.16(e) aims to ensure that inherent safety measures and safeguards are identified, analyzed, and documented. The HCA team then establishes written recommendations for prevention and control measures, in priority order, to eliminate or minimize a hazard at a refinery. Hazard prevention and control measures are ranked from most effective to least effective as follows: First Order Inherent Safety, Second Order Inherent Safety, and passive, active and procedural protection layers.

The regulations currently require the HCA team to identify, analyze, and document publicly available information on inherent safety measures and safeguards, including those "achieved in practice by the petroleum refining industry and related industrial sectors" or "required or recommended for the petroleum refining industry and related industrial sectors, by a federal or state agency, or local California agency, in a regulation or report".

Currently, the regulations do not specify what constitutes a "related industry sector." As such, petroleum refineries have indicated that the requirement to identify, analyze, and document publicly available information on inherent safety measures and safeguards "achieved in practice" is too broad to be practicable and has no objectively ascertainable meaning. Petroleum refineries are also concerned that the current regulations fail to reconcile scenarios where the use of an inherent safety measure for one hazard could have unintended consequences and create additional hazards.

CalEPA believes that the HCA requirements are performance-based standards that are intended to allow refineries flexibility in determining how to comply appropriately in particular circumstances. However, to provide further clarity to the public, petroleum refineries and enforcement agencies, as well as to ensure that best practices are implemented at refineries for safety purposes, CalEPA proposes to remove the requirement that information contained within the HCA report "include inherent safety measures and safeguards that have been: (A) achieved in practice by for the petroleum refining industry and related industrial sectors; or, (B) required or recommended for the petroleum refining industry, and related industrial sectors, by a federal or state agency, or local California agency, in a regulation or report."

CalEPA believes that removing this requirement does not significantly alter the regulations because refineries are still required pursuant to section 5110.16(e)(3) to "Identify, analyze, and document all inherent safety measures and safeguards (or where appropriate, combinations of measures and safeguards) in an iterative manner to reduce each hazard to the greatest extent feasible. Identify, analyze, and document relevant, publicly available information on inherent safety measures and safeguards." CalEPA believes that these amendments do not lessen the scope of publicly available information on inherent safety measures and safeguards that must be identified, analyzed, and documented. As such, CalEPA recommends that petroleum refineries continue to identify, analyze, and document information on inherent safety measures and safeguards that have been achieved in practice by for the petroleum refining industry and related industrial sectors; or required or recommended for the petroleum refining industry, and related industrial sectors, by a federal or state agency, or local California agency, in a regulation or report.

H. Section 5110.16(f) and 5110.16(g) – Hierarchy of Hazard Control Analysis

Specific purpose and necessity of the amendments:

Section 5110.16(f) and 5110.16(g) refers to provisions regarding the HCA. The HCA is required to be conducted by petroleum refineries every five years for existing processes, as well as in response to certain activities that trigger that requirement for an HCA to be conducted. Following the requirement to identify, analyze, and document all inherent safety measure and safeguards, etc., as specified in 5110.16(e), the HCA team must establish written recommendations for prevention and control measures, in priority order, to eliminate or minimize a hazard at a petroleum refinery. Hazard prevention and control measures are ranked from most effective to least effective as follows: First Order Inherent Safety, Second Order Inherent Safety, and passive, active and procedural protection layers.

Currently, petroleum refineries believe that section 5110.16(f) requires the HCA team to make recommendations to eliminate hazards in a prescribed order of priorities and this does not allow for refinery to best select safety measures and safeguards that are best suited for the process. To clarify this requirement, CalEPA proposes to amend the requirements to specify that "the HCA team shall consider all process safety hazards that may be impacted by a particular safety measure or safeguard and shall select those safety measures or safeguards that, in the team's judgment, are most effective at reducing all such process safety hazards". CalEPA also proposes to amend section (f) to make clear the sequence and priority order that should be followed when developing written recommendations. CalEPA believes that these amendments are non-substantive in nature and only rearrange the regulatory requirements in a manner that is easier to read and understand. This is done by moving narrative text in (f) to (f)(1) and (2) and moving current sections (f)(1)-(3) to (f)(3)-(5).

Due to the proposed amendments in section 5110.16(f) clarifying that the HCA team can select safety measures or safeguards that, in the team's judgment, are most effective at reducing all such process safety hazards, CalEPA also proposes amendments to section 5110.16(g)(6) to specify that "the rationale for not recommending any inherent safety measures and safeguards analyzed by the team and identified pursuant to subsection (e)(3)." CalEPA believes that the additional requirement to document the rationale for not recommending any inherent safety measures and safeguards analyzed is critical to ensure transparency and for accountability. This change is being proposed to make subdivision 5110.16(g)(6) consistent with subdivision 5110.16(f).

I. Section 5130.6 – Table 3, footnote 7

Specific purpose and necessity of the amendments:

Section 5130.6 contains the "State Regulated Substances List and Threshold Quantities for Accidental Release Prevention". Currently, an error exists in a reference in footnote 7 of the table. There is a reference to "Section 25532(g)(2)", which is an incorrect reference. The correct reference should be "Section 25532(i)(2)". There is a need to correct this error to ensure proper compliance with this section.

IV. Benefits Anticipated from the Regulatory Action

The proposed amendments would clarify and add greater specificity to existing regulatory provisions. The proposed amendments would benefit the petroleum refineries who implement Program 4 and the UPAs who enforce the program's regulations by allowing for greater efficiency and consistency in implementation and compliance by those entities. The proposed changes also would facilitate uniform and efficient compliance. These amendments would provide more clarity to the UPAs so that they may better enforce the regulations and would allow petroleum refineries to better understand their compliance obligations. As a result of the proposed clarifications, the proposal would also help ensure protection to public health and safety in California, as well as worker safety at the regulated petroleum refineries themselves.

V. Economic Impact Assessment

Government Code sections 11346.2(b)(2) and 11346.3(b) require the preparation of an economic impact assessment. Specifically, section 11346.3(b)(1) requires California agencies, in proposing to adopt or amend a regulation that is not a major regulation, to assess whether and to what extent the proposal will affect any of the following:

(A) The creation or elimination of jobs within the state.
(B) The creation of new businesses or the elimination of existing businesses within the state.
(C) The expansion of businesses currently doing business within the state.
(D) The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

The proposed regulatory amendments are not projected to exceed the major regulation threshold because they do not have potential costs exceeding ten million dollars in any single year or fifty million dollars in any 12-month period.

In compliance with Government Code sections 11346.3(b)(1)(A) through (D), the following elements have been assessed:

Creation or elimination of jobs within California

The proposed regulatory action will not significantly impact the creation or elimination of jobs within the State of California because these amendments simply clarify existing regulatory provisions. Additionally, the proposed changes will not create any new compliance obligations that will result in the creation or elimination of jobs.

Creation of new businesses or elimination of existing businesses within California

This proposed regulatory action will not impact the creation of new businesses or the elimination of existing businesses within the State of California because these amendments simply clarify existing regulatory provisions. Additionally, the proposed changes will not create any new compliance obligations that will result in the creation or elimination of existing businesses.

Expansion of businesses currently doing business within California

This proposed regulatory action will not impact the expansion of businesses within the State of California because these amendments simply clarify existing regulatory provisions. Additionally, the proposed changes will not create any new compliance obligations that will result in the expansion of existing businesses.

Benefits of the proposed regulation to the health and welfare of California residents, worker safety, and the state's environment

This proposed regulatory action will benefit the welfare of California residents, worker safety and the state's environment by providing clarity and consistency to the regulated entities in the petroleum industry and helping to further prevent hazardous material accidental releases in the state. This proposed regulatory action will also provide clarity for UPAs who enforce these regulations at the local level.

Significant Adverse Economic Impact Directly Affecting Business

Although the proposed regulation will directly affect petroleum refineries, CalEPA has concluded that the economic impact of the proposed regulations will not be significant. These amendments only clarify existing regulations and requirements that apply to petroleum refineries and that would be enforced by UPAs.

CalEPA anticipates that the only costs to refineries would be for those associated with updating written operating procedures and training materials reflecting the proposed regulatory amendments. The total costs to all businesses (i.e., 11 petroleum refineries) would be $21,260.69 during the first year after the regulation goes into effect.[3] For the purposes of the economic analysis, CalEPA has selected a typical timeframe of 10 years as the lifetime of the proposal. Because the proposed amendments would not require refineries to continually update their operating procedures and training materials every year over the 10-year lifetime, CalEPA estimated that costs to refineries would be incurred only in the first year after the regulation goes into effect.

VI. Reasonable Alternative to the Regulations and the Reasons For Rejecting Those Alternatives

Government Code section 11346.2(b)(4) requires CalEPA to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons why these alternatives were not included in the proposal.

Due to the aforementioned court-approved resolutions, CalEPA has determined that no reasonable alternative would be more effective in carrying out the purpose for which the action is proposed or would be as effective as, and less

[3] As stated in the Form 399, CalEPA prepared this estimate based on information from the Bureau of Labor Statistics. Occupation types, codes, and unloaded mean hourly wages are found on the Bureau of Labor Statistics, May 2023 California Occupational Employment and Wage Estimates webpage, available at https://www.bls.gov/oes/current/oes_ca.htm#top. CalEPA referenced these occupation types to estimate total costs: Occupational Health and Safety Specialist (Occupation Code: 19-5011); Management (Occupation Code: 11-0000); Lawyer (Occupation Code: 23-1011). CalEPA also used a benefits scaling factor of 1.43. The benefits scaling factor is calculated from the Bureau of Labor Statistics' Employer Cost of Employee Compensation, Table 7, Pacific Region, Sept. 2024, available at https://www.bls.gov/ecec/tables.htm (News Release xlsx file). The scaling factor of 1.43 is computed as [1+(total benefits/wages and salaries)] = [1+(15.61/36.08)].

burdensome to affected private persons than, the proposed amendments. CalEPA also determined that no reasonable alternatives to the proposed regulations that are less burdensome and equally effective in achieving the purposes of the regulations in a manner that ensures full compliance with the authorizing statute have been proposed.

CalEPA rejected the no action alternative because it would not achieve the objectives of the proposed revisions and would be inconsistent with the court-approved resolutions. The proposed revisions do not regulate actions of small businesses, thus there is not a need to identify and consider alternatives that would lessen overall adverse impacts on small businesses.

Furthermore, Government Code section 11346.2(b)(4)(A) requires that when a regulation that would mandate the use of specific technologies or equipment, or prescribe specific actions or procedures, it must consider performance standards as an alternative. The proposed amendments are performance standards, thus this requirement is not applicable. The proposed amendments do not mandate the use of specific technologies or equipment or prescribe specific actions or procedures.

VII. Duplication or Conflicts with Federal Regulations

No equivalent federal statutes or regulations currently exist. As such, the proposed amendments do not duplicate or conflict with any federal law or federal regulation. CalARP Program 4 imposes state-specific requirements that are not currently mandated by the federal Risk Management Program and section 112 of the Clean Air Act.

VIII. Mandated by Federal Law or Regulation

The proposed amendments are not mandated by any federal law or federal regulation.

IX. Documents Relied Upon in Proposing this Regulatory Action

Bureau of Labor Statistics, Employer Cost of Employee Compensation, Table 7, Pacific Region, News Release Tables (XLSX table), Sept. 2024. https://www.bls.gov/ecec/tables.htm.

Bureau of Labor Statistics, California Occupational Employment and Wage Estimates, May 2023. https://www.bls.gov/oes/current/oes_ca.htm#tophttps://www.bls.gov/oes/current/oes_ca.htm#top (downloadable XLS file).

California Office of Emergency Services. (2016). *Final Statement of Reasons, New Article 6.5 of the California Accidental Release Prevention (CalARP) Program 4 for Petroleum Refineries.*

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Edmund G. Brown Jr., Governor. (2014). *Improving Public and Worker Safety at Oil Refineries,* Interagency Working Group on Refinery Safety. https://www.dir.ca.gov/oshsb/documents/Process-Safety-Management-for-Petroleum-Refineriess-governorreport2014.pdf

Jordan Barad. (2010). *OSHA Deputy Assistant Secretary Testifies Before Senate Subcommittee on Employment And Workplace Safety on Worker Safety in Energy Production Industries* (Release Number 10-0819-NAT). https://www.dol.gov/newsroom/releases/osha/osha20100610

U.S. Chemical Safety and Hazard Investigation Board. (2009). *Urgent Recommendations* (No. 2009-14-I-TX-1). https://www.csb.gov/file.aspx?DocumentId=5928

U.S. Chemical Safety and Hazard Investigation Board. (2015). *Final Investigation Report Chevron Richmond Refinery Pipe Rupture and Fire* (No. 2012-03-I-CA). https://www.csb.gov/assets/1/20/chevron_final_investigation_report_2015-01-28.pdf

U.S. Chemical Safety and Hazard Investigation Board. (2017). *ExxonMobil Torrance Refinery Electrostatic Precipitator Explosion Torrance, California* (No. 2015-02-I-CA). https://www.csb.gov/file.aspx?DocumentId=6023

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WI). https://www.csb.gov/assets/1/6/husky_superior_refinery_report_2022-12-23_(1).pdf

U.S. Chemical Safety and Hazard Investigation Board. (2024). *Fatal Naphtha Release and Fire at BP-Husky Toledo Refinery* (No. 2022-01-I-OH). https://www.csb.gov/assets/1/6/final_report_-_20241.pdf

Western States Petroleum Association v. California Occupational Health and Safety Standards Board, et al., Sacramento County Superior Court, Case No. 34-2019-00260210, Complaint (filed July 9, 2019).

Western States Petroleum Association v. California Occupational Health and Safety Standards Board, et al., Sacramento County Superior Court, Case No. 34-2019-00260210, Joint Stipulation and Order to Substitute Parties (filed Oct. 7, 2021).

Western States Petroleum Association v. California Occupational Health and Safety Standards Board, et al., Sacramento County Superior Court, Case No. 34-2019-00260210, Request for Dismissal and Dismissal (filed Sept. 17, 2024).

Western States Petroleum Association v. California Occupational Safety and Health Standards Board, et al., E.D. Cal., Case No. 2: 19-cv-01270, Complaint (filed July 9, 2019).

Western States Petroleum Association v. California Occupational Safety and Health Standards Board, et al., E.D. Cal., Case No. 2: 19-cv-01270, Order Substituting Defendants (filed Sept. 23, 2021).

Western States Petroleum Association v. California Occupational Safety and Health Standards Board, and The California Environmental Protection Agency, E.D. Cal., Case No. 2:19-cv-1270-JAM-DB, Notice of Motion and Motion for Voluntary Dismissal (filed Sept. 23, 2024), and Minute Order Granting Voluntary Dismissal Pursuant to FRCP 41(a)(2) (filed Sept. 24, 2024).