

State of California  
AIR RESOURCES BOARD

**PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE  
REGULATION FOR THE REPORTING OF  
CRITERIA AIR POLLUTANTS AND TOXIC AIR CONTAMINANTS**

**STAFF REPORT: INITIAL STATEMENT OF REASONS**

**DATE OF RELEASE: September 29, 2020**

**SCHEDULED FOR CONSIDERATION: November 19, 2020**

**Location:**

Please see the Public Agenda which will be posted ten days before the November 19, 2020, Board Meeting for any appropriate direction regarding a possible remote-only Board Meeting. If the meeting is to be held in person, it will be held at the California Air Resources Board, Byron Sher Auditorium, 1001 I Street, Sacramento, California 95814. This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

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## EXECUTIVE SUMMARY

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Staff of the California Air Resources Board (CARB) is proposing to amend the “Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants” (or CTR). The current regulation was adopted by the Board in December 2018, and became effective on January 1, 2020. CTR requires the annual reporting of criteria pollutant and toxic air contaminant emissions by facilities subject to the applicability requirements of the regulation.

The proposed amendments to CTR represent part of a broader effort by CARB to improve inventories of airborne emissions from all sources within California, including on-road and off-road emissions from mobile sources such as automobiles, stationary sources (i.e., typically facilities), and area-wide sources (e.g., consumer products). The regulatory effort to amend CTR is designed to provide CARB and air districts with a comprehensive understanding of facility and some area-wide emissions, as California continues to transition toward zero-emission vehicles.

Over time, the relative contribution of emissions from facility-based stationary sources will continue to increase as mobile source emissions are reduced, and better stationary source inventories will be needed to identify and evaluate appropriate mitigation strategies to improve air quality. Current facility emissions data inventory programs, including the U.S. EPA National Emissions Inventory and reporting required under the Assembly Bill 2588 (AB 2588) Air Toxics “Hot Spots” Information and Assessment Act of 1987<sup>1</sup>, do not provide complete emissions data sets for criteria pollutants and toxic air contaminants on an annual basis, which are needed to identify and assess both regional and localized human health risk impacts.

The primary focus of the proposed CTR amendments is the expansion of the regulation’s applicability requirements to increase the number and types of facilities subject to annual emissions data reporting, consistent with CARB’s obligations to comprehensively oversee state air quality and air pollution sources, and its need for accurate information to do so. These amendments are necessary to ensure that accurate and comprehensive emissions inventories are collected to support multiple CARB programs and improve data transparency and public data access.

For example, Assembly Bill 197 (AB 197<sup>2</sup>) requires CARB to provide public access on its internet website to graphical summaries of facility emissions at the local and sub-county level. Additionally, improving the accuracy and availability of emissions data at the local level will help to efficiently implement AB 617<sup>3</sup> community air protection requirements and AB 2588 regulatory requirements; inform the development of air

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<sup>1</sup> California Health and Safety Code sections 44300-44394.

<sup>2</sup> Assembly Bill 197, Garcia, E., Chapter 250, Statutes of 2016, amending and adding to California Health and Safety Code, Chapter 1.5 of Part 1 of Division 2 of Title 2.

<sup>3</sup> Nonvehicular Air Pollution: Criteria Air Pollutants and Toxic Air Contaminants (AB 617) (Statutes of 2017; Chapter 136; Health and Safety Code (H&SC) section 39607.1)

toxic control measures; and may also be used to inform the development of CalEnviroScreen, a tool used to identify geographic areas within California that are disproportionately impacted by pollution. The proposed CTR amendments are necessary to support collection of the emissions data needed for CARB and air districts to have a comprehensive understanding of facility emissions throughout California. This comprehensive understanding will further CARB's ability to meet its obligations under applicable state and federal laws including the California Clean Air Act, and the federal Clean Air Act. The comprehensive picture of emissions will also support CARB's broader obligation to protect public health via an understanding of the causes, and solutions to, air pollution in the state.

The proposed amendments would increase the number of facilities subject to the CTR reporting regulation from about 1,300 facilities that are currently subject to reporting, to over 60,000 facilities, using permitted emissions and pollutant-based thresholds to establish applicability. In addition to including a multi-year phase-in schedule, to reduce near-term resource impacts, the proposed requirements also provide simplified "abbreviated" reporting requirements for many permitted processes (approximately 40 percent of facilities, or 24,000 facilities). This option reduces costs and streamlines workload for facility operators and local air districts.

Further, under the proposed amendments, we are coordinating CTR reporting requirements with the Air Toxics Hot Spots Emissions Inventory Criteria and Guidelines<sup>4</sup> reporting requirements. This helps minimize redundancy and uncertainty regarding toxics emissions reporting. Finally, the amendments add reporting requirements for diesel-powered portable equipment, provide options allowing air districts further flexibility in implementing the requirements, and include other revisions for completeness and clarity.

The cost impact to the private sector due to the proposed amendments is projected to be \$9.6 million annually, at maximum. After full implementation, the ongoing annual statewide costs of the regulation are expected to decrease to \$7.7 million a year for the private sector. Local government and state government are also expected to incur costs, at a maximum of \$5.6 million and \$149,000 per year, respectively.

This "Staff Report: Initial Statement of Reasons," or ISOR, presents CARB staff's proposal to amend the reporting regulation. This report also discusses the reasons and need for the proposed CTR amendments, and the expected economic impacts upon affected industry and local air districts resulting from the proposed regulatory changes. We also provide an analysis of alternatives to the proposed updates, benefits of the regulatory action, a summary of the public process for developing the amendments, and individual justifications for each proposed amendment.

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<sup>4</sup> California Air Resources Board (CARB). (2007, September 26) Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program. Available at: <https://ww2.arb.ca.gov/hot-spots-inventory-guidelines>.





## Objectives of the Proposed Amendments

The proposed CTR amendments have been developed to support multiple significant CARB and air district program needs, and are necessary to:

- Collect comprehensive and reliable annual criteria pollutant and toxic air contaminant emissions data from the majority of permitted facilities in California, and establish uniform applicability criteria, reporting schedules, and data submission requirements for these facilities;
- Support CARB programs including the AB 197 public right-to-know requirements, the community air protection components of AB 617, the AB 2588 Air Toxics "Hot Spots" program, State Implementation Plans to manage criteria pollutant emissions affecting ambient air quality standards, California Clean Air Act planning, National Emission Inventory requirements, Air Toxic Control Measures development, monitoring studies, CalEnviroScreen input data, and other Board activities;
- Provide a foundation to track emissions data and trends over time, and geographically throughout the state, to assist in reducing community exposure to airborne pollutants and associated health risks;
- Minimize resource impacts on facilities and air districts, by providing abbreviated reporting options;
- Use scientifically defensible methodologies, and provide applicability thresholds that are easy to understand by industry and the public;
- Further refine the current requirements in the regulation for completeness and clarity.

## Overview of the Proposed Amendments

Table ES-1 provides a summary of the key regulation amendments that are being proposed through this rulemaking process. Complete descriptions of the proposed amendments are provided in the remainder of this staff report, particularly in section XI, "The Specific Purpose of Each Adoption and Rationale for CARB's Determination that it is Reasonably Necessary." The full text of the proposed amended regulation, including underline/strikeout text displaying all revisions, is provided in Appendix A of this document.

**Table ES-1: Summary of Proposed Regulatory Amendments to CTR**

Topic	Proposed Regulatory Updates
<b>General</b>	<ul style="list-style-type: none"><li>• Further clarify that the requirements apply only to permitted facilities</li><li>• Definition updates and additions to support the phase-in schedule, additional applicability criteria, and clarity</li></ul>

Topic	Proposed Regulatory Updates
	<ul style="list-style-type: none"> <li>• Minor updates for typographical errors and clarifications throughout the regulation, that do not materially affect the previously established reporting requirements</li> </ul>
<b>Applicability</b>	<ul style="list-style-type: none"> <li>• Establish additional applicability specifications for sources emitting more than 4 tons per year of criteria pollutants (or 100 tons per year for carbon monoxide)</li> <li>• Establish additional toxics-based applicability specifications based on identified activity levels for specified permitted emissions processes</li> <li>• Provide examples of information required for cessation of reporting</li> <li>• Include a new section allowing for the request of facility information needed by CARB or an air district to determine if a facility may be subject to CTR applicability</li> </ul>
<b>Reporting Schedule</b>	<ul style="list-style-type: none"> <li>• Provide a multi-year reporting phase-in schedule for sources subject to the new additional applicability requirements, to help reduce workload impacts</li> </ul>
<b>Reporting Requirements</b>	<ul style="list-style-type: none"> <li>• Provide “abbreviated reporting” options for specified industrial sectors to simplify reporting requirements</li> <li>• Reorganize and expand the abbreviated reporting provisions, moving them to the new Article 2 of the regulation</li> <li>• For the report contents specified in section 93404, include reformatting to create separate sections to address the “Full Report Contents” and the new “Abbreviated Report Contents”</li> <li>• Modify some data fields and requirements for better consistency with existing CARB and EPA data systems</li> <li>• Add reporting requirements and applicability criteria for diesel-powered portable equipment operated at specified facilities that are subject to CTR</li> <li>• Include a requirement to provide a description of the activity data used to calculate emissions</li> </ul>
<b>Other Updates</b>	<ul style="list-style-type: none"> <li>• For abbreviated reporting, a new section was added under section 93405 to allow CARB to request additional information from facilities subject to the abbreviated requirements</li> </ul>
<b>New Article 2 for Calculating and Reporting Emissions</b>	<ul style="list-style-type: none"> <li>• The new Article 2 of CTR will eventually be used to include uniform statewide methods for quantifying emissions under CTR</li> </ul>

Topic	Proposed Regulatory Updates
	<ul style="list-style-type: none"> <li>• Article 2 currently includes new provisions, which specify the Abbreviated Reporting requirements for those sectors identified for abbreviated reporting</li> <li>• Article 2 also includes a new petition process, allowing facility owners or operators, or air districts, to petition CARB to allow modifications to the specified abbreviated reporting requirements</li> </ul>
<p><b>New Appendix A for Expanded Applicability</b></p>	<ul style="list-style-type: none"> <li>• Appendix A was added to support the new additional applicability provisions, providing district and sector-based phase-in schedules, and a table listing all permitted processes subject to the new applicability provisions</li> </ul>
<p><b>New Appendix B for Additional Toxics Reporting</b></p>	<ul style="list-style-type: none"> <li>• Appendix B was added to specify additional toxic substances that are subject to quantification and reporting during the initial years of the CTR phase-in schedule</li> </ul>
<p><b>Estimated Costs</b></p>	<ul style="list-style-type: none"> <li>• Primary costs are to businesses for data reporting, and local air districts for implementation</li> <li>• Industry sectors are phased-in over several years to help mitigate cost impacts</li> <li>• Business costs are estimated to be approximately \$9.6 million per year at maximum; local government and air district statewide costs are estimated to be \$5.6 million per year at maximum.</li> </ul>

**Staff Recommendation**

Staff recommends that the Board approve the amendments to the regulation, as proposed, to support multiple CARB and air district programs.

**I. INTRODUCTION AND BACKGROUND**

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Sound science and the data that supports it drive effective public health policy. At its core, the emissions inventory data collected to support regulatory actions is a key to successful policy development. For this reason, the California Air Resources Board has collected emissions data from a wide variety of sources over its more than 50-year history.

California’s existing air quality programs are responsible for significant public health improvements through statewide and regional air quality planning requirements, advancement of technology-based solutions, and risk reduction efforts near industrial facilities. For example, since the 1970s, regulations at the State and local level have

led to a nearly 70 percent reduction in nitrogen oxide emissions, a key component of smog formation. Also, in the past 25 years, emissions and health impacts from exposure to some toxic air contaminants has been reduced by 75 percent.

To help sustain and track that progress, the Board adopted the Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants, or CTR, in December 2018, which became effective on January 1, 2020. The current CTR requires annual reporting of criteria pollutant and toxic air contaminant emissions by a limited number of facilities (approximately 1,300) subject to the applicability requirements of the regulation. The data collected through the initial applicability requirements of the CTR is a start, but it does not provide a comprehensive assessment of the majority of permitted facility emission sources statewide.

Further, certain communities continue to experience adverse and inequitable environmental and health impacts from air pollution. As compared to other areas, communities near ports, rail yards, warehouses, or freeways, for example, experience a higher concentration of air pollution due to emissions from mobile sources such as cars, diesel trucks, locomotives, and ships. Many of the same communities also experience air quality impacts from large industrial facilities such as oil refineries. Additionally, in many communities across the State, smaller sources of toxic air contaminants like chrome plating facilities, metal recycling facilities, oil and gas production operations, and chemical use, also contribute to localized air quality impacts. Within certain communities, multiple sources of toxic air contaminants that are located in close proximity to one another may also result in an elevated cumulative toxics exposure for people in those communities. For example, the combined emissions from multiple chrome plating operations, auto body and paint shops, or manufacturing facilities within a single community may result in an elevated health risk to nearby residents.

In keeping with the agency's 50-year history of analyzing the sources of air pollution and reducing the impacts from air pollutant emissions, CARB continues to develop and implement programs and regulations to address air quality issues. The proposed CTR amendments support, and are consistent with, the tenets of AB 197 which establishes requirements for making air emissions data publicly available and transparent, and AB 617, which continues California's environmental leadership by establishing innovative new, community-focused practices to improve air quality.

The proposed CTR amendments also provide updated toxics data for air districts, so that they may evaluate risks to local residents related to the emissions of toxic contaminants regulated under AB 2588, and CARB will use this data to evaluate and update air toxic control measures, as needed. The proposed amendments to the CTR enhance the quantity and quality of emissions inventory data from facilities, which in turn will provide these and many other ongoing CARB and air district programs with the emissions data they need to address air quality issues. The amendments are also a direct way to move forward, as CARB is trying to provide a framework of

comprehensive emissions data and consistent reporting statewide, ultimately unifying disparate existing reporting structures.

A major goal of CTR now and into the future is for CARB to establish a uniform statewide system of annual reporting of criteria pollutant and toxic air contaminant emissions from facilities, while working closely with the local air districts. The currently adopted CTR meets this goal, in part, by including the following:

- Annual criteria pollutant and air toxics emissions reporting for sources subject to the CTR Regulation;
- Consistency in the types of criteria pollutants and air toxics that need to be reported;
- Establishing applicability criteria for sources subject to the reporting requirements;
- Establishing the contents of emissions data reports and how the emissions data must be reported;
- Creating reporting deadlines and the process for submitting emissions data reports.

CARB is implementing the current CTR and any proposed amendments in tandem with local air districts to avoid potential duplication of reporting efforts. Air districts have worked closely with their local facilities for many decades and have detailed, specific knowledge of these facilities with regard to their permitting, data collection, and enforcement histories. The districts' knowledge is necessary to ensure the success of the statewide reporting program.

As described in the next section, now that the basic CTR requirements have been adopted, it is necessary to expand the limited scope of the initial applicability requirements to establish comprehensive statewide reporting. This is necessary to establish a more complete statewide system of mandatory annual emissions reporting, needed to support the variety of programmatic needs previously discussed. The remainder of this staff report provides the objectives and benefits of the proposed amendments, a summary of fiscal impacts and environmental impacts, and other information related to the CTR updates.

## **II. THE PROBLEM THAT THE PROPOSAL IS INTENDED TO ADDRESS**

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Emissions inventory data is critical to understanding the sources of emissions that may contribute to adverse health risks or other impacts throughout the state. California criteria pollutant and toxics emissions data is currently collected separately by the thirty-five independent local air districts within the state. California air districts are diverse in size, number of emission sources, types of sources, population density, local geography, and other factors. With this diversity come many variations in how emissions data is collected, the frequency and types of information inventoried, and how data is processed, used, and shared after collection.

Under the proposed amendments, data from facilities will be consistently and routinely collected as compared to current programs. Additionally, the overall effort, of which CTR is a key element, includes development of new data systems and websites to collect, store, analyze, and transparently display collected emissions data.

The CTR was developed in part to address statewide issues of inventory data inconsistency, varying reporting frequencies, inconsistent methodologies, and the inherent challenges in presenting the data transparently for reported criteria pollutant and toxics emissions data. These objectives are highlighted in section 39607.1 of the Health and Safety Code (H&SC) that reads, "The state board, in consultation with districts, shall establish a uniform statewide system of annual reporting of emissions of criteria pollutants and toxic air contaminants for a stationary source."

In related legislation, AB 197 also requires CARB to make available, and update at least annually, on its internet web site the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts, pursuant to H&SC section 38531. The proposed CTR amendments are a key step forward in creating uniformity and consistency across districts, and to ensure the quality and completeness of emissions data collected throughout the state, so that the data meets the needs of multiple state and district programs. This amendments will also support CARB efforts for federal Clean Air Act and California Clean Air Act planning, and generally support CARB's statutory obligation to further understanding of the sources of air pollution in the state.

Achieving these goals will help the air districts, local community members and groups, scientists, industry, consultants, government agencies, and CARB to better identify regions and communities that are most disproportionately impacted, and most in need of additional resources to resolve inequities related to air pollution exposure. Additionally, over time, the proposed regulation will allow for statewide data comparability for various industrial sectors.

There are three applicability categories under the current regulation; they include facilities subject to mandatory California greenhouse gas emissions reporting, facilities authorized by a district permit to emit 250 tons or more per year of nonattainment criteria pollutants, and facilities that receive an elevated prioritization score for toxics.<sup>5</sup> Generally, the first two categories capture the largest California facilities, and the third category generally captures smaller facilities (not captured under the prior two categories), based on toxics emissions risk.

The proposed amendments to the regulation now include a fourth applicability category<sup>6</sup> to encompass additional facilities located both statewide, as well as in the

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<sup>5</sup> These categories are respectively covered by the language of subdivisions (a)(1), (2), and (3) of 17 CCR section 93401.

<sup>6</sup> 17 CCR section 93401, subd. (a)(4)

most highly impacted communities, which are those communities identified by the CARB Governing Board for the implementation of community air monitoring programs or community emission reduction programs established pursuant to H&SC sections 42705.5 and 44391.2.

Examples of these additional facilities include businesses such as retail gasoline fueling stations, dry cleaners, print shops, auto body and auto paint shops, metal plating, metal grinding and finishing facilities, coating and finishing facilities, industrial cleaning and degreasing operations, welding operations, facilities with backup diesel generators and emergency fire pumps, and others. A full listing is provided in Table A-3 of the proposed regulation order, provided in Appendix A of this staff report. Staff has concluded that emissions data from such facilities are needed to clearly establish which sources of air pollution are prominent at the local and community level, for tracking emissions over time, and to identify if there are harmful cumulative impacts, resulting when multiple nearby emission sources contribute to risk.

Once this new, more comprehensive, and updated facility emissions data is collected, it will facilitate a central component of CARB's overall mission of improving communication and information sharing with communities, which builds on the requirements of AB 617 and AB 197 as well. It will also support CARB's broader obligation to work to satisfy the federal Clean Air Act and California Clean Air Act. Access to up-to-date data for criteria and toxics emissions is important for transparency and accountability. Accordingly, the proposed amendments to the regulation seek to improve statewide emissions data collection. This reporting creates a strong incentive for companies to reduce pollution and helps provide opportunities for companies to learn from each other's best practices for reducing emissions.

### **III. BENEFITS ANTICIPATED FROM THE REGULATORY ACTION, INCLUDING THE BENEFITS OR GOALS PROVIDED IN THE AUTHORIZING STATUTE**

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Government Code section 11346.2(b)(1) requires enumeration of the anticipated benefits of the regulatory action, including the benefits and goals of the authorizing statutes and other needs. Many areas of California continue to be disproportionately burdened by air pollution. CARB has an obligation to collect and communicate emissions data at the regional and local levels, evaluate the risks from airborne emissions, and reduce exposure to air pollution in these communities. The proposed amendments to CTR are critical to supporting these objectives. Multiple federal and state statutes authorize and require CARB to collect, evaluate, and make publicly available facility emissions that are needed to implement the statutes. These include the National Emissions Inventory, AB 2588, AB 617, AB 197, California Health & Safety Code section 41500, and others. Using data collected under the proposed CTR requirements, the emissions sources and trends for the majority of California's permitted facility emission sources will be more fully understood.

A key benefit of the proposed regulation and amendments is its harmonization of statewide data submission requirements, such as reporting deadlines, frequency of reporting, and the specific chemical substances and other data to be reported on an annual basis, so that similar industrial sectors will have data comparability, regardless of where they are located within California. The effort also makes the data collection activities more consistent across programs, providing additional efficiency.

For example, the proposed CTR amendments are being aligned with proposed amendments to the AB 2588 “Toxic Hot Spots” program, so that the phase-in schedule for implementation, the list of applicable chemical substances to be evaluated, the reporting deadlines, and other aspects of the two programs are synchronized and consistent. This improved data in turn provides benefits to community groups, the public, regulators, scientists, CARB, and others, who have growing needs to access complete, user-friendly, and high-quality emissions data. The proposed amendments would significantly increase access to useful data in user-friendly forms, such as mapping (as provided in the current CARB Pollution Mapping Tool<sup>7</sup>), graphs, and detailed emissions data reports when needed.

In addition to addressing the goals of AB 197 and AB 617, State Implementation Plans, exposure modeling, and more, inventory data helps to determine what is being emitted into the air, by whom, and where. Inventory data helps guide and provide the scientific basis for CARB’s regulatory development process. These amendments also support CARB’s fundamental obligation to research the causes of, and solutions to, air pollution (see Health & Saf. Code §39002). Inventory data helps identify and address areas of concern, and to track progress in emission reduction efforts from facilities, area sources, and mobile sources. Inventory data is an essential element in the development of cost-effective solutions to reduce air pollution and protect human health. And, although the reporting regulation amendments provide no direct benefits to worker safety, over time, indirect health benefits to workers and residents within California are expected to be realized as actions are taken to reduce emissions based on improved inventory data.

#### **IV. AIR QUALITY**

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As described previously, the vastly improved and more extensive facility-based emission inventory data to be collected under the proposed CTR amendments is a fundamental element for protecting public health. Data collected under the program will allow identification of the most significant sources of facility emissions, which will then be used to reduce emissions and risk, characterizing and improving overall air quality and reducing toxics risk within identified communities and statewide. The comprehensive facility emission inventory data to be collected under the amended CTR requirements goes hand-in-hand, synergistically integrating with other CARB

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<sup>7</sup> CARB Pollution Mapping Tool: [https://www.arb.ca.gov/ei/tools/pollution\\_map/](https://www.arb.ca.gov/ei/tools/pollution_map/) (CARB, Pollution Mapping Tool, 2017)



emissions data and emissions reduction strategies for mobile sources, consumer products, area-wide sources such as fugitive dust, and more.

CTR and the proposed amendments require collection and reporting of emissions data to CARB (via the local air districts), to more completely understand the types, quantities, and locations of criteria and toxic emissions from facilities. As a reporting-only regulation, the proposed amendments themselves do not have direct air quality impacts. This is because the proposed amendments to the regulation require data collection and reporting by additional applicable facilities, but it does not require any direct emissions reduction actions by the facilities.

Any air quality benefits from the proposed CTR amendments would be indirect. CARB staff anticipates the collected data would be used to identify emissions sources of concern. Then, various approaches would be used to address the concerns, such as CARB or air district rules focusing on specific industry sectors or chemicals, or certain types of equipment. Through these types of mechanisms, the amended regulation would play a major role in providing data necessary for improving air quality and tracking air quality trends statewide and within communities.

## **V. ENVIRONMENTAL ANALYSIS**

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### **A. Introduction**

This chapter provides the basis for CARB's determination that the proposed project is exempt from the requirements of the California Environmental Quality Act (CEQA). A brief explanation of this determination is provided in section B below. CARB's regulatory program, which involves the adoption, approval, amendment, or repeal of standards, rules, regulations, or plans for the protection and enhancement of the State's ambient air quality, has been certified by the California Secretary for Natural Resources under Public Resources Code section 21080.5 of CEQA (14 CCR 15251(d)). Public agencies with certified regulatory programs are exempt from certain CEQA requirements, including but not limited to, preparing environmental impact reports, negative declarations, and initial studies. CARB, as a lead agency, prepares a substitute environmental document (referred to as an "Environmental Analysis" or "EA") as part of the Staff Report prepared for a proposed action to comply with CEQA (17 CCR 60000-60008). If the project is finalized, a Notice of Exemption will be filed with the Office of the Secretary for the Natural Resources Agency and the State Clearinghouse for public inspection.

### **B. Analysis**

CARB has determined that the proposed project is exempt from CEQA under the general rule or "common sense" exemption (14 CCR 15061(b)(3)). CEQA Guidelines state "the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it

can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA". The proposal is also categorically exempt from CEQA under the "Class 6" exemption (14 CCR 15306) because it is an action for the collection of information (i.e. basic data collection, research, experimental management, and resource activities) which does not result in serious or major disturbances to an environmental resource.

The proposed CTR amendments establish new reporting requirements for regulated entities, specifying that criteria pollutant and toxic air contaminant emissions must be reported on an annual basis to CARB. The proposed amendments only affect data collection, data reporting, program administration, and the contents of electronic databases, and do not involve or result in any changes to the physical environment. The proposed amendments include administrative and procedural requirements to expand and enhance the emissions reporting program.

Based on CARB's review it can be seen with certainty that there is no possibility that the proposed project may result in a significant adverse impact on the environment. Further, the proposed action is designed for the purpose of information collection and CARB found no substantial evidence indicating the proposal could adversely affect any environmental resource areas, or that any of the exceptions to the exemption applies (14 CCR 15300.2). Therefore, this activity is exempt from CEQA.

## **VI. ENVIRONMENTAL JUSTICE**

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State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Government Code, section 65040.12, subdivision (c)). CARB is committed to making environmental justice an integral part of its activities. The Board approved its Policies and Actions for Environmental Justice<sup>8</sup> to establish a framework for incorporating environmental justice into CARB's programs consistent with the directives of State law. These policies apply to all communities in California but recognize that environmental justice issues have been raised more in the context of low-income and minority communities.

Actions of CARB, local air districts, and federal air pollution control programs have made substantial progress towards improving air quality in California. However, some communities continue to experience higher exposure than others because of the cumulative impacts of air pollution from multiple sources. Adoption and implementation of the proposed CTR amendments will have no negative environmental impacts on environmental justice communities.

AB 617 and AB 197 are specifically focused on protecting and assisting disproportionately affected communities. The primary elements of AB 617 establish

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<sup>8</sup> California Air Resources Board (CARB). (2001, December 13) *Policies and Actions for Environmental Justice*. Available at: <https://ww3.arb.ca.gov/ch/programs/ej/ejpolicies.pdf>. Accessed August 20, 2020.

discrete actions and requirements for directly reducing the air pollution impacts on environmental justice communities. Under the proposed amendments, a substantial number of additional facilities throughout the state will be required to report their criteria and toxics emissions on an annual basis. Under the current CTR, approximately 1,300 facilities are subject to reporting; under the amended applicability requirements, if adopted, over 60,000 facilities would be subject to reporting. This additional CTR emissions information will be made widely available to the public at large, providing accurate and transparent emissions data to environmental justice communities, scientists, and others. The data will support community emissions reduction programs, community monitoring programs, CARB rulemakings, development of emission reduction strategies, the Air Toxics “Hot Spots” program, development of CARB Air Toxics Control Measures, and State Implementation Plans, all focused on improving the air quality, and reducing air pollution impacts within California environmental justice communities and statewide.

For additional information on the benefits of these proposed amendments to environmental justice communities and throughout California, please see sections II and III of this document, describing the “The Problem that the Proposal is Intended to Address,” and, “Benefits Anticipated from the Regulatory Action, Including the Benefits or Goals Provided in the Authorizing Statute,” respectively.

## **VII. ECONOMIC IMPACTS ASSESSMENT**

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The following economic impacts assessment (EIA) for the CTR amendments addresses the legal requirements for an EIA by presenting a summary of changes and costs due to the amendments, a description of the methodology used to estimate the cost of compliance and approach to the analysis, as well as CARB staff’s analysis of the economic impact on California businesses and fiscal impact on State and local agencies.

### **A. Legal Requirements**

Government Code Sections 11346.2(b)(2) and 11346.3(b) require the preparation of an EIA. Specifically, Section 11346.3 of the Government Code requires California agencies, in proposing to adopt or amend any administrative regulation, to:

- assess the potential for adverse economic impacts on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states
- include the potential impact of the regulation on California jobs, business expansion, and business elimination or creation
- estimate the costs or savings to any State or local agency and school district in accordance with instructions adopted by the Department of Finance
- include any non-discretionary cost or savings to local agencies, and the cost or savings in federal funding to the State

Additional requirements apply for an EIA based on whether the proposed regulation is, or is not, a *major regulation*. There are two thresholds to consider regarding major regulations, one requiring a Standardized Regulation Impact Assessment, and the other as specified by CalEPA, as discussed below.

For a major regulation proposed on or after January 1, 2014, a standardized regulatory impact analysis (SRIA) is required. The definition of major regulation as it specifically relates to a SRIA is “any proposed rulemaking action adopting, amending or repealing a regulation subject to review by OAL that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars (\$50,000,000) in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented (as estimated by the agency), computed without regard to any offsetting benefits or costs that might result directly or indirectly from that adoption, amendment or repeal.” (1 CCR § 2000)

A SRIA requires a comprehensive assessment of all costs or all benefits (direct, indirect, and induced) of the proposed regulation on business enterprises and individuals located in or doing business with California.

Health and Safety Code (H&SC) Section 57005 addresses the requirements for major regulations as defined in that section. In implementing those requirements, the Cal/EPA requires CARB to perform an economic impact analysis of submitted alternatives to the proposed regulation before adopting any major regulation, as defined in that section. A major regulation is defined as “any proposed regulation that will have a potential cost to California business enterprises in an amount exceeding ten million dollars (\$10,000,000) in any single year.”

Exceeding the CalEPA major regulation threshold requires a consideration of whether there is a less costly alternative or combination of alternatives which would be equally as effective in achieving increments of environmental protection in a manner that ensures full compliance with statutory mandates within the same amount of time as the proposed regulatory amendments.

The proposed regulatory amendments are not projected to have potential costs to California business enterprises exceeding ten million dollars in any single year; therefore, the proposed regulatory amendments are not considered a major regulation under H&SC Section 57005. Similarly, the proposed amendments would not exceed the major regulation threshold for a SRIA to be conducted, as the proposed economic impact on California business enterprises and individuals in any 12-month period through full implementation would not exceed fifty million dollars (\$50,000,000), and therefore the proposed amendments do not require the preparation of a SRIA.

## B. Summary of Total Costs Due to Amendments

As described in Section II of this ISOR, the proposed CTR Amendments would affect additional facilities located statewide. A total of approximately 60,900 facilities would be affected by the proposed amendments; this includes private business entities (58,400) as well as facilities that are owned or operated by state (500) or local (2,000) agencies. Of these 60,900 facilities, approximately 60,000 would be newly subject and approximately 900 are existing facilities subject to the current regulation that will have additional reporting requirements for diesel-powered portable engines.

The maximum total costs to all private businesses and local and state government agencies are projected to be \$14.7 million. For the private sector, the maximum annual cost impact is projected to be \$9.6 million. After implementation, the ongoing annual statewide costs of the regulation are expected to decrease to \$12.7 million a year (of which \$7.7 million is private sector costs, \$4.9 million is local government costs – including air districts, and \$71,000 is state government costs). Table 1 presents a summary of estimated total costs due to the proposed amendments.

**Table 1. Summary of Costs Due to Amendments**

Year	Total Affected Facilities	Private Sector	Local Government (Including Air Districts)	State Government	Annual Total
2022	17,100	\$2.1 million	\$785,000	\$23,000	\$2.9 million
2023	21,300	\$4.6 million	\$3.8 million	\$149,000	\$8.5 million
2024	21,300	\$2.4 million	\$1.7 million	\$25,000	\$4.1 million
2025	36,600	\$6.6 million	\$3.5 million	\$61,000	\$10.2 million
2026	56,800	\$8.5 million	\$5.6 million	\$78,000	\$14.2 million
2027	60,900	\$9.6 million	\$5.0 million	\$87,000	\$14.7 million
2028	60,900	\$9.0 million	\$5.5 million	\$81,000	\$14.6 million
2029	60,900	\$9.0 million	\$5.6 million	\$82,000	\$14.7 million
2030	60,900	\$7.9 million	\$5.1 million	\$73,000	\$13.1 million
2031	60,900	\$7.7 million	\$4.9 million	\$71,000	\$12.7 million

Additional details regarding specific costs are provided in the remaining sections of this economic assessment.<sup>9</sup>

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<sup>9</sup> A preliminary revised economic impacts summary was prepared to provide an estimate of the number of facilities and costs for compliance in consideration of the modified CTR text of the 15-day notice posted May 13, 2019 (Available: <https://ww2.arb.ca.gov/rulemaking/2018/proposed-regulation-reporting-criteria-air-pollutants-and-toxic-air-contaminants>). While the CTR Amendments build upon the modified text of the 15-day notice, values in this economic assessment are always based on the most accurate data at the time of analysis. Implementation timeframes and concepts regarding reducing the burden of reporting may vary. Therefore, caution is urged when comparing values between the economic assessments.

## C. Costs Considered and Approach to Analysis

The cost estimates performed as part of this EIA are based on approximations of the labor hours required for affected facilities to comply with the regulatory requirements, and for local air districts to assist in implementing the requirements.

### Costs Considered

The costs considered in this analysis include the cost of compliance for affected facilities to comply with the requirements of the proposed amendments and local air district costs regarding implementation of the requirements of the regulation. However, local air districts face no new specific legal requirements under the proposed regulation or amendments.

### Cost of Compliance

The primary costs associated with complying with the proposed reporting regulation are costs incurred for determining applicability, data gathering and recordkeeping activities, preparation of an annual emissions data report, reviewing the report, and submitting the report to the local air district (or at a future date, potentially, to CARB).

Cost impacts will vary from facility to facility, depending on various factors such as the specific industry sector, the regulation requirements that apply to them, the complexity of operation, the types of emission sources on-site, and existing compliance practices. Costs are expected to vary for facilities between air districts. For owners and operators of facilities located in air districts that have comprehensive existing emissions reporting programs, the costs to incorporate any additional provisions in the regulation will be relatively small. In contrast, the costs to comply in other regions which may not have fully established emissions inventory programs and do not have complete annual reporting requirements will be higher for these facilities in those regions. However, overall, for a typical affected business, the regulation will have minimal cost impacts. This is because the costs to comply will typically be a relatively modest additional workload, supplementing the workload that is typically already required in most regions to meet existing mandated data collection and reporting requirements.

### Other Costs (Air District Implementation Costs)

The regulation and proposed amendments apply only to affected owners and operators of affected facilities. However, California's local air districts have played a historically important role in collecting, processing, confirming the validity of, and managing facility emissions data, and these actions are central to the proposed regulation's implementation, data collection, and enforcement provisions. In implementing the regulation to report facility data, the local air districts (a form of local government) will also incur costs in receiving and compiling facility data, processing and checking data as needed, calculating emissions in some cases, and then submitting the required emissions data to CARB. Costs have been estimated for local air districts, and these costs will vary by the number and types of facilities in their

regions, the ability of existing staff to absorb additional workload, and (similarly to facilities) how rigorous the current district reporting requirements are, and the sophistication of existing air district data collection and management systems.

### **Approach to Analysis**

CARB staff estimated the costs of compliance for facilities subject to the regulation (both private sector and government), as well as the costs to local air districts in implementing the requirements. In general, the CTR Amendments focus on smaller facilities than currently applicable under the existing CTR regulation. CARB staff selected a time-horizon of ten years for calculating costs because the proposed amendments to the regulation would be implemented over that period, with an analysis of a fully implemented ongoing year. The main approach to estimating cost of compliance is as follows:

1. CARB staff identified the facilities expected to be subject to the proposed reporting requirements by air district. Grouping facilities by air district allow for evaluation of the phase-in requirements of the proposed amendments. Staff also identified facilities that may potentially qualify for abbreviated reporting, which would reduce costs for those facilities. Facilities were classified as to whether they were small business, local government, or state government.
2. Initial and ongoing labor hours for facilities to comply with the regulation were estimated based on the differing applicability and reporting requirements phased-in per year. Initial and ongoing labor hours were conservatively estimated based on CARB staff experience with prior reporting programs and input from commenters regarding the previous regulation. Estimates for air district implementation of the proposed amendments used input from air district personnel to estimate costs to all air districts in California.
3. Estimates of labor hours were converted to cost by multiplying the labor hour estimates by an average California loaded wage rate using Bureau of Labor Statistics data, based on the types of personnel expected to perform the data collection, evaluation, and reporting activities. Costs were calculated for each year over the implementation period and for an ongoing year.

### **D. Economic Impacts to the Private Sector, Including Small Businesses**

CARB staff estimates that the proposed CTR Amendments will affect 58,400 private businesses, at a maximum annual statewide cost of \$9.6 million in any one year, and \$7.7 million in ongoing years after implementation. These costs include costs to small businesses, which are discussed separately below.

Staff estimates that the average cost per facility to comply with the full reporting requirements would initially be approximately \$560 per year, but would decrease to approximately \$300 per year after reporters become familiar with the emissions reporting requirements. However, as discussed above, many businesses are expected to qualify for abbreviated reporting requirements that would reduce their reporting

burden and compliance costs in comparison to the full reporting requirements. For example, the additional requirements for retail gasoline dispensing facilities will be negligible, because the facility operators already collect the fuel sales data needed to estimate emissions, and already report this information to other state agencies, and in many cases to the local air district. The additional costs of compliance for these facilities would be very low. A similar situation would be expected for facilities with backup diesel-powered generators as the only permitted emission sources, because in most cases, the annual activity data to be collected would consist only of determining the number of hours that the device was operated during the year. Most devices of this type have a non-resettable meter that provides the total number of hours the unit has been operated, so in most cases, annual reporting could be accomplished by recording the meter reading once per year. However, there will be some businesses with higher costs, including those that may be more complex, or that may not have preexisting reporting requirements such that they are not currently collecting data needed to compute emissions data (which will typically be performed by air districts for the smaller facilities).

CARB staff expects the per-facility financial impact to be minimal and absorbable, because in general, the costs will only be minor additional incremental costs in addition to administration activities and existing data collection. In addition, for smaller facilities, it is anticipated that the local air districts will provide assistance to these facilities in computing criteria and toxics emissions based on easily obtained throughput and activity information such as the quantity of material sold (such as gasoline), material consumed (such as natural gas, diesel fuel, or coatings), or material produced or processed. In addition, the reporting costs are expected to decrease over time as ongoing reporting methods are established, and as the air districts and CARB develop more advanced electronic data reporting systems to streamline the reporting process.

CARB staff does not expect a noticeable change in employment, business creation, elimination or expansion, consumer prices, or business competitiveness in California due to the expanded reporting requirements. The additional time required by affected businesses to meet the requirements of the proposed amendments to the regulation are estimated to be equivalent to the creation of 13 to 58 new full-time jobs statewide. We do not expect any new businesses to be created resulting from the regulation, because any needed consultants would most likely be hired from existing firms. There may be a minor additional increase in California employment for technical consultants who may assist facilities in meeting the regulatory requirements. These consultants will typically act as technical assistance providers to assist in compiling data, preparing and reviewing emissions reports, and submitting required data.

The proposed amendments to the regulation would have limited impact on the ability of California businesses to compete with businesses in other states. This is because the proposed amendments would impose only a modest additional cost to comply with the emissions reporting requirements, relative to the overall total operational costs for



affected facilities. Therefore, the additional cost to comply with this specific regulation would not meaningfully impact the ability of affected California businesses to compete with businesses in other states.

### **Small Businesses**

The proposed CTR Amendments will impact an estimated 50,000 small businesses, with a maximum annual statewide cost impact of \$8.1 million in any one year. Ongoing costs are expected to be \$6.5 million per year after the implementation period.

The definition of “small business” is based on the description of “small business” as established in California Government Code Section 11346.3(b)(4)(B), which requires that the business is independently owned and operated, not dominant in its field of operation, and has 100 or fewer employees. Some of the types of affected small businesses include retail gasoline fueling stations, dry cleaners, print shops, auto body and auto paint shops, metal plating, metal grinding and finishing, coating and finishing facilities, industrial cleaning and degreasing operations, welding operations, facilities with backup diesel generators and emergency fire pumps, and others.

Staff estimates that the average cost for a small business to comply with the reporting requirements would be approximately \$560 per year initially, and \$300 per year thereafter). Many small businesses are expected to qualify for abbreviated reporting requirements that would reduce reporting burden and compliance costs in comparison to the full reporting requirements. These costs are expected to have a minor financial impact on individual small businesses. Furthermore, for smaller facilities, like small businesses, it is anticipated that the local air districts will often provide assistance to these facilities in computing criteria and toxics emissions based on easily obtained throughput and activity information.

## **E. Economic Impacts to State and Local Government, Including Air Districts**

Under the proposed CTR Amendments, annual reporting of criteria air pollutants and toxic air contaminants would be mandatory for any facility or entity that meets the regulation’s applicability requirements, including state and local agencies.

### **Local Government**

The maximum annual cost to an estimated 2,000 local government agencies is estimated to be approximately \$5.6 million. This includes the costs to local agency facilities that are subject to the proposed reporting requirements (approximately \$300,000), and the costs to local air districts who will be directly involved in implementing the requirements (approximately \$5.3 million). Local agency facilities include those operating water treatment plants, landfills, emergency generators, etc., who would be subject to the proposed reporting requirements.

### Air Districts

As stated previously, air districts face no new specific legal requirements under the proposed regulation. The regulation applies to affected facilities, not the air districts. However, CARB recognizes that California's local air districts play an important role in collecting, processing, confirming the validity of, and managing facility emissions data, and that these actions are central to the proposed regulation's implementation, data collection, and enforcement provisions. The proposed CTR Amendments are intended to build on those existing efforts, because air districts are already familiar with local facility operators, conduct inspections, issue permits, and in many instances have been regulating applicable sources for decades. Some local air districts may need to add staffing to manage additional workload they may incur in providing assistance in implementing the regulation. If necessary, districts could levy service charges, fees, or assessments sufficient to pay for any implementation required under the proposed regulation. It is likely that these additional district staff would also have additional duties beyond just implementing the requirements of the proposed regulation.

Regarding implementation tasks that local air districts may undertake, or any other costs that may result due to implementation of the statute, air districts have legal authority under H&SC sections 40510 and 42311 to recover related costs by imposing fees. The proposed regulation also specifies that local air districts that enforce the regulation may retain any penalty monies that result.

### **State Government**

In addition, an estimated 500 state facilities would be subject to the reporting requirements, with an estimated maximum annual cost of \$149,000. State facilities include certain California state hospitals, prisons, universities, and others.

### **Air Resources Board**

Adoption of the proposed regulation amendments is expected to require continued funding for CARB to administer the program. The regulation will be implemented using existing CARB staffing, and no change in staffing level is anticipated to administer the program under the proposed rule for data reporting, data management, analysis, enforcement or other foreseeable activities. Any CARB staffing needs for implementing the proposed regulation are already accounted for in the current operational budget. However, future funding for development and maintenance of updated databases and web tools may be needed and may be appropriated as approved through established budget procedures.

## F. Alignment with AB2588 Hot Spots Program

The Emission Inventory Criteria and Guidelines Report for the Air Toxics “Hot Spots” Program (EICG) is currently proposed to be amended. The proposed amendments to the Hot Spots Program require quadrennial emissions reporting of criteria air pollutants and toxic air contaminants from the same pool of facilities as emissions reporting is required for the proposed revisions to the CTR. The emissions reporting requirements under Hot Spots and the proposed amendments to the EICG are harmonized within the CTR regulation; in other words, reporting emissions under the CTR program will comply with the emissions reporting requirements of Hot Spots. There is expected to be considerable economic overlap between the two programs, and that costs for the emission inventory requirements of EICG will be absorbed into the proposed amendments to the CTR.

Table 3 provides an estimate of the shared costs between the two emissions reporting programs, if both programs were to be adopted.

**Table 3. Cost Comparison: Difference Between EICG and CTR Amendments**

Year	CTR: Total Private Sector Costs (2019\$)	EICG: Total Private Sector Costs (2019\$)	EICG: Shared Costs with CTR (2019\$)	EICG Additional Cost (2019\$)
2022	2.1 million	2.1 million	2.1 million	0
2023	4.6 million	5.9 million	4.6 million	1.3 million
2024	2.4 million	3.7 million	2.4 million	1.3 million
2025	6.6 million	7.9 million	6.6 million	1.3 million
2026	8.5 million	6.7 million	5.4 million	1.3 million
2027	9.6 million	6.3 million	5.0 million	1.3 million
2028	9.0 million	5.9 million	4.6 million	1.3 million
2029	9.0 million	5.9 million	4.6 million	1.3 million
2030	7.9 million	5.3 million	4.0 million	1.3 million
2031	7.7 million	5.2 million	3.9 million	1.3 million
<b>Total</b>	<b>67.4 million</b>	<b>54.9 million</b>	<b>43.2 million</b>	<b>11.7 million</b>

Table 3 shows the total private sector costs for the CTR and EICG, the shared costs of EICG with CTR, and the additional costs if the EICG amendments were adopted as well. The shared costs include all emissions estimation costs for the EICG amendments except for source testing. The EICG shared costs are effectively absorbed into the emissions reporting costs of CTR. Therefore, if the proposed amendments to the EICG and CTR are adopted, the private sector would not incur the full costs of the proposed amendments to the EICG program (i.e., \$54.9 million over ten years) in addition to the costs for the proposed amendments to the CTR; instead, the cost for the two programs would be \$79.1 million over ten years (\$67.4 million for CTR + \$11.7 million for EICG source testing).

## **G. Reasonable Alternatives to the Regulation and the Agency's Reason for Rejecting those Alternatives**

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

Staff considered several alternatives to the proposed regulatory amendments, including not establishing the amendments (taking no action), required reporting from all permitted facilities statewide, evaluation of several alternatives related to altering the reporting applicability criteria, and alternatives for small business applicability. The specific alternatives are described in Chapter VIII of this document. These alternatives were evaluated but dismissed as not being as effective as or more effective than the proposed amendments in carrying out the purposes of AB 617, AB 197, and other CARB program mandates.

As Chapter VIII describes, these alternatives would be ineffective in meeting the data collection, public right-to-know, and disproportionately impacted community evaluation requirements mandated by AB 617 and AB 197, as well as supporting other mandated CARB program needs such as State Implementation Plans, the Air Toxics "Hot Spots" program, Airborne Toxic Control Measures, and others. Therefore, the alternatives would not produce cost-savings in effectively meeting CARB goals and requirements. In conclusion, no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory amendments are proposed or would be as effective as, or less burdensome, to affected private persons than the proposed regulation.

Based on CARB staff analysis, the Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly on affected businesses. In addition, the Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide economic impact directly affecting representative private persons.

## **VIII. EVALUATION OF REGULATORY ALTERNATIVES**

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Government Code section 11346.2, subdivision (b)(4) (Gov. Code § 11346, 2016) requires CARB to consider and evaluate reasonable alternatives to the proposed regulatory action and provide reasons for rejecting those alternatives. This section discusses alternatives evaluated and provides reasons why these alternatives were not included in the proposal. As explained below, no alternative proposed to the

amendments was found to be less burdensome and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the initial authorizing law (i.e., AB 617), and in meeting multiple CARB and district program emission inventory needs, including those of AB 197, as previously identified. The Board has also not identified any reasonable alternatives to the proposed amendments that would lessen any adverse impact on small business.

#### **A. Take No Action Alternative**

An overall “no action” alternative means that the regulation would not be amended, and the existing provisions would remain as they are. Under this alternative, annual reporting of criteria and toxics emissions would only be required by a very small subset of California facilities (approximately 1,300) currently subject to CTR (out of the over 60,000 permitted sources in the state). CARB has collected emissions data from a wide variety of sources for decades. This emissions inventory data is a core element to our success in supporting sound public health policy and effective regulatory actions, targeted to improve the health of all Californians. In recognition of the foundational importance of inventory data, AB 617 requires that CARB “establish a uniform statewide system of annual reporting of emissions of criteria pollutants and toxic air contaminants for a stationary source.” Without expanding the scope of applicability as proposed, CARB will not obtain the emissions data needed to achieve numerous program objectives. Therefore, not taking action would continue with the current inconsistent and incomplete emissions reporting within California. The “no action” option is not consistent with the mandates of AB 617 or with the AB 197 community right-to-know provisions. The “no action” alternative is also not compatible with the overarching goals of streamlining and improving the existing emissions inventory data collection efforts, and creating and more accurate, efficient, and consistent data collection and retrieval process. Therefore, the “no action” option is not a viable alternative and was rejected.

#### **B. Require Reporting by All Permitted Facilities**

Within the proposed amendments, the new additional applicability provisions include specific applicability parameters based on the quantity of criteria pollutants emitted (section 93401(a)(4)(A)-(B), or the toxics-related permitted processes identified in Table A-3 (per section 93401(a)(4)(C)), which may or may not also include usage or other applicability thresholds. In developing the proposed amendments, staff also considered the alternative of including all district permitted sources within the applicability criteria. With this all-in approach, there would be some limited exclusions for certain sources, that are likely insignificant (small diesel generators) or for facilities for which activity data can be collected elsewhere (e.g., retail gasoline fueling stations). For other relatively straightforward emissions sources, abbreviated reporting would be provided, to reduce workload on facilities and air districts.

A benefit of this all-in approach for permitted facilities is that industry sources and districts would not need to devote resources towards identifying which sources are in or out of the CTR program. Effectively, all permitted sources would be subjected to reporting, unless they were in one of the narrowly excluded and easily identifiable categories. The approach would also simplify implementation and compliance with the regulation, because the time-consuming work of evaluating either permitted criteria pollutant or toxics emissions levels to determine applicability and phase-in schedules are avoided. A disadvantage of the all-in approach is that it is potentially overly broad and nonspecific, treating all facilities essentially the same as it pertains to applicability, regardless of the source, and regardless of the emissions and potential environmental harm. The all-in approach could subject even more facilities to the reporting requirements (compared to the current proposal), which would potentially increase overall statewide implementation costs to industry, districts, and CARB, with an uncertain additional benefit. For these reasons, the “All Permitted Facilities” option was rejected, in preference to the specific applicability criteria identified in the proposed amendments, requiring reporting by only those sources that could individually, or in combination, pose potential health risks.

### **C. Require Full Reporting by All Facilities, Removing the Abbreviated Reporting Provisions**

Under the proposed revisions, we provide the option for certain sectors to prepare and submit simplified abbreviated emissions data reports, to reduce compliance costs for both facilities and air districts, as compared to the full reporting requirements. In developing the regulation, we considered requiring all facilities to conform to the detailed data reporting and other requirements of the regulation, and not providing the abbreviated option. We concluded that, based on the number of sources and the relative amounts of chemicals typically released from smaller facilities, that full reporting (particularly data related to the release location of airborne emissions at a facility), would likely hold less importance for certain sectors. Collecting release location data from certain smaller and relatively less impactful facilities, whose emissions present considerably less risk, would not justify the costs of collecting such information in many cases. Therefore, the option of collecting full emissions data reports from all applicable facilities was rejected. Facilities that are allowed to use the abbreviated reporting provisions must submit full emissions data reports only upon request from CARB or the local air district.

### **D. Health and Safety Code section 57005 Major Regulation Alternatives**

The proposed amendments to CTR will not result in a total economic impact on state businesses of more than \$10 million in any single year of implementation. Therefore, this proposal is not a major regulation as defined by H&SC section 57005.

## IX. JUSTIFICATION FOR ADOPTION OF REGULATIONS DIFFERENT FROM FEDERAL REGULATIONS CONTAINED IN THE CODE OF FEDERAL REGULATIONS

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Government Code section 11346.2(b)(6) requires CARB to describe its efforts to avoid unnecessary duplication or conflicts with federal regulations that address the same issues. As with the proposed CTR amendments, various provisions of existing federal regulations require the reporting of criteria emissions and toxics air contaminants to U.S. EPA. For example, in 2008, U.S. EPA promulgated the Air Emissions Reporting Requirement (AERR), requiring states and local air pollution control agencies to submit emissions inventories for criteria pollutants to U.S. EPA's Emission Inventory System (EIS)<sup>10</sup> for State Implementation Plans. These regulations require reporting either annually or every three years based on the quantity of emissions from the source and the regional attainment status, focusing only on larger sources of criteria air pollutants.

In addition, certain specified California industry sectors are required to annually report their emissions of specified toxic air contaminants to U.S. EPA under the federal Emergency Planning and Community Right-to-Know Act<sup>11</sup>, and the Toxic Chemical Release Reporting: Community Right-To-Know (TRI)<sup>12</sup> provisions.

Although the proposed CTR amendments also require reporting of criteria and toxic emissions, which does have some overlap with existing federal requirements, the requirements are not duplicative. The proposed amendments to the regulation are specifically designed to address the needs associated with evaluating air pollution impacts in disproportionately impacted communities, and comprehensively throughout California, using consistent data. These needs cannot be met with data collected under existing federal regulations, as detailed below, which makes it necessary to implement the proposed CTR amendments. The federal regulations do not provide the comprehensive agency-reviewed, and updated data for all chemicals of concern that are needed to evaluate and mitigate the impacts of these emissions in California.

The Legislature has obligated CARB to "conduct research into the causes of and solutions to air pollution" (Health & Saf. Code § 39003) and granted CARB the authority to "do such acts as may be necessary" to fulfill its obligations under the law (Health & Saf. Code § 39600). CARB also has more specific authority to require the

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<sup>10</sup>40 CFR 51 . (2012, July 1). *Code of Federal Regulations, Title 40, Chapter 1, Subchapter J, Part 51, Subpart A, Requirements for Preparation, Adoption, and Submittal of Implementation Plans*. Retrieved August 20, 2020, from [https://www.ecfr.gov/cgi-bin/text-idx?SID=16ec8d342d1e200093512b1767b4ceaa&mc=true&tpl=/ecfrbrowse/Title40/40cfr51\\_main\\_02.tpl](https://www.ecfr.gov/cgi-bin/text-idx?SID=16ec8d342d1e200093512b1767b4ceaa&mc=true&tpl=/ecfrbrowse/Title40/40cfr51_main_02.tpl). Accessed August 20, 2020.

<sup>11</sup> 42 U.S.C. 116. (2011, January 7). *Emergency Planning and Community Right-to-Know. United States Code, 2011 Edition*. Retrieved from <https://www.govinfo.gov/content/pkg/USCODE-2011-title42/html/USCODE-2011-title42-chap116.htm>. Accessed August 20, 2020.

<sup>12</sup> 40 CFR 372. (1996, July 1). *Code of Federal Regulations, Title 40, Chapter I, Subchapter J, Part 372, Toxic Chemical Release Reporting: Community Right-to-Know*. Retrieved from <https://ecfr.io/Title-40/pt40.30.372>. Accessed August 20, 2020.

owner or operator of any air pollution emission source to allow CARB to know the amount of emissions from source. (Health & Saf. Code §41511). Beyond this authority, additional reporting requirements are mandated by AB 617, section 39601.7(b)(1) of the H&SC, which requires CARB to establish “a uniform statewide system of annual reporting of emissions of criteria pollutants and toxic air contaminants for a stationary source,” and H&SC section 39607(b)(2) established under AB 197 that requires that the state board shall, “Inventory sources of air pollution within the air basins and determine the kinds and quantity of air pollutants...”. Further, the cost of differing state and federal reporting regulations is justified by the expected benefits to human health, public welfare, and the environment. Community monitoring and emission reduction programs under AB 617, and other CARB programs will be substantially supported using the data collected under the proposed amendments to regulation, which serves as a foundation to establish, evaluate, and quantify community and statewide air quality improvements.

The following paragraphs provide some specific examples regarding how data collected under existing federal programs is not sufficient to successfully fulfil the requirements of several CARB programs, and why the proposed CTR amendments are necessary.

For example, under the U.S. EPA requirements for criteria pollutant emissions reporting, for many facilities, data is only required to be reported every three years, which is not effective when evaluating community level impacts. It is important to know what the emissions are as soon as possible, to allow evaluation of immediate impacts and to track potential reductions. In addition, the thresholds for reporting applicability are in many cases much higher under the U.S. EPA requirements, and vary by district. The amendments establish consistent and annual statewide requirements for a majority of the air district-permitted facilities in the state, requiring reporting of synchronous criteria and toxics data, for more and smaller facilities, to effectively address community emissions concerns throughout California.

For the toxics data collected by U.S. EPA, there are similar limitations in the collected federal Toxics Release Inventory (TRI)<sup>13</sup> data which necessitates that CARB establish a separate regulation and requirements to collect emissions data necessary to effectively implement various programmatic mandates. For example, the facility self-reported TRI data is not necessarily reviewed by CARB or the air districts for quality or completeness, as would be done for data collected for the additional facilities required to report under the proposed updated applicability requirements. In addition, TRI focuses on specific larger industry sectors, and does not include smaller sources such as small diesel engines, gas stations, print shops, and paint booths, which are included under the CTR amendments, and can present health risks to nearby

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<sup>13</sup> US EPA. (2017). *Toxic Chemical Release Inventory Reporting (TRI). Section 313 of the Emergency Planning and Community Right-to-Know Act*. Retrieved from [https://ofmpub.epa.gov/apex/guideme\\_ext/guideme\\_ext/r/files/static/v3336/rfi/ry\\_2017\\_rfi.pdf](https://ofmpub.epa.gov/apex/guideme_ext/guideme_ext/r/files/static/v3336/rfi/ry_2017_rfi.pdf). Accessed August 20, 2020.



residents. The TRI data also does not explicitly collect diesel particulate matter as an individual toxic substance, which is of significant concern in impacted communities. Collecting criteria and toxics emissions data from small sources or facilities, which is then reviewed by air districts and CARB for public dissemination, is a critical element needed to understand and reduce the air pollution impacts in disproportionately burdened communities and statewide where warranted. For these reasons, the proposed amendments to CTR are necessary to successfully and fully meet the AB 197 and AB 617 program objectives, as well as many additional program needs, as previously mentioned.

The proposed amendments also do not conflict with any Federal regulations. For facilities that may be subject to partial overlap between the federal and CARB requirements due to the amendments, the impacts would be minimal, because the collected data will generally meet the requirements of both federal and state reporting programs, so duplicative data collection is not required. In addition, for the federal criteria and toxics emissions reporting programs, we anticipate that the proposed CTR amendments may enhance compliance and data quality, because of the requirement for more comprehensive and consistent annual reporting, and the enhanced scrutiny of collected facility criteria and toxics data by CARB, local air district staff, and others.

## **X. PUBLIC PROCESS FOR DEVELOPMENT OF THE PROPOSED ACTION (PRE-REGULATORY INFORMATION)**

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Consistent with Government Code sections 11346, subdivision (b), and 11346.45, subdivision (a), and with the Board's long-standing practice, CARB staff held public workshops and had other meetings with interested persons during the development of the proposed CTR amendments. These informal pre-rulemaking discussions provided staff with useful information that was considered during development of the amendments that are now being proposed for formal public comment.

In this chapter, we provide a brief overview of the regulatory process and actions taken to develop the staff's proposed amendments.

With the initiation of AB 617 in July of 2017, CARB staff began a comprehensive evaluation of facility toxics and criteria air pollutant emissions data necessary to support and improve public health now and into the decades ahead. This resulted in developing the initial Criteria and Toxics Reporting Regulation which addressed only the core AB 617 reporting requirements established in H&SC section 39607.1. This initial framework CTR was adopted by the CARB Board in December 2018, and became effective on January 1, 2020. But, there was significant work ahead to develop complete and consistent statewide reporting requirements that would effectively meet current and future emissions inventory needs.

Therefore, in order to more fully meet the pressing inventory needs, during the 2018 rulemaking process, based on Board direction, CARB staff proposed revisions to the originally proposed December regulation as part of a “15-day” change. The revisions would have significantly increased the number of facilities subject to reporting throughout the state. The “15-day” revisions were developed with substantial industry stakeholder and air district input, including five public workshops. Because of the detailed nature of the revisions, and considering comments received regarding the updates, it was clear that more time would be needed to effectively develop and incorporate the additional applicability provisions. Therefore, inclusion of the additional applicability provisions was set aside for the 2018 rulemaking, and the previous approach, with additional modifications, is now being presented as part of the proposed amendments to the CTR in this 2020 rulemaking.

The background in the prior paragraph was provided to describe some of the previous 2018-2019 groundwork which was completed. This process, and the detailed feedback received, was used to develop the current CTR amendments proposed in this rulemaking. More information regarding the prior 2018 rulemaking, including proposed revisions to the original text and comments received are available at the following link: <https://ww2.arb.ca.gov/rulemaking/2018/proposed-regulation-reporting-criteria-air-pollutants-and-toxic-air-contaminants>.

Knowing that it was a critical priority to include the additional applicability provisions to expand the reporting program, in late 2019 staff began developing the amended regulation. Starting in December 2019, CARB staff initiated coordination with the previously established joint CARB-California Air Pollution Control Officers (CAPCOA) CTR workgroup. The workgroup includes representatives from CARB and local air district emissions staff, to specifically focus on developing and implementing the CTR emissions reporting requirements. The group, which included representatives from large, medium, and rural air districts, held several teleconferences during the regulation’s amendment development process.

During the calls, CARB and district staff discussed both general and very detailed practical elements of the proposed regulation, some of which would impose additional reporting requirements on facilities and would impact the air districts’ current emissions inventory data collection efforts. The air districts were instrumental in developing the proposed amendments, providing both verbal and written comments throughout the process on key issues, to help craft the proposed amendments.

As part of our outreach efforts for the original 2018 rulemaking, CARB staff personally visited each of the 35 California local air districts. We traveled to each district to better understand how emission inventory data is currently collected by the individual local air districts, and to get a sense of how a new reporting regulation may affect district workload and business processes. The visits were extremely valuable, providing a much deeper understanding of the variations between air districts in their methods, their resources, staffing, and the overarching requirements under their purview. For

example, a rural district with few emissions sources and a low population may not have a specific staff person assigned to compiling emissions inventory data on a regular basis and may perform data collection using paper forms. But, a large district with many sources and high population densities, may have groups of staff, specifically focused on collecting, compiling, and checking emissions data, collecting and maintaining the data in electronic data bases and reporting systems. This prior experience helped to inform development of the proposed CTR amendments, to reflect and accommodate differences between air districts.

The public outreach for the regulation development was extensive. Our intention was to provide as much outreach as possible in regions that are most likely to be affected by the proposed regulation.

During February 2020, CARB staff hosted five public workshops in Sacramento, the Bay Area (Oakland), the San Joaquin Valley (Fresno), Los Angeles, and San Diego, focusing on proposed amendments. Prior to each workshop, CARB staff sent letters to over 1,000 facilities potentially subject to the proposed regulation. In addition, we electronically notified over 20,000 individuals or companies of the workshops via CARB email lists. Notices for the workshops were posted to the email lists for: Criteria and Toxics Reporting Regulation, AB2588 Air Toxics Hot Spots, AB32 Public Health Workgroup, Community Air, Environmental Justice Stakeholders Group, GHG Mandatory Emissions Reporting, "Oil and Natural Gas Production, Processing, and Storage," Refineries Sector, Title V Activities, Manure Management, Semiconductors, Automotive Refinishing Suggested Control Measure, AB179, Incentives for Community Air Protection, Bulk Plant Vapor Recovery, Combined Heat and Power Systems, Portable Equipment Registration Program, Landfill Methane Control Measure, Dry Cleaning Program, Chrome Plating ATCM, Stationary Diesel Engine Risk Reduction, Thermal Spraying Materials, Asbestos - Naturally Occurring, Vapor Recovery Program, and Composite Wood Products. Webcasts and video conference options were available for some meetings to enable remote participation.

The purpose of these workshops was to present the amended regulation, with the primary focus on the additional applicability requirements established in section 93401(a)(4) of CTR, as well as in the new Article 2 for Abbreviated Reporting, and Appendix A for the air toxics process categories. Staff discussed the proposed amendments, provided draft regulatory text for review, and facilitated discussion regarding the amendments. Each workshop was attended by about 20 to 40 people. The Sacramento workshop was webcast, with about 200 people watching. The San Joaquin Valley workshop was hosted in Fresno at the air district office, with video conferencing to both Modesto and Bakersfield, to provide access throughout the San Joaquin Valley.

Attendance at the workshops included air district representatives, environmental groups, community groups, affected businesses, industry groups, academics, consultants, government agencies, and others. Following the workshops, we

received 17 “informal” written comments regarding the proposed amendments, which are posted on the CARB program website for the Criteria and Toxics Emissions Reporting Regulation<sup>14</sup>. Staff considered the submitted comments in developing and refining the CTR amendments in the current rulemaking.

In addition to the CAPCOA workgroup calls, and the public workshops, staff has also had ongoing meetings with air districts and stakeholders, to discuss specific elements of the proposed amendments and implementation of the new provisions.

Beyond the public, district, and workgroup meetings mentioned above, staff’s outreach efforts included numerous personal contacts via telephone, electronic mail, regular mail, and individual meetings with interested parties. These contacts included regulated facilities, environmental and community organizations, industry groups, and other entities. Staff considered the informal comments provided during and after the contacts and meetings in crafting the staff proposal.

## **XI. THE SPECIFIC PURPOSE OF EACH ADOPTION AND RATIONALE FOR CARB’S DETERMINATION THAT IT IS REASONABLY NECESSARY**

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CARB’s overall emission inventory programs exist to collect and characterize airborne emissions of criteria pollutants and toxic air contaminants. These data are then used by air districts, CARB, and others to develop mitigation measures, where necessary, to reduce cumulative exposure from criteria pollutants and toxic air contaminants in California’s most impacted communities, and statewide. The provisions of AB 197, AB 2588, AB 617, and the California Clean Air Act identify some of CARB’s specific responsibilities regarding the collection of emission inventory data and making that data available to the public. These statutes, and others, authorize CARB to take action supporting the broader mission of developing community emission reduction programs, and State Implementation Plans to reduce regional air pollution impacts. Inventory data collected by CARB and air districts provides a scientific basis for CARB’s regulatory development process, and allows CARB to identify and address areas of concern, and to track progress in our emissions reduction efforts from stationary sources (i.e., facilities), area sources and mobile sources. This effort seeks to satisfy CARB’s basic statutory obligation to research the causes of, and solutions to, air pollution. (Health & Saf. Code § 39003).

The proposed amendments to the CTR primarily expand the scope of facilities that are subject to the CTR reporting requirements. Other amendments are included to establish or clarify reporting requirements, to implement a phase-in schedule, to identify specific toxics for reporting, and to refine the existing requirements as needed. This section provides a purpose for each individual amendment to the regulation, and the rationale for including the update. The complete amended

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<sup>14</sup> <https://www.arb.ca.gov/ei/ctr/ctr-regulation/ctr-regulation-comments.htm>

regulation text, shown in underline-strikeout formatting, is included in Appendix A of this document.

## **General Updates**

### Purpose of Amending References to “emission data report” to “emissions report”

Throughout CTR, references to submitting an “emissions data report” or other references to the “emissions data report” is amended to refer to “emissions report.”

### Rationale for Amendment

Prior to the proposed amendment, the report submitted under CTR was referred to as either an “emissions data report” or an “emissions report” interchangeably. The regulation is amended to provide consistency in terminology, using one unified term, which is the “emissions report” to refer to reports submitted under CTR. This provides clarity to reporters and also provides a more direct link to the definition within CTR to an “Emissions report” or “report.”

## **Article 1. General Requirements for Criteria and Toxics Reporting**

### **Section 93400. Purpose and Scope**

#### Purpose of Section 93400

Section 93400 is modified to more directly identify that the requirements of the regulation apply to permitted facilities, and specifically, to those facilities permitted by a local air quality management district, air pollution control district, or air resources district. The section is also modified to include two editorial updates for clarity.

#### Rationale for Section 93400

As previously written, the term “permitted facilities” is used, with the assumption that the requirements applied to a facility with air pollution related permits. The revised language provides increased clarity, by directly specifying applicability for facilities with “permits to operate issued by a local air quality management district, air pollution control district, or air resources district.” This avoids confusion and potential misinterpretation associated with other potential “permitted facilities” having permits not directly related to air emissions, such as those for water discharges, waste, or storage tanks. The editorial updates are made to provide clarity, without further changing the meaning or intent of the text.

### **Section 93401. Applicability**

#### Purpose of Section 93401(a)

Section 93401(a)(1) includes three modifications: 1) The section is modified to include a reference to section 93401(a)(4) which expands the CTR applicability provisions; 2) Consistent with the revisions to 93400, text is added to emphasize that the applicability criteria pertain to specified facilities that have been issued a permit to

operate by a local air district; 3) The final two sentences of the section are deleted, because the text is not technically correct for all cases when determining applicability.

#### Rationale for Section 93401(a)

The rationale for the three updates, respectively, are: 1) The revision is necessary to provide a reference to the newly added section 93401(a)(4), which is needed to expand CTR applicability; the rationale for applicability expansion is discussed in that section; 2) The amendment is needed to provide increased clarity that the provisions specifically, and only, apply to facilities located within California that have been issued a permit to operate by an air district; this helps air districts and facility operators better understand the applicability scope of the regulation. For item 3), the original regulation text is unclear and incorrect, specifying that unpermitted processes and devices are not to be included in the applicability determination. For the "GHG Facilities" (93401(a)(1)) and the "Elevated Toxics Facilities" (93401(a)(3)), unpermitted sources would typically be included in the evaluation to determine if the facility is subject to GHG reporting or is an elevated prioritization facility. As previously written, air districts and facility operators would potentially be required to prepare a separate analysis for these facilities, to remove unpermitted emissions to determine applicability, creating additional and unnecessary workload. The revision makes the applicability requirements more direct and less ambiguous, and it aligns with the original intent of the requirements.

#### Purpose of Section 93401(a)(1)

Section 93401(a)(1) is modified to revise, and better specify the time frame used in identifying when a "GHG Facility" triggers the CTR applicability requirements, basing the determination on the data year, and not the beginning of the data year.

#### Rationale for Section 93401(a)(1)

The preexisting text is somewhat ambiguous, and potentially impractical to implement. Therefore, the concept of "GHG Facility" applicability being determined "at the beginning of the data year," is replaced with applicability based upon a facility being subject to GHG reporting under H&SC section 38530 for the data year. Facility operators will know with certainty if they are subject to GHG reporting for a given data year, but at the beginning of a data year, they may not know with certainty if they are subject to GHG reporting, due to complexities of the GHG reporting cessation requirements. Therefore, this update provides greater certainty and clarity for reporters and air districts.

#### Purpose of Section 93401(a)(2)

Section 93401(a)(2) is modified to revise, and better specify the time frame used in identifying when a "Criteria Facility" triggers the CTR applicability requirements, basing the determination on emissions that occur during the data year, and not an analysis at the beginning of the data year.

### Rationale for Section 93401(a)(2)

The previous text and requirement are somewhat unclear and difficult to implement. Therefore, the applicability determination modification is needed to make the applicability determination based on criteria pollutant emissions occurring during the data year, and not at the *beginning* of the year, which makes implementation of the requirements more straightforward for facility operators and air districts.

### Purpose of Section 93401(a)(3)

Section 93401(a)(3) is modified to provide more specific information regarding making a CTR reporting applicability determination for Elevated Toxics Facilities. The section is also amended to indicate that districts may recategorize a facility priority pursuant to the district's policies.

### Rationale for Section 93401(a)(3)

The addition to the section is included based on a workshop comment received, which expressed uncertainty regarding the timing regarding an applicability determination for Elevated Toxics Facilities. The new language is included to allow a facility to no longer be subject to the CTR applicability requirements if, during the data year, or at any time prior to the reporting deadline for the data year, the facility is reprioritized by the district such that it is no longer designated as high priority for toxics. For example, if a facility is designated as high priority on January 1, 2021, at that time it is subject to CTR reporting under section 93401(a)(3) for the 2021 data year. If however, the district reevaluates the facility prioritization score during 2021, or at any time before the reporting deadline for the 2021 data year, and updates the facility designation such that it no longer meets the high priority criteria for the district, then the facility is not subject to reporting 2021 calendar year data in 2022 (unless it meets other CTR applicability criteria, such as for MRR facilities, criteria pollutant emissions, or sectors identified in Table A-3 of the regulation).

Under existing district authority, air districts may recategorize the priority of a facility based on toxic emissions, so the addition is primarily provided to underscore this authority and ability as it applies to implementing CTR. The provision is also included to make clear that facilities are not required to use the same prioritization score indefinitely in determining CTR applicability. Typically, CTR applicability would be reevaluated should a facility prioritization score be updated.

### Purpose of Section 93401(a)(4)

Section 93401(a)(4) is newly added text to expand the applicability requirements of CTR, which is needed to include additional facilities and industry sectors in the emissions inventory. The initial section of 93401(a)(4) identifies the subsections that 93401(a)(4) pertains to (i.e., 93404(a)(4)(A)-(C)). To establish the expanded scope, the new section also specifies that the applicability criteria pertain to air district permitted facilities and identifies which emission sources are to be included in the applicability determination.

Additional overall discussion of the purpose and rationale for the expansion of the CTR applicability requirements, beyond the specific technical elements and language which follows, is provided previously in Section II, of this ISOR, "The Problem that the Proposal is Intended to Address," and Section III, "Benefits Anticipated from the Regulatory Action, Including the Benefits or Goals Provided in the Authorizing Statute." To avoid redundancy, this overall purpose and rationale information is not duplicated in the following sections, but the purpose and rationale for specific elements which are added or amended are provided in the following discussion.

#### Rationale for Section 93401(a)(4)

Section 93401(a)(4) consists of three primary components: 1) The first element is needed to establish the potential universe of facilities subject to CTR to provide clarity for facility operators, districts, and CARB; as specified, applicability includes facilities permitted by air districts that exceed thresholds specified in subsequent subsections; 2) The second element is needed to identify which emissions are to be considered in evaluating applicability, specifically, air district permitted processes and devices, which is needed to provide clarity and enforceability of the provisions; 3) The third element excludes certain sources from the applicability determination, which is needed to avoid making the applicability determination unnecessarily cumbersome or burdensome, which would occur if these sources, with potentially vague, unknown, or irrelevant emissions, were to be included in the applicability determination.

#### Purpose of Section 93401(a)(4)(A)

Section 93401(a)(4)(A) is added to establish a new CTR applicability threshold of 4 tons per year (tpy) or more of any criteria pollutant emissions (except carbon monoxide) for facilities. The provision also allows local air districts to use the facility's authorized, or permitted, potential to emit to determine applicability to the 4 tpy threshold.

#### Rationale for Section 93401(a)(4)(A)

Generically, the new requirement is needed to include more facilities under the CTR reporting requirements. As mentioned previously, the overarching needs are discussed in sections II and III of this ISOR. CARB staff evaluated reporting thresholds for criteria pollutants that are set forth by air districts across the state. Many districts have established 5 tpy as an emissions threshold for criteria pollutants, above which a facility would be required to obtain a district-issued permit to operate. Specifically, the 4 tpy reporting threshold selected for CTR aligns with the South Coast Air Quality Management District's (SCAQMD) criteria pollutant permit threshold for stationary sources. In terms of facilities within the state, the SCAQMD has the most permitted sources (substantially more than other districts) and is the district that is most impacted by air pollution, which is part of the rationale for choosing 4 tpy.

Because many other districts have a 5 tpy permitting threshold, and the CTR applicability criteria apply only to permitted facilities, evaluating a 4 tpy threshold for CTR implementation (for permitted facilities) would not be a substantial difference or workload variation for such districts, when compared to a higher threshold. The implementation of a 4 tpy threshold increases statewide equity in reporting across



regions, industry sectors and sources, in which the focus is not only on the very largest or most toxic facilities.

Collecting more accurate and disaggregated facility-based criteria pollutant emissions data from stationary sources will aid in the evaluation of the relative contribution of these facilities to impaired ambient air quality. This will also allow the comparison of criteria pollutant emissions from stationary sources relative to one another, and relative to mobile sources and natural sources, when evaluating actions that may be needed to address the nonattainment of ambient air quality standards in regions across the state. This amendment essentially revises the threshold from 250 tpy for criteria pollutants (as currently specified in 93401(a)(2)) to 4 tpy, and effectively expands the CTR scope to provide the comprehensive data reporting necessary to support CARB, district, and community priorities in reducing exposure to harmful air pollutants.

The provision to allow air districts to use a facility's permitted potential to emit is provided to allow air districts flexibility in determining applicability. This flexibility is provided to reduce resources for both air districts and facility operators. Should a district choose to use potential to emit in determining applicability, neither the facility nor the district would be required to compute emissions levels. This is useful in situations in which a facility permit level is below the 4 tpy threshold, which would allow for a simple determination that the facility does not meet the applicability threshold and is not subject to reporting. This is because legally, the facility is not allowed to emit more than 4 tpy of emissions, so it cannot exceed the applicability 4 tpy threshold without being in violation of permitting requirements. However, if a facility potential to emit is greater than the 4 tpy threshold, then an analysis of actual emissions is required to determine if the facility exceeds the threshold.

#### Purpose of Section 93401(a)(4)(B)

Section 93401(a)(4)(B) is added to establish a new CTR applicability threshold of 100 tons per year of more of carbon monoxide (CO) for facilities permitted by air districts. The provision also allows local air districts to use the facility's authorized or permitted potential to emit to determine applicability to the 100 tpy threshold.

#### Rationale for Section 93401(a)(4)(B)

Carbon monoxide emissions from permitted stationary sources have minimal local, regional, and global impacts, and carbon monoxide is not a significant pollutant of concern in California. In fact, there are no California or Federal non-attainment regions in California for ambient concentrations of carbon monoxide. However, because CO is designated as a criteria pollutant, it is still necessary to include a threshold in the regulation, to include all criteria pollutants. Because combustion-related CO (the most significant human-caused CO source) is emitted at substantially higher rates than for other combustion products, such as oxides of nitrogen and volatile organic compounds (VOCs), the threshold is therefore higher to reflect this difference. This threshold prevents very small sources, including those that emit less than 100 tpy of CO, from being inadvertently brought into the CTR reporting program. The

rationale for including the option for air districts to use the potential to emit in determining applicability identical to that provided above for the 4 tpy applicability.

#### Purpose of Section 93401(a)(4)(C)

Section 93401(a)(4)(C) is added to include reporting applicability for permitted processes at facilities that are known to emit airborne toxic air contaminants to the atmosphere. The new section refers to Table A-3 in Appendix A of the regulation, which identifies the specific processes and reporting thresholds added to the applicability requirements. Refer to the Summary and Rationale for Table A-3 for additional information regarding the inclusion of each sector. This new section also provides the descriptive information needed to explain how SIC and NAICS codes are relevant in determining CTR applicability for the Table A-3 toxics process sectors.

#### Rationale for Section 93401(a)(4)(C)

The prior applicability categories, based on GHG reporting, criteria pollutants, and elevated toxics as determined by air districts, are not comprehensive or health protective enough to meet air district, CARB, and community health protection needs. The additional data from sources specified under 93401(a)(4)(C) is necessary to identify, analyze, and evaluate potentially significant air pollution sources in impacted communities and other locations. Therefore, the provisions of the new section are added to include, in a focused and discriminating manner, those permitted processes and associated toxic emissions of greatest concern, and which must be reported by facility operators engaged in those processes.

#### Purpose of Sections 93401(b)

The heading of section 93401(b) is updated to include the word "Facility."

#### Rationale for Section 93401(b)

The exclusions in section 93401(b) only apply to determining whether a facility is subject to the reporting requirements of the regulation, so updating the heading of the section to "Facility Exclusions" provides additional clarity regarding the scope of the exclusions.

#### Purpose of Section 93401(b)(2)

The previous 93401(b)(2) is modified to specify that facilities in the sections 93401(b)(2)(A), (B), or (C) are excluded from reporting and the associated emissions are to be excluded from the facility applicability determinations.

#### Rationale for Section 93401(b)(2)

Because the excluded sources listed are not subject to reporting, it would be illogical (and often impractical) to include emissions associated with the sources within the

applicability determination. Although this could be inferred from the prior text, the amendment is provided to remove ambiguity.

#### Purpose of Section 93401(b)(2)(A)

The text of this section is modified to relocate text which states that the source is excluded, which is moved to the preceding section 93401(b)(2), as well as minor grammatical revisions.

#### Rationale for Section 93401(b)(2)(A)

The modification is provided because the text stating the exclusion was moved to the new 93401(b)(2) to reduce repetitiveness in the text. The other grammatical edits are to improve readability.

#### Purpose of Section 93401(b)(2)(B)

The section is modified to clarify that the emissions sources described in the section are not included in the CTR applicability determination and to clarify that the sources described pertain to all "open" burning.

#### Rationale for Section 93401(b)(2)(B)

The introductory exclusion text was relocated to the new 93401(b)(2) to reduce repetitiveness in the text. The modifications also now directly specify that the exclusion for agricultural wastes or agricultural residues applies to "open burning" of these materials. This is necessary, because otherwise the exclusion could potentially be applied to the burning of agricultural wastes in sources such as biomass cogeneration facilities, which is not the intent of the exclusion. In addition, it is necessary to remove the stipulation that the burning be "subject to burn permitting by a local air district." Without the change, the exclusion would only apply to permitted burning, but unpermitted burning would be reportable under CTR. It is not logical, or consistent with staff intent to provide an exemption from permitted burning, regulated by the air district, and not also unpermitted burning, therefore the text is deleted.

#### Purpose of Section 93401(b)(2)(C)

The text of this section is modified to relocate text which states that the source is excluded, which is moved to the preceding section 93401(b)(2).

#### Rationale for Section 93401(b)(2)(C)

The modification is provided because the text stating the exclusion was moved to the new 93401(b)(2) to reduce repetitiveness in the text. The other grammatical edits are to improve readability.

#### Purpose of Section 93401(c)

The section is modified so the cessation of reporting provisions in section 93401(c) also apply to the newly added "additional applicability" facilities included under section 93401(a)(4).

#### Rationale for Section 93401(c)

All facilities subject to CTR must have a mechanism to cease reporting if they no longer meet any CTR applicability requirements. This provides a pathway, and potentially an incentive for facilities to reduce their emissions below applicability thresholds. With the inclusion of the additional applicability categories added in section 93401(a)(4), it is necessary to add a reference to these sources under 93401(c) to provide them with a cessation mechanism consistent with other facilities.

#### Purpose of Section 93401(c)(1)

The section is modified to provide additional detail, regarding what types of information must be submitted to document that the cessation requirements have been met, as well as how it is to be submitted, and a grammatical update. The section is also modified to indicate that facilities must notify both CARB and the local air district when the facilities intend to cease reporting.

#### Rationale for Section 93401(c)(1)

The amended text provides specificity regarding the information that must be provided to CARB and the local air district when providing a cessation notification. By including examples of the information to be provided, such as cancelled permits to operate, we provide additional clarity to reporters to help ensure their success in meeting their requirements, and provide CARB and districts a framework for evaluating cessation requests. We have also provided specific instructions on how the notification is to be submitted (via writing or email), also to reduce ambiguity, and a small edit to improve readability. A section reference is also updated to correspond to additional changes within the document.

#### Purpose of Section 93401(c)(2)

The section provides grammatical updates.

#### Rationale for Section 93401(c)(2)

The amended text provides small edits to improve readability and consistency.

#### Purpose of Section 93401(c)(3)

The section provides a minor edit.

#### Rationale for Section 93401(c)(3)

The amended text provides consistency with other proposed updates to Section 93401(a).

#### Purpose of Section 93401(d)

The new section 93401(d) is added to allow the CARB Executive Officer or the Air Pollution Control Officer of a local air district to request information from facility owners or operators needed to evaluate whether a facility meets applicability provisions. The section also provides the general criteria used to determine when such data requests are made, and the timing for submitting such data.

### Rationale for Section 93401(d)

The inclusion of this section is necessary to provide CARB and air districts the authority to collect data from facilities to ascertain if they may be subject to CTR. This authority is necessary because otherwise, without facility data, the regulatory agencies would either need to rely on non-facility data, or use other mechanisms for obtaining the facility data, hampering the ability of the agencies to ensure compliance when identifying applicability. In order to avoid open-ended discretion in requesting facility data, the section includes the requirement for CARB or districts to consider available data prior to making requests; available data may provide a basis for a facility to be potentially subject to CTR. Finally, the section requires that a facility submit required data within 30 days of receipt of a request. This 30-day timing is established to provide timely data submission, to allow determination of CTR applicability and potentially implementation of reporting requirements. A longer time period, such as 60 days, is considered to be unnecessary because in usual real-world cases, preliminary contact will be made with facility operators well in advance of a formal data request. Therefore, facility owners and operators will typically know of CARB's or the district's interest in collecting additional information, and the information needed, prior to a formal request, providing sufficient time to collect and provide the data within the established 30-day window. However, in cases where necessary, due to the complexity of data to be provided, the lack of facility resources needed to compile the data within 30 days, difficulties in accessing needed data, or other potential reasons, provisions are included to allow CARB or the district to grant a 30-day extension in submitting the needed data.

### **Section 93402. Definitions**

#### Purpose of Definition "Activity level data acquisition method"

The definition of "Activity level data acquisition method" has been added, because a new requirement is added to CTR to report the information, so the definition describes what is reported.

#### Rationale for Definition

The new definition is added to assist reporters subject to CTR to comply with the requirements. The requirement to report the "activity level data acquisition method" is newly added under the proposed amendments. The definition provides description of what is to be reported, as well as some examples of the types of information that fall under the acquisition method term.

#### Purpose of Definition "Actual emissions" or "actual air emissions"

The definition is modified to provide a grammatical update.

#### Rationale for Section 93401(c)(2)

The amended text provides a small edit to correct a grammatical error.

#### Purpose of Definition “Air District Group” or “District Group”

The definition of “Air District Group” or “District Group” is added to support the reporting schedule affecting new sources subject to reporting under the applicability criteria included in 93401(a)(4). The definition pertains to the district groups established in Table A-2 and used in Table A-1 of the regulation, which are used to phase-in the reporting requirements for sources subject to the updated applicability requirements.

#### Rationale for Definition

The definition is provided to establish the terminology needed to describe distinct groups of air districts. The specific members of the air district groups are identified in Table A-2 of the regulation. It is necessary to create the groups to provide a mechanism to phase-in the reporting requirements over time to reduce facility and air district resource impacts, and to provide preparation time for those affected by the regulation. Information regarding why districts were assigned to certain groups is provided in the Purpose and Rationale for Table A-2.

#### Purpose of Definition “Air Pollution Control Officer”

The definition of “Air Pollution Control Officer” is added to establish what is meant by the term Air Pollution Control Officer, as it is used in CTR.

#### Rationale for Definition

The new definition is added to CTR because the term “Air Pollution Control Officer” is used within the regulation multiple times so the definition provides additional clarity in applying and understanding the regulation and its requirements.

#### Purpose of Definition “Construction aggregate processing”

The definition for “Construction aggregate processing” is added to CTR because it is referenced in the new Table A-3, which identifies additional sources subject to reporting per section 93401(a)(4).

#### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the processes described as “construction aggregate processing.” The definition establishes the scope of activities included under the activity, and without the definition, the types of activities within the category that trigger reporting would be ambiguous.

#### Purpose of Definition “Device”

The definition is modified to provide a grammatical error.

#### Rationale for Section 93401(c)(2)

The unmodified definition limited “Device” to mean it only had “one” process associated with it. In reality, a device may have one or more processes associated with it, so the text is amended to reflect this.

#### Purpose of Definition "Direct-drive emergency standby fire pump engines"

The definition for "Direct-drive emergency standby fire pump engines" is added to CTR because it is referenced in the new Table A-3, which identifies additional sources subject to reporting per section 93401(a)(4).

#### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the processes described as "direct-drive emergency standby fire pump engines." The definition establishes the scope of activities included under the activity, and without the definition, the types of activities within the category that trigger reporting would be ambiguous.

#### Purpose of Definition "Emergency standby engine"

The definition for "Emergency standby engine" is added to CTR because it is referenced in the new Table A-3, which identifies additional sources subject to reporting per section 93401(a)(4).

#### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the processes described as "Emergency standby engine." The definition establishes the scope of activities included under the term, and without the definition, the types of activities within the category that trigger reporting would be ambiguous. The CTR definition references the definition of "emergency standby engine" as established under title 17, CCR, section 93115, to maintain uniformity among CARB definitions, and to provide reporters consistency between programs.

#### Purpose of Definition "Emissions report" or "report"

The definition for "Emissions report" or "report" is modified to remove obsolete terminology, and to expand the definition.

#### Rationale for Definition

The prior wording of the definition could have potentially been interpreted such that an "Emissions report" would only include emissions data, whereas in reality, a compliant emissions report submitted under CTR must include data as specified under the regulation, such as the facility name, location, the processes in operation, and other information. For this reason, the definition is modified to reflect that a report includes data "pertinent to" emissions that occurred at a facility. Also, a global update was made to the regulation to standardize terminology, such that a report submitted under CTR is identified as an "emissions report" removing the term sometimes used of an "emissions data report," therefore the definition was modified to reflect this update.

#### Purpose of Definition "Emittent ID"

The definition for "Emittent ID" is modified to clarify that the term refers specifically to identification numbers that are assigned to specific substances, and also to include

reference to additional substances with additional assigned Emittent ID numbers that are added to the article in Appendix B, Table B-1.

#### Rationale for Definition

The prior wording of the definition was slightly ambiguous regarding the fact that the term applies specifically to a unique number assigned to a unique substance; the revised definition wording clarifies that ambiguity. Additionally, the definition is modified to include new substances and new assigned numbers (i.e. new Emittent ID numbers) that are added to the article; without this clarification, the definition would only apply to the list of substances and Emittent ID numbers that were previously referenced in the definition.

#### Purpose of Update for Definition "Facility"

The definition for "Facility" is modified to include a reference to the Standard Industrial Classification code that is assigned to specific stationary physical equipment, structures, etc. that may be distinguished from additional structures and equipment located on the same contiguous or adjacent properties that are assigned a different SIC code, and may be considered a separate facility based on the differences in industrial activities

#### Rationale for Definition

The definition is modified to account for situations where equipment that is under common ownership or common control, and located on contiguous or adjacent properties, may be considered a separate facility based on differences in the industrial activities that occur between the two sets of equipment operations. This distinction is consistent with U.S. EPA facility definitions.

#### Purpose of Update for Definition for "Fugitive emissions"

The definition for "Fugitive Emissions" is modified to refer to emissions that cannot reasonably "be expected to" pass through a stack or similar opening, to clarify that some emissions that do pass through such an opening could still be indirect or unintended, and still be considered "fugitive" emissions.

#### Rationale for Definition

The modification was made in response to informal comments from stakeholders that indicated that some emissions from leaks, dust, or other sources within an operation could be indirect and poorly characterized, yet still pass through a ventilation system or stack to the atmosphere. Therefore, the additional wording was added to the definition to prevent such emissions from being potentially excluded from the fugitive emissions category.

#### Purpose of Update for Definition for "Geospatial coordinates"

The definition for "Geospatial coordinates" is modified to reduce ambiguity by removing the definition of geospatial coordinates for fugitive or non-ducted sources.



### Rationale for Revision

As previously defined, "Geospatial coordinates" included a sub-definition for geospatial coordinates associated with emissions from fugitive or non-ducted sources. This sub-definition definition (and the underlying requirement) to identify and report the location for these emissions is vague. As included, it would have been difficult for reporters to comply with the requirement, and to determine if they had sufficiently met the requirement to report the location of these emissions. Therefore, the sub-definition is removed, which also removes the associated requirement to report the estimated location of the fugitive or non-ducted emissions.

### Purpose of Definition "Hazardous waste treatment, storage, disposal and recycling facility"

The definition for "Hazardous waste treatment, storage, disposal and recycling facility" is added to CTR because it is referenced in the new Table A-3, which identifies additional sources subject to reporting per section 93401(a)(4).

### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the processes described as a "hazardous waste treatment, storage, disposal and recycling facility." The definition establishes the scope of activities included under the term, and without the definition, the types of activities within the category that trigger reporting would be ambiguous. To maintain uniformity with other regulatory programs and to assist reporters, the definition references the previously established definition for "hazardous waste facility." For the purposes of CTR, certain activities included in the preexisting CCR definition are excluded from the facility category; these are "transfer stations that do not pump or package hazardous waste" and "storage facilities that store only containerized waste." These categories are excluded because they are not expected to be meaningful sources of toxic air contaminants, which is the rationale for including the larger waste category as defined.

### Purpose of Definition "Local air district"

The definition of "Local air district" is added primarily because the term is used throughout the regulation, and a definition indicates what is meant by the term.

### Rationale for Definition

The term "Local air district" is defined to establish that, as used in CTR, "local air district" applies to the air district that has jurisdiction over a facility subject to reporting under CTR. Or, in other words, for the purposes of implementing CTR, local air districts only have authority over those facilities located within their air district.

### Purpose of Definition "Maximum Rated Horsepower (brake horsepower (bhp))"

The definition of "Maximum Rated Horsepower (brake horsepower (bhp))" is added, because the term is used in the regulation to describe and differentiate size and power differences between internal combustion engines that may be subject to specific CTR requirements.

### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the term described as “Maximum Rated Horsepower (brake horsepower (bhp)).” The definition is used to describe the size and power of internal combustion engines, and without the definition, the characterization of engines using the term would be ambiguous.

### Purpose of Definition “Permit” or “Air District Permit”

The definition of “Permit” or “Air District Permit” is modified to clarify language that pertains to permits, establishing that other district-issued documents that require emissions reporting may be classified as “Permits” or “Air District Permits” in implementing CTR.

### Rationale for Definition

The preexisting definition for “Permit” or “Air District Permit” previously included air district permits to construct. CTR is established to require the reporting of ongoing and typical annual emissions from operational facilities. CTR is not intended to include the temporary or transient emissions associated with construction-related emissions, therefore air district permits related to construction are removed from the primary definition. In addition, construction permits may be issued for sources (such as a large office building) that when completed may not be subject to CTR. The inclusion of construction permits could create a temporary CTR source for the “construction facility,” which would then no longer be subject to reporting following completion of the project, creating potential confusion. However, because some air districts require facilities to collect and report emissions under an “authority to construct” or a similar temporary permit related to construction or installation of devices or other equipment, additional language was added to the definition to establish that such documents may be considered “permits” under CTR.

### Purpose of Definition “Permit or rule emissions limit”

The definition of “Permit or rule emissions limit” is modified to include “activity limit(s)” in the definition, and to clarify ambiguous wording.

### Rationale for Definition

The definition is modified because permitted limits may apply to actual emissions to the atmosphere, as previously written, but permit limits may also be based on activity limits, such as gallons of fuel dispensed. The update reflects this reality in permitting activities. The definition is also modified to clarify that limits may be established in “permits” as well as in rules, and to correct an incorrect term (“emissions limit” is corrected to “emitting activity” in the last portion of the definition).

### Purpose of Definition “Physical address”

The definition of “Physical address” is modified to remove potentially confusing wording.

### Rationale for Definition

Based on air district comments received, it was apparent that the wording related to “with respect to a United States parent company” was both confusing and unnecessary. This is because any facility subject to reporting is by default physically located within the United States, so that doesn’t need to be stated and the text is deleted. The second revision is made to more clearly state that the physical address pertains to the address of an actual facility, versus a corporate address which may be distinct from the physical facility producing emissions.

### Purpose of Definition “Process”

The definition of “Process” is modified to clarify that each process, for the purposes of CTR, is associated with a specific device.

### Rationale for Definition

The definition of “Process” was modified for clarity. The additional text is added to make clear that, under the reporting requirements, each process is to be associated with a specific device.

### Purpose of Definition “Process Description”

The definition of “Process description” is added to provide clarity regarding the requirement under CTR to report “process description” data under section 93404.

### Rationale for Definition

The definition of “Process description” was added for clarity, so that the level of detail needed to comply with this reporting requirement was not ambiguous. Without the definition, the level of detail required for reporting this data would not be clear to reporters.

### Purpose of Update to Definition for “Reactive organic gas” or “ROG”

The definition for “Reactive organic gas” or “ROG” is amended to allow a district to use a district-specific definition of ROG to quantify ROG reported under CTR.

### Rationale for Definition

Air districts may have different definitions for ROG than the definition specified under CTR. Typically, the differences between the CTR definition and local district definitions are inconsequential in terms of the actual emissions included or reported. Therefore, to avoid the additional and unproductive workload of requiring districts to strictly conform to the CTR ROG definition, for no relevant benefit, the amended definition allows air districts to use their own definitions of ROG.

### Purpose of Update to Definition for “Release location type”

The definition for “Release location type” is modified to use terminology that is consistent with other existing reporting programs.

### Rationale for Definition

The proposed amendment is included to reduce potential confusion, by using release point descriptive terminology that is consistent with other air district and CARB emission reporting programs. Specifically, using the terms point source and volume source, to indicate sources such as stacks or fugitive leaks, respectively.

### Purpose of Update to Definition for "Release point"

The definition for "Release point" is modified to change the name of the definition from "Release point" to "Release point physical configuration."

### Rationale for Definition

This change is based on an air district comment received and is included to more clearly identify the information to be reported specified under section 93404. The previous label of "Release point" was ambiguous and could potentially refer to the *location* of the release point, rather than the *configuration* of a release point, as is specified in the text of the definition. The qualifier of "unknown" is also added to the definition to provide consistency with existing reporting practices.

### Purpose of Definition "Sector Phase"

The definition of "Sector Phase" is added to support the reporting schedule affecting new sources subject to reporting under the new applicability criteria included in 93401(a)(4). The definition pertains to the permitted processes listed in Table A-3 and is used to establish three groups of permitted processes, which are used to phase-in the reporting requirements over a period of time for sources subject to the updated applicability requirements.

### Rationale for Definition

The definition is provided to establish the terminology needed to label distinct groups of permitted processes in the new Table A-3 of the regulation. The Sector Phases are provided to introduce the additional new sectors and processes into the CTR reporting requirements over time, to help even out workload for air districts, reporters, and CARB. The Sector Phase in Table A-3 is used in conjunction with the information in Tables A-1 (Initial Data Year) and A-2 (District Group) to determine when a facility engaging in a specific permitted process in Table A-3 initially becomes subject to reporting under CTR.

### Purpose of Update to Definition for "Toxic air contaminant"

The definition of "Toxic air contaminant" is modified to include the additional substances listed in the new proposed Table B-1 in Appendix B of CTR.

### Rationale for Definition

Under the existing regulation, reporting is only required for the 2007 Hot Spots list of toxic substances, as identified in the current definition. In order to be more health protective and to require reporting of additional toxics which are of significant concern and potential risk, the Table B-1 list of substances is added to CTR. Refer to

the Purpose and Rationale for Table B-1 for additional information regarding the addition of the table and substances.

#### Purpose of Update to Definition for "Unit Type Code"

The definition for "Unit Type Code" is modified to provide a reference the newly added Appendix B to this staff report, which includes a listing of the Unit Type Codes. Examples of Unit Type Codes are also added to the definition.

#### Rationale for Definition

The previous definition provided information on where listed Unit Type Codes could be located. However, it is difficult to locate the codes using the provided reference to the U.S. EPA Data Element Registry Services (DERS) system. Therefore, to assist reporters, the codes have been added as Appendix B to this staff report, and incorporated by reference within the regulation, to make the codes easy to locate and to ensure consistent reporting. Also, examples for Unit Type Codes are added to help those subject to CTR better understand the definition and underlying data, which will aid them in complying with the requirement to report the codes

#### Purpose of Definition "Wastewater treatment plant"

The definition for "Wastewater treatment plant" is added to CTR because it is referenced in the new Table A-3, which identifies additional sources subject to reporting per section 93401(a)(4). The definition also provides a description of covered systems wastewater treatment plants, and an exclusion for "onsite sewage treatment systems."

#### Rationale for Definition

It is necessary to add the definition to provide certainty regarding what is meant by the permitted processes described as a "wastewater treatment plant." The definition establishes the scope of activities included under the activity, and without the definition, the types of activities within the category that trigger reporting would be ambiguous. To maintain uniformity with other regulatory programs and to assist reporters, the definition references previously established definitions for wastewater treatment plants. Because Table 3 of the regulation establishes different reporting thresholds for uncovered wastewater treatment systems versus covered treatment systems, a description of covered systems is included in the definition, so reporters can make the distinction between the two processes. Finally, it is necessary to include an exclusion for "onsite sewage treatment systems," because such sources tend to be small and irrelevant emission sources, so are not appropriate sources to include when determining CTR reporting applicability. However, if such onsite treatment occurs as part of the operations at a facility that meets other applicability criteria, those emissions would be reportable as part of the overall facility data report, if the process was permitted by a district, or if the district elects to quantify the process emissions on behalf of the facility.

### **Section 93403. Emission Reporting Requirements**

#### Purpose of Section 93403(a)

The words “annual” and “data” are deleted.

Rationale for Section 93403(a)

For uniformity in referring to emissions reports throughout the regulation, instead of referring to “annual emissions data reports” the term is updated to “emissions report.” The change is nonsubstantive.

Purpose of Section 93403(a)(1)

The heading of the section is modified to clarify that the requirements pertain to Reporting Using District “Program and” Methods. Also, the prior description regarding data that must be submitted under the requirements for the section was revised to provide more specificity as it pertains to the local air district’s requirements.

Rationale for Section 93403(a)(1)

The first change is a simple addition to the heading of the section, to more clearly state that we are referring to the overall air district reporting “Program and” Methods, rather than just Methods. This change provides a more accurate depiction of the district reporting process. The second modification was needed to be more specific in identifying the data that must be reported. This was partially necessary because the prior language related to the emissions “that have most recently been reported” was difficult to interpret and created uncertainty regarding the requirements during years in which data was not submitted to the district. The revised language instead refers to the “districts’ existing emissions reporting program” referring to the air district requirements, and removes the uncertainties related to the “most recently” reported data.

Purpose of Section 93403(a)(1)(A)

Delete “year” from the section.

Rationale for Section 93403(a)(1)(A)

The edit is included to remove the unnecessary word, “year” to streamline the text.

Purpose of Section 93403(a)(1)(A)1.

The section is revised to correct a typographical error in the reference to section 93401(a)(3), and to more fully describe the data to be considered.

Rationale for Section 93403(a)(1)(A)1.

The reference to section 93404(a)(3) was updated to 93401(a)(3), because the prior reference was incorrect. The other minor section amendments are included to more explicitly describe what data are to be considered in evaluating applicability, referring to the “data submission in 2020” and based on “air district permitted” emissions, versus, for example, emissions data provided to CARB, or U.S EPA emissions.

Purpose of Section 93403(a)(1)(B)

The section is amended in order to restrict the delay in reporting to only facilities subject to 93401(a)(3), and no other applicability categories. Also, minor edits are included for document style consistency in referring to submitted data.

#### Rationale for Section 93403(a)(1)(B)

As previously written, the option to delay reporting for certain sources could have been interpreted in a way which was overly expansive. It would have allowed GHG and Criteria source categories to delay reporting, as long as they were also in the Elevated Toxics Facilities category. The original intent is to provide the delay only for Toxics Facilities that do not meet additional applicability criteria, therefore “only” was added to the text. The other revisions are to standardize how we refer to the reporting year for data, by removing the word “year.”

#### Purpose of Section 93403(a)(2)

The section is modified to indicate that reports include both “General Contents” (Facility Data) and “Full Report Contents.”

#### Rationale for Section 93403(a)(2)

With the further development of the abbreviated reporting requirements under the proposed amendments, there is now a delineation between “General Contents” data reported by all facilities, and “Full Report Contents” which is only reported by some reporters. This amendment reflects that change and is provided to help reporters identify the reporting requirements.

#### Purpose of Section 93403(a)(2)(A)

This section and the requirements it includes were previously located in section 93403(d) of CTR. It is relocated to this section, and the reporting year for which the delay in reporting release location data is allowed is clarified.

#### Rationale for Section 93403(a)(2)(A)

The existing provisions for release location data reporting timing are relocated to this section for improved logical organization, and to assist reporters in identifying the option to defer reporting of the release location data. There was no change to the preexisting requirements. The year in which the release location data described in this section was clarified to make the requirement less ambiguous.

#### Purpose of Section 93403(b): Overview of Section Amendments

The previous text of 93403(b) related to Abbreviated Reporting is modified and relocated to the new Article 2 of CTR. The section is replaced with new and modified text describing the reporting phase-in schedule for “Additional Applicability Facilities,” as described in the following sections.

#### Rationale for Section 93403(b): Overview of Section Amendments

With the significant modifications to the Abbreviated Reporting requirements, and potential future revisions, it made sense to separate the requirements into a separate article of the regulation, for ease of use and for clearer organization. Discussion of the actual Abbreviated Reporting requirements are provided in the Purpose & Rationale for Article 2 of this document.

#### Purpose of Section 93403(b)

The new section 93404(b) is added to establish the reporting schedule for Additional Applicability facilities, including that the requirements only apply to facilities that fall into the Additional Applicability requirements, and not to facilities in other applicability categories.

#### Rationale for Section 93403(b)

With the inclusion of additional applicability categories in section 93401(a)(4), it was necessary to include the phase-in schedule for when the identified sources are subject to submitting reports. Within the introduction to the schedule in this section, we specify that this reporting schedule applies to facilities that meet only the Additional Applicability criteria. Facilities that meet any other applicability criteria, such as for a GHG, Criteria, or Elevated Toxics Facility, may not report under these requirements. This is necessary to make it clear that facilities only fall under one reporting schedule, and reporters are not allowed to choose a phase in schedule if they meet more than one applicability criteria.

#### Purpose of Section 93403(b)(1)

This section is added to specify how to determine the initial reporting year for Additional Applicability facilities. Under the amendments, reporting is subdivided to include an "Initial" year, and an "Annual Emissions Reporting" year, after which ongoing annual reporting is required.

#### Rationale for Section 93403(b)(1)

The section is necessary so that reporters subject to the Additional Applicability requirements know when to submit their initial data report under CTR and refers them to Table A-1 of CTR, which includes the specific data years in which reporting must be initiated. In order to help reduce workload and provide air districts time to develop needed reporting systems and processes, facilities must report data for an initial reporting year, but then are not subject to ongoing annual reporting until the year specified in the following section. More information about the reporting schedule and rationale is provided in the Purpose & Rationale section for Table A-1 of this document.

#### Purpose of Section 93403(b)(2)

Section 93403(b)(2) is added to specify when facilities meeting the Additional Applicability criteria are required to submit emissions reports on an annual basis.

#### Rationale for Section 93403(b)(2)

Reporting for Additional Applicability facilities is phased-in such that they report an initial year of data, but then are not subject to reporting again until the year specified in this section. This is to flatten the number additional facilities that are newly added to the CTR reporting program each year, to help balance workload and minimize escalations in resource needs. Therefore, some sources depending on the Sector Phase they fall into, may have several years "off" from reporting following their initial



data submission, before ongoing annual emissions reporting is required. This is best understood by referring to Table A-1 of the proposed CTR amendments.

#### Purpose of Section 93403(b)(3)

The new section is added to establish the contents of emissions reports for facilities subject to the proposed Additional Applicability Facility applicability criteria and introduces the concept of *Full Report Contents* and *Abbreviated Report Contents*.

#### Rationale for Section 93403(b)(3)

With the addition of the new proposed Additional Applicability provisions to CTR, it is also necessary to establish the reporting requirements for these facilities. This section is necessary to describe, at a high level, what must be reported for these sources, and where to find the complete reporting requirements within the regulation.

#### Purpose of Section 93403(b)(3)(A)

This new section is added to describe when release location data must be reported for Additional Applicability Facilities.

#### Rationale for Section 93403(b)(3)(A)

As with other sources subject to CTR, these facilities are also provided a delay in reporting release location data. This delay is necessary to allow enough time to collect the additional data, and to help reduce the workload on facilities and districts during the initial years of program implementation.

#### Purpose of Section 93403(b)(3)(A)1.

New section 93403(b)(3)(A)1. is added to provide air districts flexibility in determining when release location data must be submitted under CTR for Additional Applicability Facilities.

#### Rationale for Section 93403(b)(3)(A)1.

This section is primarily included to address comments from air districts regarding the need to balance workloads in implementing CTR and other inventory programs, and to allow prioritization of release location data collection to initially focus on the sources of highest local concern. Alternatives to the default CTR reporting schedule must be approved by CARB to ensure that consistent and complete release data are collected. The section also describes the overall criteria CARB is to consider in evaluating requests for alternative schedules, to provide a level of certainty to districts and facilities regarding the information evaluated in approving requests for alternative schedules.

#### Purpose of Section 93403(b)(4)

This section is added to describe that once a facility is subject to reporting under the Additional Applicability requirements, all reportable sources at the facility are subject to emissions reporting, not just the emissions sources that triggered the applicability provisions (with the exception of those facilities subject to abbreviated reporting).

#### Rationale for Section 93403(b)(4)

For a facility subject to the Additional Applicability provisions, it could potentially be unclear if a facility is required to submit emissions data only pertinent to those sources that triggered applicability, or for the entire facility. Therefore, the section is included to remove any ambiguity, by stating that all reportable sources at a facility must be reported once applicability is triggered. Reportable sources are as established in section 93404. An exception is provided for “abbreviated reports” in which case only the sources that triggered applicability are reportable. This is provided to streamline the reporting for these sources, to minimize workload, and because the abbreviated reporting facility sectors typically do not have other significant emissions sources on-site.

#### Purpose of Section 93403(b)(5)

This proposed new section is included to provide a consistent reporting schedule for agricultural operation facilities that would become subject to CTR under the new proposed Additional Applicability provisions.

#### Rationale for Section 93403(b)(5)

Under the new Additional Applicability provisions, “agricultural operation” facilities may become subject to reporting based on the 4 tpy threshold, or by meeting the sector-specific requirements provided in Table A-3 of CTR. Under this situation, an agricultural operation facility, which may include multiple emission sources, may trigger different reporting requirements at different times, creating uncertainty about when to report. To prevent this potential conflict, 93403(b)(5) provides a uniform time to initiate reporting for the agricultural operation facilities, as described in the section.

#### Purpose of Section 93403(c)

This section is modified to make the text consistent with other revisions to the regulation regarding submittal of emissions reports.

#### Rationale for Section 93403(c)

Modifications were made to this section to ensure that the text reflects other changes in the regulation text regarding the timing of and process for the submission of emissions reports.

#### Purpose of Section 93403(c)(1)

Changes to the section are included to: (1) relocate the preexisting district-to CARB August 1 submittal date to this section, (2) provide air districts additional flexibility regarding when facilities must submit emission reports to their local air district, and (3) establish that reports must be submitted in a format determined by the local air district, replacing previous text.

#### Rationale for Section 93403(c)(1)

For change (1), the existing August 1 date (for when districts are to report data to CARB) was moved to this section of the regulation to introduce the requirement sooner and to have it more clearly highlighted in the regulation. For update (2), the original text that was previously in section 93403(c)(2), was deleted. This text is

replaced allowing air districts to deviate from the default May 1 deadline and use an alternate established facility-to-district reporting deadline, provided that the district submits data reports to CARB by August 1. This revision is based on air district feedback and is provided so that districts may better schedule reporting around their resources and needs. For update (3) to the section, existing text in section 93403(c) included the option for districts to “provide approval for data submissions in other formats.” This has been deleted and is replaced with the more directive text that districts will provide the required formats for reporting (and there is not some “other” format). In this context, “format” is meant relatively broadly, and for example may include online reporting systems, spreadsheets, paper forms, district-generated data reports based on activity data, or other approaches used by air districts.

#### Purpose of Section 93403(c)(1)(A)

The amendment shown is primarily a relocation of the previous section 93403(c)(2)(A) to this section, with minor edits for consistency.

#### Rationale for Section 93403(c)(1)(A)

The preexisting text related to report submittal is moved to this more “up-front” section of the regulation, so the requirements are more readily apparent. Other than the move, the preexisting text is edited to change the term “designated representative” to “designated representative and/or owner or operator,” to be more inclusive and to be consistent with other usage in the regulation.

#### Purpose of Section 93403(c)(2)

Text related to district submittal dates was relocated to section 93403(c)(1) and slightly modified, consistent terminology is included, and the concept and requirements for “Alternate Submittal to CARB” is more fully established, providing the option to allow data submissions to a CARB administered electronic data system. This option is provided to potentially streamline reporting and to possibly reduce air district workload by having data directly submitted to CARB, versus having the district act as an intermediate step in the data gathering and reporting process.

#### Rationale for Section 93403(c)(2)

See the purpose and rationale for section 93403(c)(1) regarding the relocated text, and the purpose and rationale for 93403(c)(1)(A) on the inclusion of the “designated representative” text. Regarding “Alternate Submittal to CARB,” the concept was present in the original regulation, so it is not new. The proposed amendments are included to more completely specify options and requirements, with more direct language allowing districts to require their facilities to submit to a CARB-based system (as available), and establishing that such facilities must submit reports by August 1 each year, consistent with when reports submitted via air districts must be submitted.

#### Purpose of Section 93403(c)(2)(A)

Revisions to the section are to more fully describe the process and requirements for a facility to transition from reporting to the air district, to reporting directly to a CARB hosted reporting system. Note that a CARB-based reporting system for direct

submission of CTR data does not currently exist, and development is only in the very early phases, so these requirements are in place proactively for reporting in future years. The large block of strike-out text at the end of section (i.e., the old 93403(c)(2)(A) section) is primarily relocated to 93403(c)(1)(A).

#### Rationale for Section 93403(c)(2)(A)

As mentioned, the overarching provision to allow reporting directly to CARB is not new. The amendments now provide greater specificity to help facilities better understand the requirements including providing a submission deadline, identification that the request must be sent to CARB and the district APCO, and 45 day review timeline for CARB and districts, so the facilities have certainty regarding approval for potential CARB-based reporting, when such a system is completed and available. See the purpose and rationale for section 93403(c)(1)(A) regarding the strikeout text at the end of the section that was relocated to improve the organization of the regulation.

#### Purpose of Section 93403(c)(3)

This section is modified to specify the scope of the liability for late submittals or errors.

#### Rationale for Section 93403(c)(3)

The amendment is incorporated to reduce ambiguity regarding liability, specifically that the facility owner or operator liability is specifically associated with making compliance determinations, i.e., determining compliance with the requirements of the regulation.

#### Purpose of Section 93403(c)(3) – Original Numbering

The section is deleted, to remove the requirement for CARB to provide an electronic reporting system.

#### Rationale for Section 93403(c)(3) – Original Numbering

The deletion is necessary because the previous requirement upon CARB within the regulation to provide a reporting system was unnecessary. CARB is committed to providing a data system in the future, but with existing uncertainty in the system development process and timing, the requirement was vague and could not be reasonably enforced, and so was removed.

#### Purpose of Section 93403(d) – Original Numbering

The existing requirements related to the timing for reporting release location data were relocated, which is why all of the previous section 93403(d), including (d)(1)(A), (d)(1)(B), and (d)(2) is shown as deleted text. The core of the pre-existing requirements remain unchanged, however refer to the purpose and rationale for the relocated text (as indicated below) for additional information.

#### Rationale for Section 93403(d) – Original Numbering

The release location reporting timing requirements of previous 93403(d)(1)(A) is relocated to 93403(a)(2)(A). The requirements of previous 93403(d)(1)(B) are relocated to 93403(b)(3)(A). These amendments are incorporated to more directly highlight the

delay in reporting of the release data, which was previously sometimes overlooked because it was near the end of the full 93403 section. The requirements of previous 93403(d)(2), related to the update frequency for the release data, is relocated to 93404(b)(1)(D) to make the requirement more apparent to reporters by co-locating it with the data to be reported.

#### Purpose of Section 93403(e)

The section is amended to simplify the text and reduce redundancy.

#### Rationale for Section 93403(e)

By modifying the text to state that the owner or operator must comply with the requirements, it was no longer necessary to state they have “the responsibility for complying.” In addition, it is adequate to state that a facility must comply, without providing an example of elements that must be complied with (e.g., ensuring an accurate and complete report), which could also potentially indicate that some elements of compliance are more important than others, so the text was removed.

#### Purpose of Sections 93403(e)(1)

Based on air district and facility feedback regarding confusion about the existing requirements, the requirements pertaining to who reports what during an ownership change was modified.

#### Rationale for Section 93403(e)(1)

This section addresses who is responsible for reporting prior-year data when there is an ownership change. The first primary revision includes specific bracketed dates, January first through May 1 (or a district-specified deadline), replacing the potentially vague, “at the time of a reporting deadline” language. Under the requirements, the prior owner retains responsibility for reporting prior year data. Assuming they meet the specified reporting deadline, and data are approved as acceptable, that responsibility ceases after they successfully submit their report. The prior owner would still retain reporting responsibility of prior data if they missed the reporting deadline. If a change of ownership occurs after the reporting deadline, it is recommended that the new owner confirm that the required CTR report was submitted by the prior owner.

The second primary revision to the section is to change the data to be reported from a “complete calendar year” to the “previous data year.” This was done because it can be reasonably assumed that a prior owner will have the data needed to submit a report for the year immediately preceding the ownership change.

#### Purpose of Section 93403(e)(2)

This section pertains to who reports current-year data, for the year in which an ownership change takes place. As a substantial deviation from the existing text, the proposed amendments now require the annual report to be submitted as two separate reports, based upon the times during which each owner has operational control of the facility. The prior text required that the new and old owner work together to create a unified full year report.

#### Rationale for Section 93403(e)(2)

The section is amended to reflect concerns by both facility operators and air districts regarding the potential lack of cooperation between old and new owners in preparing a unified report. In addition, we learned when an ownership change occurs some districts establish a completely new facility identification for the purposes of tracking the facility, which would make it very impractical to have a single full-year unified emissions report. Therefore, the requirements are modified to better align with the realities of what occurs during ownership changes.

#### Purpose of Section 93403(e)(3)

This section is deleted.

#### Rationale for Section 93403(e)(3)

The section is deleted because with the revisions to the ownership change requirements, it was no longer relevant because cooperation between past and current owners is not necessarily required.

#### Purpose of Section 93403(f)

The section is modified to include the mention of air district addresses for the purposes of notification.

#### Rationale for Section 93403(f)

This proposed amendment is to reflect the elements in CTR in which facility-initiated notifications or requests are to be submitted to both CARB and the district in which the facility is located. Therefore, we now indicate that information is to be provided to both addresses as appropriate.

#### Purpose of Section 93403(g)

The section is modified to revise the name of the branch name used for mailing materials to CARB.

#### Rationale for Section 93403(g)

The modification is necessary to reflect a realignment and renaming of CARB's organizational structure for the Criteria Pollutant and Air Toxics Reporting Section within the CARB division.

### **Section 93404. Emissions Report Contents**

#### Purpose of Section 93404 – General Updates

General updates are included to 93404 to include new headings and modified organization, which resulted in substantial changes to the numbering of the elements within the section. For ease of referencing, we will refer to the sections using the amended numbering scheme.

#### Rationale for Section 93404

Edits which required substantial numbering changes included modifications to provide a more logical flow to the requirements, and to provide the additional structure

needed to specify the new concepts of “Full Report Contents” and “Abbreviated Report Contents,” as described fully below.

#### Purpose of Section 93404 and 93404(a)

The introductory 93404 section and 93404(a) section are modified to simplify and clarify the sentences, primarily by removing unnecessary words.

#### Rationale for Section 93404(a)

The rationale for the amendments is parallel for both sections. The word “annual” is removed so that consistent language is used in CTR to define an “Emissions report.” The list of report elements is deleted because it was unnecessary (saying “contents” is sufficient), and it could be construed as being comprehensive, leading to potential misunderstanding.

#### Purpose of Section 93404(a)(1)

The section is modified to more completely describe the facility identification number and to add the requirement to report the CARB facility ID that is used when reporting GHG emissions. The prior requirement to report “Data year being reported” is moved to section 93404(b)(1)(C)1.

#### Rationale for Section 93404(a)(1)

The intent is to receive the facility identification number used by air districts when reporting emissions data to CARB. Therefore, we have specified that the reportable ID is to be the number used for CARB reporting, and not potentially some other number used internally by the district for permitting or some other purposes. To streamline cross-referencing of CTR data and data collected under the GHG Mandatory reporting program, the requirement is added to report the greenhouse gas reporting CARB ID number, which only applies to facilities subject to reporting under CTR because of their GHG reporting applicability. The “Data year being reported” reporting requirement is moved to section 93404(b)(1)(C)1. to more logically organize the data to be reported.

#### Purpose of Section 93404(a)(2)

“Physical” address is removed from the section

#### Rationale for Section 93404(a)(2)

The requirement to report the physical address of a facility is separately included in section 93404(a)(6) so it is unnecessary here.

#### Purpose of Section 93404(a)(3)(A)

The text regarding reporting additional NAICS codes is moved to section 93404(a)(3)(B).

#### Rationale for Section 93404(a)(3)(A)

A portion of the previous text is relocated (with minor modifications), because it pertains specifically additional NAICS codes.

#### Purpose of Section 93404(a)(3)(B)

The section is amended to include the text that was relocated from the prior section.

#### Rationale for Section 93404(a)(3)(B)

The sentence pertaining to reporting additional NAICS is more logically located in this section.

#### Purpose of Section 93404(a)(4)

The amendment is included to describe what additional SIC code reporting applies to, by including facility "activities or services."

#### Rationale for Section 93404(a)(4)

Although the prior text was adequate, the amendment provides specific reference to "additional facility activities or services" to help reporters more easily understand the reporting requirement.

#### Purpose of Section 93404(a)(6)

The amendments are included to remove the requirement to report a mailing address for the facility, and to add the words "as applicable" in reference to the facility physical address.

#### Rationale for Section 93404(a)(6)

This section requires the reporting of the facility physical address, "as applicable," because in some cases, a facility may not have a street address. Also, the reporting of a mailing address for the facility owner or operator is required under 93404(a)(2), and there is no need to require a mailing address for the physical facility.

#### Purpose of Section 93404(b)

The new text is included to provide a heading which specifies what "Specific Contents" must be included in emission reports.

#### Rationale for Section 93404(b)

The new heading and text are necessary to describe to reporters which general groups of data must be reported, that being either "Full Report Contents" or "Abbreviated Report Contents." The section also introduces the overall concept of Full and Abbreviated data reports.

#### Purpose of Section 93404(b)(1)

The section is added to provide a heading for the "Full Report Contents" requirements and to specify that the requirements only apply to those facilities that do not qualify for the abbreviated reporting requirements.

#### Rationale for Section 93404(b)(1)

The new text is needed to clearly distinguish between the full and abbreviated reporting requirements, and to specify to reporters that they report either the "full"



data set or the “abbreviated” data set, depending on which applies to their facility type.

Purpose of Section 93404(b)(1)(A)

The text “Device Data” is added as a heading.

Rationale for Section 93404(b)(1)(A)

The heading is added to more directly identify that the requirements that immediately follow pertain to “Device Data” reporting.

Purpose of Section 93404(b)(1)(A)1.

The Device ID reporting requirement is modified for consistency with other preexisting CARB and air district emissions reporting requirements.

Rationale for Section 93404(b)(1)(A)1.

The existing text referring to the identification of a device was vague, mentioning either a name or an ID. It is updated to now only refer to a single data element, the “Device ID” which provides clarity and needed consistency with other existing reporting programs. In general, it is anticipated that the Device ID will be a short alphanumeric code which is used as a mechanism to uniquely distinguish between individual devices that are subject to reporting.

Purpose of Section 93404(b)(1)(A)2.

The requirement is modified to allow reporting of either the device name or a description of the device.

Rationale for Section 93404(b)(1)(A)2.

The requirement is modified to provide consistency with existing reporting programs and systems, and to provide additional flexibility to reporters. It is expected that the device name or description will typically be one or more words describing the device, such as, Boiler, Natural Gas Fired Turbine, Paint Booth, Thermal Oxidizer, etc.

Purpose of Section 93404(b)(1)(A)3.

The text “U.S. EPA” is added to more clearly identify the source of Unit Type Codes.

Rationale for Section 93404(b)(1)(A)3.

Although the CTR definition for “Unit Type Code” identifies that the source of the codes is U.S. EPA, including it within the requirement assists reporters by directly noting the source, without requiring reference to the definition.

Purpose of Section 93404(b)(1)(B)

The text “Process Data” is added as a heading.

Rationale for Section 93404(b)(1)(B)

The heading is added to more directly identify that the requirements that immediately follow pertain to “Process Data” reporting.

Purpose of Section 93404(b)(1)(B)1.

The Process ID reporting requirement is modified for consistency with other preexisting CARB and air district emission reporting requirements.

Rationale for Section 93404(b)(1)(B)1.

The existing text referring to the identification of a device was vague, mentioning either a name or an ID. It is updated to now only refer to a single data element, the "Process ID" which provides clarity and needed consistency with other existing reporting programs. In general, it is anticipated that the Process ID will be a short alphanumeric code which is used as a mechanism to uniquely distinguish between individual processes that are subject to reporting.

Purpose of Section 93404(b)(1)(B)2.

The requirement is added to report "Process description" as part of the full report contents.

Rationale for Section 93404(b)(1)(B)2.

Previously, only the Process name or ID was subject to reporting. Although necessary information, the ID is typically a code, which often will not provide any information regarding the type of process, which is a shortcoming of the current requirements. Without a description of the process producing emissions, it is difficult to understand the specific emission sources and to evaluate potential future reduction measures. Therefore, the requirement to report the "Process description" was added. Some examples of process descriptions could be tank storage, fuel combustion, surface coating, metal grinding, and many others

Purpose of Section 93404(b)(1)(B)3.

The amendment is parallel to the revision to 93404(b)(1)(B)1., to streamline and simplify the reporting requirements by specifying reporting of only one data element and not providing an option.

Rationale for Section 93404(b)(1)(B)3.

Same as the rationale for 93404(b)(1)(B)1.

Purpose of Section 93404(b)(1)(C) - Original Numbering

The reference to reporting release location is deleted from this section and relocated.

Rationale for Section 93404(b)(1)(C) - Original Numbering

The deletion is made from the section and the relevant text and requirements are included in section 93404(b)(1)(D). This amendment is to make the reporting requirements more understandable by consolidating the release location data reporting requirements in a single section of CTR.

Purpose of Section 93404(b)(1)(B)5.

The section is amended to specify that the Activity level to be reported is “for the data year.

Rationale for Section 93404(b)(1)(B)5.

The amendment is required to provide certainty to those subject to the regulation, specifically identify the activity data to reported applies to a single data year, and not, for example, a month, or multiple years of activity.

Purpose of Section 93404(b)(1)(B)7.

The requirement is added to report the “Description of activity level data acquisition method.

Rationale for Section 93404(b)(1)(B)7.

The requirement is necessary because it is important, for the purpose of understanding and validating the submitted emissions data, which method was used to collect the activity data. For example, knowing if the data was collected through direct metering, or mass balance, or engineering estimates, or some other approximation provides some insight into the level of uncertainty associated with the data, as well as allowing more meaningful comparisons between data sets from related process activities.

Purpose of Section 93404(b)(1)(C)

The heading “Emissions Data” is added.

Rationale for Section 93404(b)(1)(C)

The new heading was added to aid reporters in more easily locating the specific “Emissions Data” reporting requirements.

Purpose of Section 93404(b)(1)(C)1.

The requirement to report the “Data year being reported” is moved from 93404(a)(1) to this section.

Rationale for Section 93404(b)(1)(C)1.

The requirement to provide “Data year being reported” was previously in section 93404(a)(1). It was deleted from that section and relocated here to improve the logical organization of the data to be reported.

Purpose of Section 93404(b)(1)(C)2.

The option to report the “device identifier” is removed, and the ordering of the “Device” reporting requirement is swapped with the “Process” requirement.

Rationale for Section 93404(b)(1)(C)2.

This the deletion of the “identifier name reporting” is made to conform with the terminology change made in 93404(b)(1)(A)1., and the ordering change is made to match the sequencing of the prior sections, in which the device data is listed first.

Purpose of Section 93404(b)(1)(C)3.

The option to report the “process identifier” is removed, and the ordering of the “Process” reporting requirement is swapped with the “device” requirement.

Rationale for Section 93404(b)(1)(C)3.

This the deletion of the “identifier name reporting” is made to conform with the terminology change made in 93404(b)(1)(B)1., and the ordering change is made to match the sequencing of the prior sections, in which the device data is listed first.

Purpose of Section 93404(b)(1)(C)4.

The word “Code” is changed to “code.”

Rationale for Section 93404(b)(1)(C)4.

The change is to provide consistency in capitalization.

Purpose of Section 93404(b)(1)(C)8.

The section is modified to remove examples of emission factor sources and provide a reference to 93404(d) for additional details.

Rationale for Section 93404(b)(1)(C)8.

It is more appropriate and helpful to those subject to CTR to provide examples and other more detailed information regarding emission factor reporting in the referenced section, which applies to Use of Best Available Data and Methods.

Purpose of Section 93404(b)(1)(C)10.

A reference to section 93404(d) is added, related to reporting the emissions calculation method.

Rationale for Section 93404(b)(1)(C)10.

The reference is added to explicitly direct reporters to the Use of Best Available Data and Methods section to more directly connect the reporting requirement to the specifics of the data to be reported.

Purpose of Section 93404(b)(1)(C)11.

A new requirement is added to require the reporting of the control efficiency of all emissions control devices.

Rationale for Section 93404(b)(1)(C)11.

The addition of this requirement is necessary because without control device information it is difficult, if not impossible, to fully understand emissions from a source. For example, emissions from a source may be low because the source produces low emissions, or the emissions may be low because the source is outfitted with very effective control equipment. Without information regarding the control efficiency of devices, these important questions are not answerable with the submitted data, so the requirement is added to make the data more usable, and to help understand where additional emission controls may be beneficial.

Purpose of Section 93404(b)(1)(C)13.

A new requirement is added to require the reporting of the amount of a toxic air contaminant substance that is used or produced at a facility during the data year, if there are no best available data and methods that can be used to quantify an emissions estimate for the substance.

Rationale for Section 93404(b)(1)(C)11.

The addition of this requirement is necessary, because, in some cases, there may not be a method available to provide a reasonable estimate of the amount of a substance that is emitted from a facility during the data year. If a mass balance approach cannot be used to calculate a reasonable emissions estimate, and there are no other available emission factors, engineering estimate approaches, or other methods as described in the definition for “best available data and methods,” that can be used to quantify the emissions for a data year, then the amount of any such toxic air contaminant that is used or produced by the facility during the data year must be reported, as applicable.

Purpose of Section 93404(b)(1)(D)

The heading “Release Location Data” is added. The reference to section 93403(d) for the reporting schedule for release location data is deleted.

Rationale for Section 93404(b)(1)(D)

The new heading was added to aid reporters in more easily locating the specific “Release Location Data” reporting requirements. The reference to section 93403(d) for the reporting schedule for release location data was removed because the reference is incorrect (with restructuring of the regulation) and reference to the release location reporting schedule is not necessary because the schedule is now directly within the subsection under 93404(b)(1)(D)5.

Purpose of Section 93404(b)(1)(D)1.

Revise text from “stack or fugitive” to “point or volume”.

Rationale for Section 93404(b)(1)(D)1.

Revising the release location type more accurately describes the data required of reporters and maintains consistency with existing reporting practices.

Purpose of Section 93404(b)(1)(D)3.

Revise text from “stack” to “point (i.e. stack)”.

Rationale for Section 93404(b)(1)(D)3.

The revision more accurately describes the data required of reporters and maintains consistency with existing reporting practices.

Purpose of Section 93404(b)(1)(D)3.a.

Remove text “identifier name or”.

Rationale for Section 93404(b)(1)(D)3.a.

Removing the text more accurately describes the data required of reporters, as “identifier name” is not a required data parameter.

Purpose of Section 93404(b)(1)(D)3.f.

Revise text from “type” to “physical configuration”.

Rationale for Section 93404(b)(1)(D)3.f.

The revision more accurately describes the data required of reporters. The term “physical configuration” more clearly describes the nature of the data that is required.

Purpose of Section 93404(b)(1)(D)4.

Revise text from “fugitive” to “volume (i.e. fugitive)” and update references to reflect revised numbering.

Rationale for Section 93404(b)(1)(D)4.

The revision more accurately describes the data required of reporters, and is consistent with terminology used in other sections of CTR. Section references are updated to reflect the renumbering of elements of the Release Location Data.

Purpose of Section 93404(b)(1)(D)5.

Relocate existing text from previous 93403(d)(2).

Rationale for Section 93404(b)(1)(D)5.

The requirements of previous 93403(d)(2), related to the update frequency for the release data, is relocated to 93404(b)(1)(D)5. to make the requirement more apparent to reporters by co-locating it with the data to be reported rather than in the general reporting requirements.

Purpose of Section 93404(b)(2)

The newly added section specifies the required contents of abbreviated reports, with references to the data in 93404 which must be reported and data in the new section 93421 sections in the newly added Article 2 of CTR.

Rationale for Section 93404(b)(2)

With the significant modifications to the previous section 93403(b), *Abbreviated Reporting* requirements, and potential future revisions, the Abbreviated Reporting requirements are provided in a separate article (Article 2) of the regulation for ease of use and for clearer organization. Because facilities that fall under the abbreviated reporting requirements are typically smaller emissions sources with a limited number of processes and emission types, the data reporting requirements are reduced as specified. Additional information regarding the abbreviated reporting requirements is provided in the Purpose and Rationale sections for Article 2.

Purpose of Section 93404(c)

Add text “for a facility”.

#### Rationale for Section 93404(c)

The added text clarifies and reinforces that the annual emissions report is on a facility-basis.

#### Purpose of Section 93404(c)(1)(A)

Revised text from “existing” to “CARB particulate matter”.

#### Rationale for Section 93404(c)(1)(A)

The revised text clarifies that CARB particulate matter speciation profiles will be used to allow reporters and others to better understand what data will be used in performing the calculations.

#### Purpose of Section 93404(c)(1)(B)

Added text regarding reporting of the presence and amount of a toxic air contaminant that is used or produced at a facility if there is no reasonable, technically justified emissions estimation method available.

#### Rationale for Section 93404(c)(1)(B)

The substances listed as toxic air contaminants may be emitted at a facility even if there is currently no reasonable, technically justified emissions estimation method available. Reporting whether the listed substance is used at a facility in a way that may result in airborne emissions will assist future goals to develop reasonable, technically justified emissions estimation methods for those substances. Reporting the presence and amounts of these substances that are used or produced at a facility will also provide communities with their right-to-know if these substances may become airborne.

#### Purpose of Section 93404(c)(2)

Amend the beginning of the section text with “Except as indicated in section 93404(c)(2)(C), below,”.

#### Rationale for Section 93404(c)(2)

The text of this section was amended to support the addition of Section 93404(c)(2)(C), *Portable Diesel-Fueled Engines and Devices at GHG and Criteria Facilities*.

#### Purpose of Section 93404(c)(2)(C)

Added text to make emissions reporting applicable to portable diesel-powered engines or devices rated at 50 maximum rated horsepower (brake horsepower (bhp)) or above and operated at GHG and Criteria Facilities at any time during the data year, regardless of equipment ownership or permit status.

#### Rationale for Section 93404(c)(2)(C)

Emissions from these sources can represent a large portion of the health risk from facilities that utilize them. Diesel particulate matter is a carcinogen and a listed substance, and the use of these portable devices and engines pose a potential risk to

the nearby community and sensitive receptors. The most use of these sources are anticipated to be by the largest facilities, therefore the reporting for these sources have been limited to only those affected by the applicability requirements of 93401(a)(1) and 93401(a)(2) ("GHG" and "Criteria" Facilities). However, these portable devices and engines may be owned and operated by contractors that perform work at the facility. Therefore, there is no limitation on equipment ownership by the facility or whether the device or engine is permitted. In an effort to capture the most relevant emissions and limit the burden on data collection, an exemption for devices or engines rated less than 50 bhp is provided. To provide flexibility with reporting emissions from these sources, there are options regarding the estimation of emissions and reporting of activity levels. The reporting of these sources coincides with the start of the phase-in schedule for the proposed Additional Applicability provisions.

#### Purpose of Section 93404(c)(2)(D)

The text of this section is added to clarify exempted emissions sources.

#### Rationale for Section 93404(c)(2)(D)

The addition of the text in this section clarifies that the emissions sources described are exempt from reporting device, process, emissions, and release location data. These are not new exemptions, but the exempted sources listed are repeated here for ease of use and referencing (the exempted sources are found under 93401(b)).

#### Purpose of Section 93404(d)

The section is modified to include a new heading, to mention the reporting of "control efficiency," and to more specifically identify what must reported when calculating emissions using "activity data." Other edits described below are to reduce ambiguity.

#### Rationale for Section 93404(d)

The new heading is added to be more descriptive and to provide a direct connection to the CTR definition of "Best Available Data and Methods," to assist reporters in understanding the requirements. The requirement to report "control efficiency" is added previously in 93404(b)(1)(C)11., therefore the requirement is reiterated here to underscore the requirement. The added text specifying, "using best available data and methods" is added to make clear that use of "best available data and methods" also applied to district-generated data. The text regarding "air district emission provided" emission factors is deleted and "provided by an air district" is added at the end of the phrase for better grammar. The final sentence of the section is added, regarding reporting activity data, in support of the new requirement under 93404(b)(1)(B)7. to report the, "Description of activity level data acquisition method." The sentence is provided to assist those subject to reporting by providing examples of typical types of activity data that may be used and reported in computing emissions.

#### Purpose of Section 93404(e)

The word, "data" is removed when referring to an "emissions data report."



#### Rationale for Section 93404(e)

For consistency and to match the CTR definition for “Emissions report,” terminology throughout CTR is standardized to refer to “emission reports” and not “emission data reports” because the inclusion of “data” is unnecessary in the description of the report.

### **Section 93405. Document Retention and Record Keeping Requirements**

#### Purpose of Section 93405(a)

Section 93405(a) is modified to recognize that other recordkeeping requirements may exist, and to establish that under CTR five years is the minimum retention time, regardless of other requirements.

#### Rationale for Section 93405(a)

The modification is necessary to specify that the CTR record retention requirements do not supersede any other federal, state, or local requirements, and also to establish that regardless of other requirements, the CTR record retention requirements are no less than five years.

#### Purpose of Section 93405(c)

Section 93405(c) is modified to clarify the number of days previously referenced refers to calendar days, and not “work” days.

#### Rationale for Section 93405(a)

The modification eliminates a previously ambiguous term.

#### Purpose of Section 93405(d)

Section 93404(d) is added to allow CARB to request additional data from facility operators or owners subject to abbreviated reporting. Criteria for evaluating the need for the additional data are provided, as well as identifying the potential “additional data” that could be requested, and the timeframe for reporters to provide the additional data.

#### Rationale for Section 93405(d)

This addition is necessary for CARB and districts to help protect public health in unique situations in which, based on analysis, it has been determined that the emissions from an abbreviated reporting facility likely poses potential health risk to people in the vicinity of the facility. Additional collected information is necessary to better understand the impacts of the facility emissions. The risk analysis used to determine if additional reporting is necessary may include emissions from only the facility itself, or may include the cumulative effects from the facility combined with other sources, as is needed to effectively consider the overall emission impacts. These risk-based criteria are included to provide a basis for requiring additional data reporting from certain abbreviated reporting facilities.

The new section also identifies the types of additional information that may be subject

to reporting, referring to section 93404 of CTR, which includes the full data reporting requirements (versus the abbreviated-only reporting requirements). Based on the needs to evaluate the facility risk, any and all information in section 93404(b) may be requested if the criteria are met for requesting additional data. Operators are provided 60 days to respond to the request, which based on prior experience from other emissions reporting programs, is typically enough time for a facility owner or operator to collect and provide additional data. This is particularly true considering that in most cases additional data requests are preceded by informal discussions with the reporter, prior to the submission of a formal data request by CARB.

#### **Section 93406. Confidentiality**

No amendments proposed to section.

#### **Section 93407. Enforcement**

No amendments proposed to section.

#### **Section 93408. No Preemption of More Stringent Air District or Federal Requirements**

No amendments proposed to section.

#### **Section 93409. Severability**

No amendments proposed to section.

#### **Section 93410. Implementation by CARB and by the Local Air Districts**

##### Purpose of Section 93410(a)

Section 93410(a) is modified to specify that in addition to incorporating CTR requirements into district rules, they may also be incorporated into district permits. Redundant heading text is removed.

##### Rationale for Section 93410(a)

The prior text was unnecessarily limiting and the amendment is included to reflect the reality that the reporting requirements may be included in district rules, district permits, or both. The heading text was removed because it is redundant and unnecessary.

##### Purpose of Section 93410(b)

Section 93410(b) is added to provide the option for the CARB Executive officer enter into agreements with air districts related to the implementation and enforcement of CTR requirements.

##### Rationale for Section 93410(b)

Although under the unmodified CTR, there was nothing prohibiting CARB from entering into cooperative agreements with air districts to implement CTR, the added text makes the option more explicit, providing CARB and districts clear authority to enter into such agreements. Typically, such agreements are executed through a Memorandum of Agreement between CARB and an air district. As described in the

new text, these agreements may pertain to program funding, reporting implementation, enforcement, or other activities related to CTR implementation or data sharing.

#### Purpose of Section 93410(f)

Section 93410(f) is added, based on public comments, to allow independent citizens or citizen groups to request information from CARB that determines whether a specific facility has been issued a permit by the local air district, is subject to the CTR applicability requirements, and is in compliance with relevant permit and CTR requirements.

#### Rationale for Section 93410(b)

This addition to the regulation provides an opportunity for interested citizens to obtain information regarding specific facilities, with regard to the facilities' status under district permitting rules and the CTR reporting requirements. It will allow community members to bring potentially unknown sources to the attention of districts and CARB, in a manner that documents the request from the community member, and the regulatory agencies.

## **Article 2. Requirements for Calculating and Reporting Criteria Pollutant and Toxic Air Contaminant Emissions**

### **Section 93420. Purpose and Scope**

#### Purpose of Section 93420

The purpose of Section 93420 is to establish the purpose and scope of Article 2.

#### Rationale for Section 93420

The purpose of Article 2 is to support Subchapter 7.7, Article 1, *General Requirements for Criteria and Toxics Reporting*, thereby assisting in implementing the requirements of sections 39607 and 39607.1 of the California Health and Safety Code (H&SC) and the requirements outlined in sections 42705.5 and 44391.2 of the H&SC. The authority to collect such data is also supported by section 41511 of the H&SC. The scope of Article 2 includes information on calculation methods to be used by facilities or districts when quantifying emissions.

### **Section 93421. Abbreviated Reporting**

#### Purpose of Section 93421(a)

The purpose of section 93421(a)(1) is to specify the requirements to qualify for abbreviated reporting, the contents of the abbreviated report, and the mechanism for which emissions will be calculated and reported.

#### Rationale for Section 93421(a)

With the addition of specific sectors to the CTR Regulation, we sought a mechanism to reduce workload on facilities and air districts in complying with the regulation. One of the primary approaches for this is providing "abbreviated reporting" requirements for

certain industry sectors where criteria and toxics emissions can be simply quantified based on readily available facility data. The abbreviated reporting process closely involves the local air districts who would collect the facility-specific data or other data and then compute emissions using district methods approved by CARB.

Data currently reported by these sectors to air districts include information such as annual fuel usage, gallons of fuel consumed, total annual sales of gasoline, and quantity of remains cremated, as specified in the regulation text. Since these parameters are normally already tracked and quantified by facility operators, minimal new effort is needed to provide the data to the air district for the purpose of quantifying emissions based on the activity data. Any existing device and process data that may be needed in estimating emissions from these abbreviated sources are expected to be obtained through permit information maintained by the local air district.

#### Purpose of Section 93421(a)(1)

The purpose of section 93421(a)(1) is to allow agricultural operations that meet the requirements of 93421(a) to submit an abbreviated report.

#### Rationale for Section 93421(a)(1)

Estimating emissions from agricultural operations applicable per 93401(a)(4) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of agricultural operations will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(1)(A)

The purpose of section 93421(a)(1)(A) is to specify the required activity level data for agricultural operations meeting the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(1)(A)

The "quantity of head of cattle" is required to calculate emissions from agricultural operations that report using the abbreviated reporting provisions.

#### Purpose of Section 93421(a)(2)

The purpose of section 93421(a)(2) is to allow facilities that meet the requirements of 93421(a) to submit an abbreviated report for boilers or heaters that exclusively combust natural gas or propane.

#### Rationale for Section 93421(a)(2)

Estimating emissions from boilers or heaters that exclusively combust natural gas or propane for facilities that meet the requirements of 93421(a) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of this source will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(2)(A)

The purpose of section 93421(a)(2)(A) is to specify the required activity level data for the combustion of natural gas or propane in boilers or heaters, for facilities that meet the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(2)(A)

The “total annual fuel usage, in million scf or MMBtu” is required to calculate emissions from boilers or heaters combusting natural gas or propane reporting using the abbreviated reporting provisions.

#### Purpose of Section 93421(a)(3)

The purpose of section 93421(a)(3) is to allow facilities that meet the requirements of 93421(a) to submit an abbreviated report for diesel-powered emergency standby generators and direct-drive emergency standby fire pump engines.

#### Rationale for Section 93421(a)(3)

Estimating emissions from diesel-powered emergency standby generators and direct-drive emergency standby fire pump engines for facilities that meet the requirements of 93421(a) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of this source will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(3)(A)

The purpose of section 93421(a)(3)(A) is to specify the required activity level data for diesel-powered emergency standby generators and direct-drive emergency standby fire pump engines, for facilities that meet the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(3)(A)

The “total annual hours of operation” is required to calculate emissions from diesel-powered emergency standby generators and direct-drive emergency standby fire pump engines reporting using the abbreviated reporting provisions.

#### Purpose of Section 93421(a)(4)

The purpose of section 93421(a)(4) is to allow facilities that meet the requirements of 93421(a) to submit an abbreviated report for the retail sale of gasoline.

#### Rationale for Section 93421(a)(4)

Estimating emissions from the retail sale of gasoline for facilities that meet the requirements of 93421(a) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of this source will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(4)(A)

The purpose of section 93421(a)(4)(A) is to specify the required activity level data for the retail sale of gasoline, for facilities that meet the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(4)(A)

The “total annual gasoline dispensed, in gallons” is required to calculate emissions from the retail sale of gasoline using the abbreviated reporting provisions.

#### Purpose of Section 93421(a)(5)

The purpose of section 93421(a)(5) is to allow facilities that meet the requirements of 93421(a) to submit an abbreviated report for the cremation of humans or animals.

#### Rationale for Section 93421(a)(5)

Estimating emissions from the cremation of humans or animals for facilities that meet the requirements of 93421(a) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of this source will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(5)(A)

The purpose of section 93421(a)(5)(A) is to specify the required activity level data for the cremation of humans or animals, for facilities that meet the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(5)(A)

The “total annual mass cremated by type of remains, in pounds” is required to calculate emissions from the cremation of humans or animals reporting using the abbreviated reporting provisions.

#### Purpose of Section 93421(a)(6)

The purpose of section 93421(a)(6) is to allow facilities that meet the requirements of 93421(a) to submit an abbreviated report for construction aggregate processing, where no asphalt products are used or produced.

#### Rationale for Section 93421(a)(6)

Estimating emissions from construction aggregate processing (where no asphalt products are used or produced) for facilities that meet the requirements of 93421(a) are anticipated to be relatively straightforward to calculate for experienced air district and/or CARB staff. The inclusion of this source will reduce the emissions reporting burden from the owners and operators of these sources while meeting data quality objectives.

#### Purpose of Section 93421(a)(6)(A)

The purpose of section 93421(a)(6)(A) is to specify the required activity level data for construction aggregate processing, for facilities that meet the requirements for abbreviated reporting.

#### Rationale for Section 93421(a)(6)(A)

The “total annual mass of dried material produced, in tons” is required to calculate emissions from construction aggregate processing using the abbreviated reporting provisions.

#### Purpose of Section 93421(b)

The purpose of section 93421(b) is to specify the requirements for requesting additional qualifying activities for abbreviated reporting, and for requesting alternative schedules or alternative parameters for acquiring activity data for qualifying activities.

#### Rationale for Section 93421(b)

This provision was added to allow districts to initiate an abbreviated reporting process for other sector categories, upon approval by CARB of the air district methods used to determine source emissions. The addition of activities to the abbreviated reporting process is expected to reduce the regulatory burden on those reporters that would qualify.

### **Appendix A. Applicability Thresholds and Lookup Tables for Facilities Subject to Reporting Per Section 93401(a)(4)**

#### Purpose of Appendix A

Appendix A includes Tables A-1, A-2, and A-3. These tables are added to establish the reporting schedule in terms of timing, as well as when facilities engaging in specific permitted processes are subject to reporting. Each table is individually described in more detail below.

#### Rationale for Appendix A

The appendix is added to specifically identify the years in which reporting must begin for specified permitted processes (Table A-1), which air districts are subject to which reporting schedule (Table A-2), and which permitted process are subject to reporting under the proposed amendments (Table A-3). These tables are necessary to clearly and completely identify, to facilities, air districts, and others affected by the regulation, which sources are subject to reporting and when.

#### Purpose of Table A-1

Table A-1 provides the initial data year in which facilities become subject to the CTR reporting requirements, based on the air district in which the facility is located, and

the permitted process(es) that occur at the facility. Table A-1 also establishes when recurring annual reporting takes effect.

#### Rationale for Table A-1

With the inclusion of additional sources subject to reporting, and in order to balance workload and resources for facilities, districts, and CARB, the schedule for the initial year of reporting, and for ongoing annual reporting, is staggered for facilities subject only to 93403(a)(4) and no other applicability criteria. Specifically, for facilities subject to the additional 4 tpy or 100 tpy criteria pollutant applicability of 93403(a)(4)(A)-(B), or sector-based applicability of 93403(a)(4)(C), the reporting schedule is phased-in based on which air district the facility is located in and the specific permitted processes that occur at the facility. There are two distinct air district groups and three industry sector groupings under the reporting schedule, with additional timing adjustments for agricultural operations and for reporting emissions release location data. The timing in Table A-1 only applies to the "additional applicability" 93403(a)(4) facilities added under the proposed amendments.

Under the phase-in schedule, the 4 tpy and 100 tpy applicability facilities in District Group A begin reporting with the 2022 data year, reported in 2023, and report annually thereafter. This applicability group is typically already subject to some level of reporting for most districts, so the district and facility resources to comply with the CTR requirements are generally minimal, which is why they are scheduled to begin reporting for the initial years of the proposed amendments and then continue annual reporting.

However, because more facilities are affected under the Sector Phase classifications, which in many cases may not be already reporting emissions data, their phase-in is spread across multiple years. In this case approximately one-third of the categories that fall under the Table A-3 permitted processes become subject to reporting each year. Focusing only on District Group A for the purposes of explanation, for the 2022 data year, only Sector Phase 1 facilities are required to report. Then, for the 2024 data year, only facilities in Sector Phase 2 are required to report; and for the 2025 data year, only the Sector Phase 3 facilities are required to report. During the initial reporting years for the sector phases, reporting is required for only a single year, and annual updates are not required until the 2026 data reported in 2027 (for the District Group A facilities). This one-third per year approach provides additional time for facilities and districts to put the resources in place to implement the requirements, without subjecting them to a continuously growing set of additional facilities subject to reporting.

After four years, when data collection and reporting processes have been well established, then all facilities subject to CTR become subject to annual reporting. This begins with the 2026 data for District Group A facilities and the 2027 data for District Group B facilities.

Another element of Table A-1 is the "gap year." For District Group A, this is the year between Sector Phase 1 and 2 reporting, when the data reporting year skips a year, jumping from 2022 to 2024. This additional one-year gap is provided to provide air



districts and CARB a year after the first year of Sector Phase 1 reporting to assess the process, refine reporting systems, and evaluate data prior to reporting by the Sector Phase 2 reporters. This additional time was requested by air districts during the regulation development process and was included because it will help to provide a more robust and accurate data reporting program.

The note “\*” for the table provides a description of the requirements in plain language to assist in understanding how the phase-in schedule is to be implemented, specifically with how the one-third per year approach is applied.

The note designated “\*\*” reiterates the requirements of 93403(b)(5) which is included to provide a consistent reporting schedule for agricultural operation facilities that would become subject to CTR under the new proposed Additional Applicability provisions. This is provided because under the new Additional Applicability provisions, “agricultural operation” facilities may become subject to reporting based on the 4 tpy threshold, or by meeting the sector-specific requirements provided in Table A-3 of CTR. Under this situation, an agricultural operation facility, which may include multiple emission sources, may trigger different reporting requirements at different times, creating uncertainty about when to report. To prevent this potential conflict, 93403(b)(5) provides a uniform time to initiate reporting for the agricultural operation facilities, as described in the section and in the Table A-3 note.

#### Purpose of Table A-2

Table A-2 creates two lists, which subdivide California Air Districts into separate groups. These groups are used in conjunction with Table A-1 for establishing when certain facilities or sources subject to CTR become subject to reporting emissions and other data.

#### Rationale for Table A-2

Because there was a need and desire to phase in over time the number of facilities and sectors subject to reporting under the proposed additional applicability requirements, emissions reporting is phased-in by year, by air district, and by permitted process. This was done to distribute the resources needed to implement the program requirements over time so they would not burden facilities and air districts within a narrow time horizon. Instead, the reporting phase-in is spread out over a 7-year time period.

One mechanism for spreading out the implementation was to subdivide the districts into those that included communities selected during 2018 for a community air monitoring program or a community emissions reduction program under AB 617, and those that did not have a “selected community” identified during 2018. The selected communities are defined geographic area selected and approved by the CARB Governing board, pursuant to H&SC 42705.5 or 44391.2. In general, these communities are substantially disproportionately affected by air pollution when compared to other communities, which makes it very important to identify the sources of air pollution within these selected communities, and the magnitude of emissions associated these sources as soon as possible.

Because of the warranted emphasis on emissions within selected communities, which extends to the air districts the communities are located in, District Group A in Table A-2 includes the districts with 2018 “selected communities.” For reporting under CTR, this puts these districts and the associated facilities first in line for reporting, because this is where the needs for consistent and annual emission inventory data are most beneficial overall.

Then, districts that do not have 2018 selected communities are assigned to District Group B, which provides a 1-year delay in CTR implementation. Part of this is done to spread out the workload, as mentioned, but also to provide an opportunity for districts in Group B to learn from both the District Group A districts and CARB during the first years of implementing the proposed amended requirements. In terms of moving forward, additional districts with “selected communities” identified in 2019 and subsequent years are not assigned to District Group A because the current categorization provides a reasonable workload split, and with regards to future community selections, the reporting schedule will require data submissions regardless, as the Group A and B distinctions are mostly relevant to the initial phase-in years, and them become irrelevant once all sources become subject to annual reporting in either 2026 or 2027, respectively.

### **Purpose of Table A-3**

#### **Overview**

Table A-3 of CTR identifies permitted processes subject to CTR under the proposed amendments. Any facility which engages in one or more of the “Permitted Processes” shown, at a level exceeding the “Activity Level Reporting Threshold,” would be subject to the applicable CTR reporting requirements. For those processes in which generally there is no minimum “safe” level of emissions, a reporting threshold of “Any activity level” was assigned, to ensure that all facilities that have been issued a permit to operate by a local air district and are performing the operations are subject to reporting. For other processes, a lower-limit activity level was established where possible, to exclude reporting of facility processes that are generally expected to have negligible adverse health impacts.

Similarly, where it was reasonably possible to limit the reporting applicability to specified industry sectors or types, based on Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) designations, those specifications were also included in Table A-3. In typical situations, it is expected that the toxics associated with the specified permitted process would only occur at a level of potential significance from those industry types specifically identified in the table.

Table A-3 also includes a “Sector Phase” designation, which indicates, for the purposes of reporting, when a facility within a certain “Sector” or engaging in a specified “Permitted Process” becomes subject to reporting based on the reporting schedule in Table A-1. In establishing the Sector Phases in Table A-3, in general, those sectors that are of greatest concern with regards to toxicity and potential health

impacts are included in the initial phases, and other sources are included in later phases. For example, permitted processes in Sector Phase 1 are included in the first years of reporting, generally because of the potential high health risk associated with the sector emissions and the need to receive timely emissions data to inform the public and provide data on reducing air pollution impacts on environmental justice and other communities. Of course, this does not mean that emissions from other processes in other sector phases are not potentially harmful, but it was not practical to initiate reporting for all sectors within a single year, so sectors were subdivided into Sector Phases. The number of facilities within each sector phase was also considered when establishing the sector assignments, to include roughly similar quantities of facilities within each phase to help balance resources over the program implementation.

Throughout this section for Table A-3, we refer to Appendix E of the Emission Inventory Criteria and Guidelines Report for the Air Toxics “Hot Spots” Program (EICG)<sup>15</sup>. Appendix E of EICG titled, “Appendix E – Requirements for Classes of Facilities Emitting Less Than 10 Tons per Year of Criteria Pollutants,” was last amended August 27, 2007. With the well-established history of the Hot Spots program, Appendix E served as an initial framework for identifying the permitted processes that are now included in Table A-3 for sources proposed to be subject to reporting under CTR.

However, with new information and science regarding toxics emissions available, in many cases CTR modifies and adds to the 2007 EICG Appendix E requirements and categories in order to meet the current CARB and air district community-based and statewide priorities required under AB 617 and AB 197. Because of the linkage and history between Appendix E and CTR Table 3, in this section we typically provide a brief discussion regarding why or if the CTR Table A-3 requirements differ from the EICG Appendix E requirements where appropriate. With the next update of the Hot Spots EICG Appendix E, to the extent possible it will be harmonized with Table A-3 of CTR to reflect the latest data available and to provide consistency across the interrelated programs.

The remainder of this section discusses the Purpose and Rationale for each permitted process included in Table A-3, explaining why it was important and necessary to include it in the CTR applicability requirements.

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<sup>15</sup> CARB, Emission Inventory Criteria and Guidelines for the Air Toxics “Hot Spots” Program, Appendix E. Effective September 26, 2007. Available at: <https://www.arb.ca.gov/ab2588/2588guid.htm>.

### **Table A-3: Permitted Process Purpose and Rationale**

#### SECTOR PHASE 1: PERMITTED PROCESSES

##### Purpose of Sector No. 1: Metal plating, anodizing, or grinding using cadmium or chromium

The purpose of including the permitted process “metal plating, anodizing, or grinding using cadmium or chromium” at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to make the owners or operators of those affected facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1<sup>16</sup>.

##### Rationale for Inclusion of Sector No. 1

This process has the potential to release emissions of the highly toxic air contaminants cadmium and hexavalent chromium. Plating and anodizing may emit the toxic metals to the air from chemical baths used during the process. Setting an activity level reporting threshold or limiting the SIC or NAICS codes for this activity category would not provide confidence in the completeness of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617 and AB 2588.

Anodizing and grinding using cadmium or chromium were added to this sector for CTR to expand on the classes of activities identified in Appendix E of the CARB Hot Spots EICG. This is necessary because these types of metal working activities, in addition to plating, have the potential to release cadmium or chromium into the atmosphere, which can have detrimental health effects, including increased cancer risk.

##### Purpose of Sector No. 2: Plating, polishing, coating, engraving, and allied services, including thermal spraying, using chromium, cadmium, or nickel

The purpose of including the permitted process “plating, polishing, coating, engraving, and allied services, including thermal spraying, using chromium, cadmium, or nickel” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 347x or NAICS code(s) 3328xx and 33991x, is to establish that the owners or operators of those affected facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

##### Rationale for Inclusion of Sector No. 2

This process has the potential to release metal emissions of the toxic air contaminants chromium, cadmium, and nickel. Nickel is a potent carcinogen, although the OEHHA

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<sup>16</sup> *Sector Phase Rationale Notes:* The overall Sector Phase assignment rationale is included in the overarching Purpose and Rationale for Table A-3, described previously. Therefore, to avoid repetitiveness, the rationale for the specific phase assigned to each permitted process is not included in the Purpose and Rationale for each permitted process.

cancer unit risk factor for nickel is more than an order of magnitude less than cadmium, and over two orders of magnitude less than hexavalent chromium.

As opposed to Sector No. 1, this sector focuses on the “fabricated metal products” industry, as specified by the SIC and NAICS categories listed in the table. In addition to the potent carcinogens of chromium and cadmium, nickel is widely used in these sectors. The range of SIC codes for this sector have been limited to the “coating, engraving, and allied services” sector of the “fabricated metal products” SIC category, and the range of NAICS codes have been limited to the “coating, engraving, heat treating, and allied activities” and “jewelry and silverware manufacturing” NAICS categories. These ranges limit the number of potentially affected facilities to those with the potentially largest toxics emissions, and therefore the greatest need for annual emissions reporting.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 3: Petroleum refining and industries related to petroleum refining

The purpose of including the permitted process “petroleum refining and industries related to petroleum refining” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 2911 through 2999 or NAICS code(s) 3241xx, 325110, and 325194, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 3

This process has the potential to emit many types of toxic air contaminants, including benzene, toluene, ethylbenzene, xylene, and many others, that range from low OEHHA cancer unit risk factors to high. Therefore, from a public health perspective, it is important to have the emissions from the processes reported under CTR. The large number of different air pollutants emitted do not allow for a *de minimis* activity level reporting threshold to be established, which is why an “Any activity threshold” is applied. Facilities that are subject to this category due to the SIC and NAICS codes listed include those engaged in petroleum refining, asphalt paving mixtures and blocks manufacturing, asphalt felts and coatings manufacturing, lubricating oils and greases manufacturing, other products of petroleum and coal manufacturing, petrochemical manufacturing, and cyclic crude and cyclic intermediate manufacturing, which are included based on their known potential to release toxic air contaminants.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 4: Industrial machinery manufacturing

The purpose of including the permitted process “industrial machinery manufacturing” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 353x or 356x or NAICS code(s) 333xxx, is to make the owners or operators of

those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 4

Although facilities in this sector category are likely to meet one of the other applicability thresholds related to emissions of greenhouse gases or criteria air pollutants, the sector is included to ensure that smaller facilities engaged in the process are not excluded.

#### Purpose of Sector No. 5: Fumigation of crops for market using ethylene oxide, propylene oxide, methyl bromide, sulfuryl fluoride, sulfur dioxide, or phosphine and phosphine-generating processes.

The purpose of including the permitted process “fumigation of crops for market using ethylene oxide, propylene oxide, methyl bromide, sulfuryl fluoride, sulfur dioxide, or phosphine and phosphine-generating processes” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 0723, 2033, 2034, 2068, 2099, 5148 or NAICS code(s) 115111, 115114, 3111xx through 3114xx, 3118xx, and 3119xx, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector 5.

This process releases toxic air contaminants that are neurotoxins, carcinogens and teratogens. Ethylene oxide, propylene oxide, and methyl bromide are consistent with the equivalent class of facilities listed in Appendix E EICG.

CTR is also adding methyl bromide replacement sulfuryl fluoride, sulfur dioxide, and phosphine and phosphine-generating processes not currently listed in Appendix E of EICG. Although these chemicals are not currently on the EICG Appendix A-1 list, these chemicals are of concern due to their toxicity. Sulfuryl fluoride is used to fumigate closed structures and their contents for termites, beetles, bedbugs, moths, cockroaches, and rodents.<sup>17</sup> Phosphine fumigants are sold in solid form, and when exposed to water vapor in air, a chemical reaction occurs releasing phosphine gas. Phosphine gas is highly toxic, reactive, and potentially explosive.<sup>18</sup> Sulfur dioxide is also known to be used as a fumigant, and can cause acute health effects upon inhalation. These chemicals are anticipated to be added to the EICG Appendix A-1 list in the next Hot Spots rulemaking update, and are included in the list of toxic air contaminants to be reported in Appendix B in this article

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<sup>17</sup> National Pesticide Information Center, Oregon State University Extension Services. (2017) *Sulfuryl Fluoride General Fact Sheet*. Available: <http://npic.orst.edu/factsheets/sfgen.html>. Accessed December 9, 2019.

<sup>18</sup> Alabama Cooperative Extension System. (2005 August) *Fumigating Agricultural Commodities with Phosphine*. Available: [http://nasdonline.org/static\\_content/documents/7243/d002470.pdf](http://nasdonline.org/static_content/documents/7243/d002470.pdf). Accessed December 9, 2019.

Purpose of Sector No. 6: Rubber and miscellaneous plastics products manufacturing if styrene, butadiene, phthalates, carcinogenic solvents, or isocyanates are used

The purpose of including the permitted process “rubber and miscellaneous plastics products manufacturing if styrene, butadiene, phthalates, carcinogenic solvents, or isocyanates are used” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 3011 through 3089, 3293, 3555 or NAICS code(s) 31332x, 31491x, 3162xx, 3252xx, 325991, 3261xx, 3262xx, and 339113, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

Rationale for Inclusion of Sector No. 6

This process releases carcinogenic toxic air contaminants. Limiting the activity level reporting threshold for this category would not provide the complete emissions data required for community right-to-know requirements under AB 197, and the actions and requirements needed for reducing air pollution impacts on environmental justice communities as required by AB 617. Facilities listed in the permitted process description and classified in one of the SIC or NAICS codes are subject to the requirements of CTR.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG; however, the category in CTR is specific in the listing of the use of substances that would make a facility subject (i.e., styrene, butadiene, phthalates, carcinogenic solvents, or isocyanates). The equivalent class of facilities in EICG applicability is based on when a listed substance is used in a blowing agents, plasticizer, or diluent, or is present as a free monomer.

Purpose of Sector No. 7: Processes emitting 1,4-dioxane in reverse osmosis equipment manufacturing, water treatment filtration systems, manufacturing of paints, lacquers, cosmetics, and cleaning agents; manufacturing or processing of petroleum, pulp and paper, explosives; commercial printing, electroplating/polishing; manufacturing of pesticides, dyes, fibers, pharmaceuticals, adhesives, semiconductors, electronic components, photographic equipment, magnetic recording media, polymers, plastics, rubber, and organic and inorganic chemicals; and degreasing solvent use containing 1,4-dioxane

The purpose of including permitted processes “emitting 1,4-dioxane in reverse osmosis equipment manufacturing, water treatment filtration systems, manufacturing of paints, lacquers, cosmetics, and cleaning agents; manufacturing or processing of petroleum, pulp and paper, explosives; commercial printing, electroplating/polishing; manufacturing of pesticides, dyes, fibers, pharmaceuticals, adhesives, semiconductors, electronic components, photographic equipment, magnetic recording media, polymers, plastics, rubber, and organic and inorganic chemicals; and degreasing solvent use containing 1,4-dioxane” at an activity level reporting threshold of 10 pounds of 1,4-dioxane emitted per year and occurring at a facility classified with SIC code(s) 13xx, 22xx, 26xx, 27xx, 28xx, 29xx, 30xx, 35xx, 36xx, 37xx, 38xx, 49xx, 50xx, 51xx, 73xx, 75xx, 76xx, 97xx or NAICS code(s) 211xxx, 221xxx, 236xxx, 2371xx, 2389xx, 3115xx, 3121xx, 3149xx, 3222xx, 3231xx, 325xxx, 326xxx, 331xxx, 332xxx,

333xxx, 334xxx, 3361xx, 3364xx, 3399xx, 4881xx, 5311xx, 5417xx, 5622xx, 61xxxx, 8111xx, 92811x, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 7

The substance 1,4-dioxane is a toxic air contaminant and a carcinogen. It may be released to air during its production, the processing of other chemicals (e.g., pharmaceuticals and pesticides), and its use as a solvent. 1,4-dioxane remaining as a byproduct in end-use products (e.g., domestic detergents and personal care products) may be released to publicly owned treatment works (POTWs). In air, 1,4-dioxane is subject to photooxidation with an estimated half-life of 1-3 days.<sup>19</sup> Facilities equal to or exceeding the activity level reporting threshold are subject to CTR and include those engaged in the activities listed in the permitted process descriptions (and classified in one of the SIC or NAICS codes listed).

This sector has different SICs listed and includes a list of facilities in the permitted process description, compared to the equivalent class of facilities listed in Appendix E of EICG. Due to revised methodology affecting inhalation risk estimates, the threshold for this sector was reduced from 85 pounds of 1,4-dioxane emitted per year in the EICG to 10 pounds emitted per year to account for a reduction in the amount of exposure presenting a risk to infants and children, and the potential for multiple sources or facilities to present a health risk to persons living or working at nearby locations.

#### Purpose of Sector No. 8: Combustion of crude, residual, distillate, or diesel oil, except for the agricultural operations and medical-related industry sectors as defined in the SIC and NAICS columns

The purpose of including the permitted process “combustion of crude, residual, distillate, or diesel oil, except for the agricultural operations and medical-related industry sectors as defined in the SIC and NAICS columns” at an activity level reporting threshold of 100 gallons of fuel combusted per year, or over 5 hours per year of operation for Tier 4 or higher diesel engines; or 30 gallons of fuel combusted per year or 5 hours per year of operation for Tier zero through tier 3 diesel engines; or 100 gallons of fuel combusted per year for combustion devices other than compression ignition engines, and occurring at a facility classified with any SIC code except SIC codes 0110 through 0762 and 8011 through 8099, or any NAICS code except NAICS codes 111xxx, 112xxx, 1151xx, 1152xx, and 621xxx through 623xxx, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 8

Diesel particulate matter is a toxic air contaminant and a carcinogen. Diesel engine emissions are believed to be responsible for about 70 percent of California’s

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<sup>19</sup> Agency for Toxic Substances & Disease Registry (ATSDR). (2012, April) *Toxicological Profile for 1,4-Dioxane*. Available: <https://www.atsdr.cdc.gov/toxprofiles/tp187-c6.pdf>. Accessed December 9, 2019.



estimated known cancer risk attributable to toxic air contaminants. As a significant fraction of PM<sub>2.5</sub>, diesel particulate matter contributes to a number of health impacts that have been attributed to particulate matter exposure.<sup>20</sup> All facilities equal to or exceeding the activity level reporting threshold are subject, except for those in the agricultural operations and medical-related sectors, which are subject to reporting in later phases.

Compared to the equivalent class of facilities listed in Appendix E of EICG, this sector limits the SIC and NAICS codes to only those classified outside of the agricultural or medical-related sectors. The activity data threshold has been split into three categories: (a) whether the engine is Tier 4 or higher and diesel-fueled, (b) Tier zero through tier 3 diesel engines, or (c) other combustion devices other than compression ignition engines. The proposed activity level reporting thresholds are based on CARB staff health risk assessments, using the current OEHHA<sup>21</sup> unit risk and cancer potency values to evaluate the potential inhalation health risk of diesel particulate matter emitted near sensitive and other receptors. Reporting applicability for facilities in the medical and agricultural production sectors have been delayed to Phases 2 and 3, respectively, to allow extra time for facility operators and air districts to develop data collection practices for these facilities. Also, facilities in the agricultural production sector tend to have engines placed in locations that are not in close proximity to human living spaces.

Purpose of Sector No. 9: Processes emitting styrene, in boat and ship building and repair; rubber products manufacturing; plastics, resins, and foams manufacturing; utility vault manufacturing; cultured marble and stone manufacturing and wholesale; fiber cans and drums manufacturing; manufacturing and installation of polystyrene products; and furniture and fixtures manufacturing

The purpose of including permitted processes “emitting styrene, in boat and ship building and repair; rubber products manufacturing; plastics, resins, and foams manufacturing; utility vault manufacturing; cultured marble and stone manufacturing and wholesale; fiber cans and drums manufacturing; manufacturing and installation of polystyrene products; and furniture and fixtures manufacturing” at an activity level reporting threshold of 1 pound of styrene emitted per year and occurring at a facility classified with SIC code(s) 17xx, 22xx, 23xx, 24xx, 25xx, 26xx, 28xx, 30xx, 32xx, 34xx, 35xx, 37xx, 38xx, 44xx, 45xx, 49xx, 50xx, 51xx, 75xx, 97xx, or NAICS codes 211xxx, 2123xx, 213xxx, 221xxx, 236xxx, 237xxx, 311xxx, 3121xx, 313xxx, 314xxx, 315xxx, 316xxx, 321xxx, 322xxx, 32311x, 324xxx, 325xxx, 326xxx, 327xxx, 331xxx, 332xxx, 333xxx, 334xxx, 336xxx, 337xxx, 339xxx, 441xxx, 443xxx, 4441xx, 445xxx, 447xxx,

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<sup>20</sup> California Air Resources Board (CARB). (2019) *Summary: Diesel Particulate Matter Health Impacts*. Available: <https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts>. Accessed December 9, 2019.

<sup>21</sup> Office of Environmental Health Hazard Assessment (OEHHA). (May 2009) *Appendix A: Hot Spots Unit Risk and Cancer Potency Values (updated May 2019), to the Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures*. Available: <https://oehha.ca.gov/air/crn/technical-support-document-cancer-potency-factors-2009>. Accessed December 11, 2019.

448xxx, 481xxx, 484xxx, 485xxx, 486xxx, 4881xx, 4883xx, 493xxx, 562xxx, 62xxxx, 722xxx, 8111xx, 8114xx, 8122xx, 92811x, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 9

Styrene is a toxic air contaminant and a carcinogen. Styrene volatilizes from water readily and photodegrades in the atmosphere, with a half-life ranging from 7 to 16 hours. Typical sources of styrene emissions are those facilities producing styrene, polystyrene, other plastics, synthetic rubber, and resins. Concentrations of styrene greater than rural air concentrations have been identified in urban and industrial source areas.<sup>22</sup> All facilities equal to or exceeding the activity level reporting threshold are subject to reporting, if the facility is classified in one of the SIC or NAICS codes listed.

Compared to the equivalent class of facilities listed in Appendix E of EICG, this sector limits the SIC and NAICS codes to those sectors for which emissions of styrene have been reported to CEIDARS previously, or for which emissions of styrene can generally be expected. Based on the current OEHHA methodology affecting inhalation risk estimates, to be health protective, the threshold for this sector was established at 1 pound of styrene emitted per year.

#### Purpose of Sector No. 10: Methylene chloride use for paint or coating removal, printing or print shop cleaning, or aircraft maintenance or repair

The purpose of including the permitted process “methylene chloride use for paint or coating removal, printing or print shop cleaning, or aircraft maintenance or repair,” at an activity level reporting threshold of 1 gallon of methylene chloride used per year and occurring at a facility classified with any SIC or NAICS code, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 10

Methylene chloride is a toxic air contaminant and a carcinogen and volatilizes rapidly. Methylene chloride has a lifetime of six months in the atmosphere and will degrade by reaction with photochemically produced hydroxyl radicals. Most atmospheric releases of methylene chloride result from industrial and consumer uses of the solvent.<sup>23</sup>

An activity level reporting threshold of 1 gallon of methylene chloride use per year provides a *de minimis* exemption for low-use emitters, while still providing the level of emissions data needed to evaluate neighborhood impacts. Due to the ubiquitous use of methylene chloride for paint or coating removal, limiting the SIC or NAICS codes

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<sup>22</sup> Agency for Toxic Substances & Disease Registry (ATSDR). (2010 November) *Toxicological Profile for Styrene*. Available: <https://www.atsdr.cdc.gov/ToxProfiles/tp53.pdf>. Accessed December 9, 2019.

<sup>23</sup> Agency for Toxic Substances & Disease Registry (ATSDR). (2000, September) *Toxicological Profile for Methylene Chloride*. Available: <https://www.atsdr.cdc.gov/ToxProfiles/tp14.pdf>. Accessed December 9, 2019.

for this category would not provide confidence in the coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. The industries of “printing or print shop cleaning” and “aircraft maintenance or repair” are specifically mentioned because of the historically common use of the solvent in those industries.

Compared to the equivalent class of facilities listed in Appendix E of EICG, under CTR the sector also includes “printing or print shop cleaning” and “aircraft maintenance or repair” in the description. The specified use threshold is based on consideration of toxicity using the most recent OEHHA guidelines and risk values. The one gallon threshold for methylene chloride use represents a level below which health impacts would likely be negligible.

#### Purpose of Sector No. 11: Paint stripping and varnish stripping

The purpose of including the permitted process “paint stripping and varnish stripping,” at any activity level and occurring at a facility classified with SIC code 7641 or NAICS code 811420, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 11

This process has the potential to release toxic air contaminants and Prop 65 categorized carcinogens such as methylene chloride, chromium, lead, manganese, nickel, and cadmium. There may be other solvents with U.S. Environmental Protection Agency exempt VOC status used in large amounts in addition to the solvent sector categories specifically listed, such as tert-butyl acetate, PCBTF, and methylene chloride. The paint stripping MACT state reduced usage of methylene chloride, which may result in increased usage of other VOC exempt solvents.

#### Purpose of Sector No. 12: Use of N-methyl pyrrolidone

The purpose of including the permitted process “used of N-methyl pyrrolidone ” at a activity level reporting threshold of 1 gallon of N-methyl pyrrolidone per year occurring at a facility classified any SIC code(s) or NAICS code(s) is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 12

N-methyl pyrrolidone is currently listed as a developmental and reproductive toxic by Prop 65. HESIS put out a Health Hazard Advisory detailing it’s reproductive and nervous system toxicity, in addition to irritation to the eyes, nose, throat and skin. N-methyl pyrrolidone emissions are not currently reported to CARB due to it not being on the AB 2588 “Hot Spots” Appendix A-I list. Facilities have the potential to be emitting thousands of pounds a year of this chemical based on activity reports and solvent usage. Due to its toxic effects, 1 gallon per year could be a potential health risk and therefore was chosen as the activity level threshold.

### Purpose of Sector No. 13: Dry cleaning facilities, except facilities that only use water or carbon dioxide based cleaning systems

The purpose of including the permitted process “dry cleaning facilities, except facilities that only use water or carbon dioxide based cleaning systems” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 7216, 7217 or NAICS code(s) 812320, 561740, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

### Rationale for Inclusion of Sector No. 13

Some dry-cleaning solvents, notably perchloroethylene and n-propyl bromide (also known as 1-Bromopropane) are carcinogenic toxic air contaminants. N-propyl bromide is occasionally used in dry cleaning and its use has increased as a substitute for other carcinogens (i.e., perchloroethylene).<sup>24</sup> Water and carbon dioxide-based cleaning systems do not emit toxic air contaminants. With the phase-out of dry cleaning using perchloroethylene by 2023, CARB staff do not expect the use of perchloroethylene at dry cleaners to be applicable to any permitted source after 2023. However, CARB staff are including this sector to remain consistent with the classes of facilities in Appendix E of AB 2588, and to collect emissions inventories of alternative dry-cleaning chemicals including glycol ethers. The SIC and NAICS codes listed cover the range of industry classifications among which CARB staff expect emissions to occur, thereby limiting the breadth of facilities. To include comprehensive reporting for all identified sources, which may be located near population centers, the “Any activity level” threshold is applied to this source category.

### Purpose of Sector No. 14: Tert-butyl acetate use in, aerospace manufacturing and maintenance; fabricated metal products manufacturing; manufacture or use of coatings, inks, adhesives, cleaners and degreasers; and military facilities. Tert-butyl acetate from auto body repair and coating operations are reported under the Phase 2 category for that process

The purpose of including the permitted process “tert-butyl acetate use in, aerospace manufacturing and maintenance; fabricated metal products manufacturing; manufacture or use of coatings, inks, adhesives, cleaners and degreasers; and military facilities” at an activity level reporting threshold of 20 pounds of tert-butyl acetate used per year and occurring at a facility classified with SIC code(s) 28xx, 32xx, 33xx, 34xx, 37xx, 37xx, 49xx, 50xx, 97xx, or NAICS codes 325xxx, 327xxx, 331xxx, 332xxx, 3362xx, 3363xx, 3369xx, 3364xx, 5417xx, 5629xx, 92811x, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

### Rationale for Inclusion of Sector No. 14

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<sup>24</sup> California Department of Public Health (CDPH) (2016 December) *Hazard Evaluation System and Information Service (HESIS), 1-Bromopropane Background*. Available: <https://www.cdph.ca.gov/Programs/CCDC/DEOD/DCDC/DCDC/HESIS/CDPH%20Document%20Library/SB193-1-BP-Background.pdf>. Accessed December 9, 2019.

Tert-butyl acetate is a toxic air contaminant and a carcinogen. An activity level reporting threshold of the use of 20 pounds of tert-butyl acetate used per year provides a *de minimis* exemption for low-use emitters, while still providing the level of emissions data needed to evaluate toxic impacts. The SIC and NAICS codes listed cover the range of industry classifications among which CARB staff expect emissions of tert-butyl acetate to occur, thereby limiting the breadth of facilities. This will allow districts, CARB, and regulated entities to focus on those industries with the most potential to emit tert-butyl acetate.

This sector is not currently a listed class of facility in Appendix E of EICG. Although this chemical is not currently on the EICG Appendix A-1 list, this chemical is of concern and is included in Appendix B of CTR as a contaminant that is required to be reported. Tert-butyl acetate is anticipated to be added to the EICG Appendix A-1 list in the next Hot Spots rulemaking update.

Purpose of Sector No. 15: Use of parachlorobenzotrifluoride (PCBTF) in cleaning or degreasing solvents, adhesives, printing inks, or coating operations. PCBTF from auto body repair and coating operations are reported under the Phase 2 category for that process.

The purpose of including the permitted process "use of parachlorobenzotrifluoride (PCBTF) in cleaning or degreasing solvents, adhesives, printing inks, or coating operations. PCBTF from auto body repair and coating operations are reported under the Phase 2 category for that process." at an activity level reporting threshold of 5 pounds or 0.5 gallons of parachlorobenzotrifluoride used per year and occurring at a facility classified with any SIC code(s) or NAICS code(s) is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1. Any facilities classified as auto body repair and coating operations and the associated SIC(s) 5511 through 5521, 7532, 7535 are reported under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 15

Parachlorobenzotrifluoride (PCBTF) has been categorized as a Prop 65 carcinogen and granted exempt VOC status by the U.S. EPA. The exempt VOC status has led to extensive use of PCBTF, especially in coatings and adhesives. An activity level reporting threshold of 5 pounds or 0.5 gallons of PCBTF used per year is based on the high level of use and recently adopted cancer potency values by OEHHA.

#### Purpose of Sector No. 16: Solvent cleaning and degreasing

The purpose of including the permitted process "solvent cleaning and degreasing" at any activity level reporting threshold for carcinogenic solvents or at an activity level reporting threshold of 55 gallons used per month (annual average) for non-carcinogenic solvents and occurring at a facility classified with SIC code(s) 13xx, 17xx, 22xx, 25xx, 26xx, 27xx, 28xx, 29xx, 30xx, 32xx, 33xx, 34xx, 35xx, 36xx, 37xx, 38xx, 39xx, 45xx, 49xx, 509x, 519x, 75xx, 7623, 7641, 8071, 822x, 9711 or NAICS code(s) 211xxx, 212xxx, 213xxx, 221xxx, 238xxx, 322xxx, 323xxx, 324xxx, 325xxx, 326xxx, 327xxx, 332xxx, 333xxx, 334xxx, 335xxx, 336xxx, 337xxx, 339xxx, 423xxx, 425xxx,

441xxx, 447xxx, 451xxx, 486xxx, 488xxx, 541xxx, 562xxx, 611xxx, 811xxx, 928xxx, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 1.

#### Rationale for Inclusion of Sector No. 16

Cleaning and degreasing solvents include many compounds that are toxic air contaminants and some that are carcinogens. The activity level reporting threshold for non-carcinogenic solvents is equivalent to the current EICG Appendix E threshold and the reporting threshold of any activity level for carcinogenic solvents is based on potential health risk to nearby sensitive receptors. All facilities classified in one of the SIC or NAICS codes listed and with an activity level equal to or exceeding the reporting threshold are subject.

#### SECTOR PHASE 2: PERMITTED PROCESSES

Purpose of Sector No. 17: Isocyanate compound use, in print shops and commercial printing; aerospace manufacturing and maintenance; adhesive and sealants manufacturing; plastics foam products manufacturing; military facilities; manufacture of flexible and rigid foams, fibers, coatings such as paints and varnishes, and elastomers; spraying of polyurethane coatings on cement, wood, fiberglass and metals; surface coating of appliances; surface coating of magnetic tape; manufacture or use of blowing agents; and production of polyurethane foam

The purpose of including the permitted process “isocyanate compound use, in print shops and commercial printing; aerospace manufacturing and maintenance; adhesive and sealants manufacturing; plastics foam products manufacturing; military facilities; manufacture of flexible and rigid foams, fibers, coatings such as paints and varnishes, and elastomers; spraying of polyurethane coatings on cement, wood, fiberglass and metals; surface coating of appliances; surface coating of magnetic tape; manufacture or use of blowing agents; and production of polyurethane foam” at an activity level reporting threshold of the use of materials containing 3 pounds of isocyanates per year and occurring at a facility classified with SIC code(s) 24xx, 25xx, 26xx, 27xx, 28xx, 30xx, 33xx, 347x, 36xx, 37xx, 38xx, 39xx, 45xx, 50xx, 51xx, and 97xx, or NAICS codes 321xxx, 322xxx, 32311x, 324xxx, 325xxx, 326xxx, 3279xx, 331xxx, 334xxx, 335xxx, 3361xx, 3364xx, 3366xx, 339xxx, 481xxx, 4881xx, 4883xx, 5417xx, 8114xx, 92811x, is to make establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 17

Isocyanate compounds are toxic air contaminants, can cause increased risk of asthma, and are carcinogens. Toluene diisocyanate (TDI) and methylenediphenyl diisocyanate (MDI) are two such isocyanate compounds that are extremely reactive and widely used

in the production of polyurethane materials. Exposure of the general population to diisocyanates could potentially result from industrial exposures.<sup>25</sup>

An activity level reporting threshold of the use of materials containing 3 pounds or more of isocyanates per year provides a *de minimis* exemption for low-use emitters, while still providing the level of emissions data needed to understand the quantities and sources of airborne emissions and their impact. The SIC and NAICS codes listed cover the range of industry classifications that CARB staff expects emissions of isocyanates to occur.

This sector is not currently a listed class of facility in Appendix E of EICG, but these chemicals are currently on the EICG Appendix A-1 list. These chemicals are toxic enough to warrant a separate category focused on the use of isocyanate containing materials.

#### Purpose of Sector No. 18: Printing and publishing including print shops and miscellaneous commercial printing

The purpose of including the permitted process "printing and publishing including print shops and miscellaneous commercial printing" at an activity level reporting threshold of 2 gallons used per day (annual average) for graphic arts materials with no isocyanates or 0.5 gallons per day (annual average) for graphic arts materials with isocyanates and occurring at a facility classified with SIC code(s) 2711 through 2771, 2782 or NAICS code(s) 313310, 32311x, 5111xx, 51223x, 561439, 81292x, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 18

Printing and publishing have the potential to emit many types of toxic air contaminants, including isocyanates. The activity level reporting threshold is based on assessment of the potential health risk of toxic air contaminants released from printing and publishing operations near sensitive receptors. The reporting threshold for graphic arts materials with no isocyanates is similar to the current EICG Appendix E threshold and the reporting threshold for graphic arts materials with isocyanates is lower due to the high toxicity of isocyanates. All facilities equal to or exceeding the activity level reporting threshold and classified in one of the SIC or NAICS codes listed are subject.

#### Purpose of Sector No. 19: Hazardous waste treatment, storage, disposal and recycling at a hazardous waste treatment, storage, disposal and recycling facility

The purpose of including the permitted process "hazardous waste treatment, storage, disposal and recycling at a hazardous waste treatment, storage, disposal and recycling facility" at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to establish that the owners or operators of those

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<sup>25</sup> Agency for Toxic Substances & Disease Registry (ATSDR). (2018 June) *Toxicological Profile for Toluene Diisocyanate and Methylenediphenyl Diisocyanate*. Available: <https://www.atsdr.cdc.gov/ToxProfiles/tp206.pdf>. Accessed December 9, 2019.

facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 19

Emissions from hazardous waste treatment, storage, disposal, and recycling facilities include toxic air contaminants and carcinogens. The types and variability of emissions of air pollutants potentially emitted by the processes do not allow for establishing a *de minimis* activity level reporting threshold. While the range of SIC and NAICS industry classifications are listed as “any”, the definition of “hazardous waste treatment, storage, disposal, and recycling facility” limits the types of facilities subject to this sector.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 20: Welding, laser cutting and plasma cutting of metal materials

The purpose of including the permitted process “welding, laser cutting and plasma cutting of metal materials” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 1799, 3356, 3496, 3541, 3542, 3544, 3548, 3699, 7692 or NAICS code(s) 325998, 331491, 332313, 333514, 333517, 333922, 335311, 811310, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 20

Welding, laser cutting and plasma cutting of metal materials has the potential to emit metals and other toxic air contaminants. The activity threshold is, “Any activity level” because limiting the activity level threshold for this category would not provide the complete emissions data required for the community right-to-know requirements under AB 197, and the actions and requirements for identifying and reducing air pollution impacts on selected environmental justice communities as required by AB 617. Facilities with the applicable SIC and NAICS codes are subject to the reporting requirements of CTR and are expected to provide a comprehensive inventory.

#### Purpose of Sector No. 21: Construction aggregate processing, if asphalt products are also used or produced

The purpose of including the permitted process “construction aggregate processing, if asphalt products are also used or produced” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 1442 through 1446 or NAICS code(s) 212321 and 212322, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 21

This process has the potential to release emissions of toxic air contaminants, including metals, benzene, formaldehyde, toluene, xylenes, and various polycyclic aromatic



hydrocarbons. Limiting the activity level reporting threshold for this category would not provide the confidence in coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. Facilities listed in the permitted process description and classified in one of the SIC or NAICS codes are subject to the requirements of CTR.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 22: Chemicals and allied products manufacturing

The purpose of including the permitted process “chemicals and allied products manufacturing” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 2812 through 2899 or NAICS code(s) 211112, 311942, 331311, 325xxx, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 22

This process has the potential to emit many types of carcinogenic toxic air contaminants, ranging from low OEHHA cancer unit risk factors to high. This is a “no threshold” or “Any activity level” category because the sector activities and emissions are extremely diverse, so there is not a specific activity level reporting threshold for the category that would provide the confidence in coverage or completeness of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. Facilities classified in one of the SIC or NAICS codes are subject to the requirements of CTR.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 23: Bulk petroleum storage and loading, bulk benzene storage and loading, and related wholesalers

The purpose of including the permitted process “bulk petroleum storage and loading, and related wholesalers” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 5171, 5172 or NAICS code(s) 4247xx, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 23

This process releases multiple carcinogenic toxic air contaminants such as benzene, ethyl benzene, and polycyclic aromatic hydrocarbons. The activity threshold is, “Any activity level” because limiting the activity level threshold for this category would not provide the complete emissions data required for the community right-to-know requirements under AB 197, and the actions and requirements for identifying and reducing air pollution impacts on selected environmental justice communities as

required by AB 617. Facilities listed in the permitted process description and classified in one of the SIC or NAICS codes are subject to the requirements of CTR.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 24: Polybrominated biphenyl compounds (PBBs), and any brominated diphenyl ethers, manufacture or use

The purpose of including the permitted process “polybrominated biphenyl compounds, and any brominated diphenyl ethers, manufacture and use” at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 24

Polybrominated biphenyl compounds (including brominated diphenyl ethers) are synthetic, persistent, and bioaccumulative compounds associated with adverse effects on the thyroid and brain development. The widespread use of polybrominated diphenyl compounds as fire retardants since the late 1970s has resulted in their presence in the environment.<sup>26</sup> Although the penta- and octa-formulations of polybrominated diphenyl ethers are banned and no longer manufactured in California (California State Senate, 2003–2004. Bill # AB 302), the deca-brominated products are still used in most types of synthetic materials, including textiles and polyester used for printed circuit boards and in high-impact plastics used in consumer electronics.<sup>27</sup> Moderate to highly brominated congeners are found in air samples relatively close to the source of pollution, while less brominated congeners travel greater distances from the source.<sup>28</sup>

Limiting the activity level reporting threshold or the SIC or NAICS codes for this category would not provide confidence in the coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617.

This sector is not currently a listed class of facility in Appendix E of EICG. Although these chemicals are not currently on the EICG Appendix A-1 list, these chemicals are of concern. These chemicals are anticipated to be added to the Hot Spots EICG Appendix A-1 list in the next rulemaking update.

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<sup>26</sup> Agency for Toxic Substances & Disease Registry (ATSDR). (2017, March) *Toxicological Profile for Polybrominated Diphenyl Ethers*. Available: <https://www.atsdr.cdc.gov/toxprofiles/tp207.pdf>. Accessed December 9, 2019.

<sup>27</sup> University of California, Davis. (2005 October). *Near-Source Ambient Air Monitoring of Polybrominated Diphenyl Ethers. Report Prepared for the California Air Resources Board Project # 01-407*. Available: <https://ww3.arb.ca.gov/toxics/pbde%20final%20report%202005.pdf>. Accessed December 9, 2019.

<sup>28</sup> Clinical Medicine & Research. (2003 October) *Polybrominated Diphenyl Ethers (PBDEs): New Pollutants-Old Diseases*. Available: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1069057/>. Accessed December 9, 2019

#### Purpose of Sector No. 25: Use of ethylene oxide for sterilization

The purpose of including the permitted process "use of ethylene oxide for sterilization" at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 25

Ethylene oxide is a toxic air contaminant and a carcinogen. The activity level reporting threshold is similar to the EICG Appendix E threshold which is consistent with the ethylene oxide ATCM, and serves to screen out facilities with *de minimis* risk. Facilities equal to or exceeding the activity level reporting threshold are subject and include those listed in the permitted process description.

#### Purpose of Sector No. 26: Leather and hide tanning and finishing, processing and fabricated goods

The purpose of including the permitted process "leather and hide tanning and finishing, processing and fabricated goods," at any activity level and occurring at a facility classified with SIC code 3111 or NAICS code 316110, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 26

This process has the potential to emit hazardous air pollutants including glycol ethers, toluene and xylene. The U.S. Environmental Protection Agency has a Maximum Achievable Control Technology (MACT) standard of 6.8 pounds of HAP per 1,000 square feet of leather processed for existing upholstery leather operations and 2.5 pounds of HAP per 1,000 square feet of leather processed for new sources. The MACT emission limit for existing sources with water-resistant/ specialty leather product process operations is 5.6 pounds of HAP per 1,000 square feet of leather processed. The MACT emission limit for existing sources with nonwater-resistant leather product process operations is 3.7 pounds of HAP per 1,000 square feet of leather processed. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

#### Purpose of Sector No. 27: Retail sale of gasoline

The purpose of including the permitted process "retail sale of gasoline" at an activity level reporting threshold of 25,000 gallons of gasoline sold per year and occurring at a facility classified with any SIC code(s) or NAICS code(s), is to make the owners or operators of those facilities applicable to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 27

This process releases benzene and other carcinogenic toxic air contaminants and is commonly located near sensitive receptors. The activity level reporting thresholds are based on health risk and serve to screen out facilities with *de minimis* risk. The activity

level reporting threshold for retail sale of gasoline is expected to include all, or nearly all, retail gasoline dispensing facilities in California under the CTR reporting requirements. Limiting the SIC and NAICS codes for this category would not provide the complete data needed to help protect public health. This is partially because gasoline sales may occur at businesses that are primarily classified as convenience stores, grocery stores, or other sectors, and including SIC or NAICS limitations potentially would not fully capture businesses dispensing gasoline.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG, other than CTR including activity level reporting threshold of 25,000 gallons per year to screen out gas stations with minimal emissions.

Purpose of Sector No. 28: Auto body repair and coating operations at auto body shops, including new and used car dealers

The purpose of including the permitted process "auto body repair and coating operations at auto body shops, including new and used car dealers" at an activity level reporting threshold of 50 gallons of paint used per year and occurring at a facility classified with SIC code(s) 5511 through 5521, 7531, 7532, 7535 or NAICS code(s) 4411xx, 44121x, 441228, 44131x, 811111, 811121, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

Rationale for Inclusion of Sector No. 28

This process has the potential to emit many types of toxic air contaminants, including metals, solvents, and isocyanates. The activity level reporting threshold is based on assessment of the potential health risk of toxic air contaminants released from auto body repair and coating operations near sensitive receptors. All facilities equal to or exceeding the activity level reporting threshold and classified in one of the SIC or NAICS codes listed are subject.

Compared to the equivalent class of facilities listed in Appendix E of EICG, this category in CTR includes an activity level reporting threshold of 50 gallons of paint used per year, while there is no such threshold in Appendix E of EICG.

Purpose of Sector No. 29: Medical services, hospitals, and related facilities which use formaldehyde (or formalin), glutaraldehyde, ethylene oxide, or diesel engines

The purpose of including the permitted process "medical services, hospitals, and related facilities which use formaldehyde (or formalin), glutaraldehyde, ethylene oxide, or diesel engines" at an activity level reporting threshold of 110 pounds of formaldehyde emitted per year, or 110 pounds of glutaraldehyde emitted per year, or 4 pounds of ethylene oxide used per year, or 30 gallons of diesel fuel burned per year, or 5 hours of engine operation per year, and occurring at a facility classified with SIC code(s) 8011 through 8099 or NAICS code(s) 62xxxx, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

Rationale for Inclusion of Sector No. 29

Formaldehyde, glutaraldehyde, ethylene oxide, and diesel particulate matter are toxic air contaminants, and formaldehyde, ethylene oxide, and diesel particulate matter are carcinogens. Medical services, hospitals, and related facilities are sensitive receptors, and therefore require its own specific category. The activity level reporting thresholds are based on health risk and serve to screen out facilities with de minimis risk. Facilities equal to or exceeding any of the activity level reporting thresholds are subject and include those listed in the permitted process description and classified in one of the SIC or NAICS codes listed.

Compared to the equivalent class of facilities listed in Appendix E of EICG, the category in CTR lists formalin, in addition to formaldehyde, while also listing glutaraldehyde, and diesel fuel combusted. The CTR category also lists an activity level reporting threshold for sterilization using ethylene oxide, while Appendix E of EICG relies on the separate class listing of "Facilities using ethylene oxide for sterilization."

#### Purpose of Sector No. 30: Wastewater treatment at wastewater treatment plants, including incineration of sludge

The purpose of including the permitted process "wastewater treatment at wastewater treatment plants, including incineration of sludge" at an activity level reporting threshold of 10 million gallons annual average daily flow for covered systems, 5 million gallons annual average daily flow for uncovered systems, or any activity level for facilities that incinerate sludge, and occurring at a facility classified with SIC code 4952 or NAICS code 221320, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

#### Rationale for Inclusion of Sector No. 30

Wastewater treatment has the potential to emit toxic air contaminants. The activity level reporting threshold is based on assessment of the potential health risk of toxic air contaminants released from wastewater treatment operations near sensitive receptors. The current EICG Appendix E threshold of 10 million gallons of annual average daily flow is being lowered to 5 million gallons of annual average daily flow for uncovered systems due to recent OEHHA guidelines and childhood risk science. The reporting threshold for covered systems remains at 10 million gallons of annual average daily flow because pooled source testing, previously done for wastewater treatment plants, found that having a covered primary treatment area reduced emissions significantly compared to those without covered primary treatment. All facilities equal to or exceeding the activity level reporting threshold and classified in the SIC code or NAICS code listed are subject.

#### Purpose of Sector No. 31: Flat glass manufacturing

The purpose of including the permitted process "flat glass manufacturing," at an activity level reporting threshold of 100 pounds of glass production and occurring at a facility classified with SIC code 3211 or NAICS code 327211, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

### Rationale for Inclusion of Sector No. 31

Flat glass manufacturing has the potential to emit hazardous air pollutants including arsenic, cadmium, lead, manganese, nickel and other metals. The U.S. Environmental Protection Agency has a Maximum Achievable Control Technology standard for glass manufacturing operations is 0.2 pounds of HAP/PM per ton of glass. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

### Purpose of Sector No. 32: Pressed and blown glassware manufacturing

The purpose of including the permitted process of "pressed and blown glassware manufacturing" at an activity level reporting threshold 100 pounds of glass production at a facility classified with SIC code(s) 3229, 3221 or NAICS code(s) 327212, 327213 is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

### Rationale for Inclusion of Sector No. 32

Pressed and blown glassware manufacturing has the potential to emit hazardous air pollutants including arsenic, cadmium, lead, manganese, nickel and other metals. The U.S. Environmental Protection Agency has a Maximum Achievable Control Technology standard for glass manufacturing operations of 0.2 pounds of HAP/PM per ton of glass. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

### Purpose of Sector No. 33: Clay ceramics manufacturing

The purpose of including the permitted process of "clay ceramics manufacturing" at an activity level reporting threshold 1 ton of product manufactured at a facility classified with SIC code(s) 3253, 3261 or NAICS code(s) 327120, 327110 is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 2.

### Rationale for Inclusion of Sector No. 33

Emissions from clay ceramics manufacturing includes hazardous air pollutants such as chromium, lead, manganese, nickel and other metallic hazardous air pollutants. The U.S. Environmental Protection Agency has multiple Maximum Achievable Control Technology standards for this sector including temperature limits, fuel restrictions, controls on spray operations, glaze composition limits and more. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

## SECTOR PHASE 3: PERMITTED PROCESSES

### Purpose of Sector No. 34: Hexavalent chromium use in cooling towers

The purpose of including the permitted process "hexavalent chromium use in cooling towers" at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to include the owners or operators of those facilities

under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 34

The use of hexavalent chromium in cooling towers has the potential to emit the highly toxic air contaminant hexavalent chromium. While the Chromate Treated Cooling Towers Airborne Toxic Control Measure (ATCM) bans hexavalent chromium-containing compounds in cooling tower recirculation water, CARB staff are including this sector to remain consistent with the classes of facilities in Appendix E of EICG. In remaining consistent with EICG, the activity level reporting threshold and the SIC or NAICS codes for this category were not limited.

#### Purpose of Sector No. 35: Incineration of hazardous, municipal, or biomedical waste, or tires

The purpose of including the permitted process “incineration of hazardous, municipal, or biomedical waste, or tires” at any activity level reporting threshold and occurring at a facility classified with any SIC or NAICS code, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 35

Emissions from the incineration of hazardous, municipal, or biomedical waste, or tires include toxic air contaminants and carcinogens. The variety of air pollutants emitted do not allow for a specific *de minimis* activity level reporting threshold, therefore the “Any activity level” designation is applied. Staff has not limited the SIC or NAICS codes for this category, because regardless of the overarching business type performing the incineration, toxic emissions would still be produced. Therefore, limiting the SIC or NAISC categories, would not provide the complete coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG, except for animal cremation, which is included as a separate sector (“Cremation of humans or animals”).

#### Purpose of Sector No. 36: Cremation of humans or animals

The purpose of including the permitted process “cremation of humans or animals” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 7261, 6531, 8699, or NAICS code 812220, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 36

The cremation of humans or animals produces toxic air contaminants and carcinogens. The complex variety and types of air pollutants emitted by the process does not lend itself to establishing a *de minimis* activity level reporting threshold. Limiting the

activity level reporting threshold or the SIC or NAICS codes for this category would also not provide the complete emissions data needed for the community right-to-know provisions under AB 197, and as needed to meet the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617.

This sector has two equivalent classes of facilities listed in Appendix E of EICG. In the EICG, animal crematories are classified under the equivalent class of facilities for “Incineration of hazardous, municipal, or biomedical waste, or tires,” which affect all SIC categories. The other equivalent class of facilities in the EICG is “Funeral services with crematories.” That class affects SIC code 7261.

#### Purpose of Sector No. 37: Fiberglass and various fiberglass materials and product manufacturing

The purpose of including the permitted process “fiberglass and various fiberglass materials and product manufacturing” at any activity level reporting threshold and occurring at a facility classified with SIC codes(s) 2221, 3229, or NAICS code(s) 326191, 326199, 337125, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 37

Fiberglass and various fiberglass materials and product manufacturing have the potential to release toxic air contaminants and carcinogens, including styrene, formaldehyde, and hexavalent chromium. Limiting the activity level reporting threshold for this category would not provide emissions data needed for community right-to-know requirements under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 38: Pulp and paper manufacturing

The purpose of including the permitted process “pulp and paper manufacturing” at any activity level reporting threshold and occurring at a facility classified with SIC codes(s) 2611, 2621, 2631, or NAICS code(s) 3221xx, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 38

Pulp and paper manufacturing has the potential to release toxic air contaminants and carcinogens, including hexachlorobenzene, dioxins/furans and polycyclic aromatic hydrocarbons. Limiting the activity level reporting threshold for this category would not provide the complete and comprehensive emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air



pollution impacts on environmental justice communities as required by AB 617. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 39: Semiconductors and related devices manufacturing

The purpose of including the permitted process “semiconductors and related devices manufacturing” at any activity level reporting threshold and occurring at a facility classified with SIC code 3674, or NAICS code 334413, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 39

Semiconductors and related device manufacturing has the potential to release toxic air contaminants, including hydrochloric acid, hydrofluoric acid, glycol ethers, methanol, xylene, and other solvents. Limiting the activity level reporting threshold for this category would not provide the complete statewide emissions data required for meeting the community right-to-know provisions under AB 197 and the meeting actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 40: Oil and gas extraction or production

The purpose of including the permitted process “oil and gas extraction or production” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 1311 through 1389, or NAICS code(s) 211xxx, 213111, 213112, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 40

Oil and gas extraction and production has the potential to release toxic air contaminants, including benzene, toluene, ethylbenzene, xylenes, styrene, hydrogen sulfide, and n-hexane. Due to the quantity and complexity of compounds emitted, establishing an activity level reporting threshold for this category would not provide the emissions data needed for the community right-to-know provisions under AB 197, and information needed to meet the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector does not have an equivalent class of facilities listed in Appendix E of EICG, however proposed amendments to the EICG, if approved, would align with these proposed amendments to CTR.

Purpose of Sector No. 41: Melting, smelting, recovery, reclamation, or recycling of lead-containing materials, including but not limited to lead batteries

The purpose of including the permitted process “melting, smelting, recovery, reclamation, or recycling of lead-containing materials, including but not limited to lead batteries” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 3300 through 3499, 3690 through 3699, 3714, 3728, 5051, 5093, 9711, or NAICS code(s) 331410, 331492, and 423930, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

Rationale for Inclusion of Sector No. 41

Melting, smelting, recovery, reclamation, or recycling of lead-containing materials, including but not limited to lead batteries have the potential to release the criteria air pollutant and toxic air contaminant, lead. Due to the toxicity of lead, and community concern with associated emissions, it was not possible to establish a credible lower-limit reporting threshold under which emissions would not be a concern, Therefore the sector does not have a reporting threshold, and all identified sources are subject to reporting. This sector applies to only those SIC and NAICS codes listed, which are expected to include the majority of the emissions from this process.

This sector does not have an equivalent class of facilities listed in Appendix E of EICG, however proposed amendments to the EICG, if approved, would align with these proposed amendments to CTR.

Purpose of Sector No. 42: Primary or secondary metal melting, smelting, refining, alloying, forging, or foundry/casting operations

The purpose of including the permitted process “primary or secondary metal melting, smelting, refining, alloying, forging, or foundry/casting operations” at any activity level reporting threshold and occurring at a facility classified with SIC code(s) 3300 through 3499, 3690 through 3699, 3714, 3728, 5051, 5093, 9711, or NAICS code(s) 331410, 331492, 33151x, 33152x, and 423930, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

Rationale for Inclusion of Sector No. 42

Primary or secondary metal melting, smelting, refining, alloying, forging, or foundry/casting operations have the potential to release toxic air contaminants, including hazardous metals such as lead, zinc, nickel, copper, cadmium, chromium, mercury, selenium, arsenic, and cobalt. Because of the potential toxicity of these metals, all sources must be subject to reporting, to provide an overall assessment of all associated facilities within California, for use in comparing emissions from facilities, and to effectively meet the community right-to-know, and public protection provisions

of AB 197 and AB 617. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector does not have an equivalent class of facilities listed in Appendix E of EICG, however proposed amendments to the EICG, if approved, would align with these proposed amendments to CTR.

#### Purpose of Sector No. 43: Prepared feed manufacturing

The purpose of including the permitted process “prepared feed manufacturing” at an activity level reporting threshold of one ton of product manufacturing at a facility classified with SIC code 2048 or NAICS code 32119, is to include the owners or operators of those facilities under the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 43

Prepared feed manufacturing has the potential to emit toxic air contaminants including chromium and manganese compounds. The U.S. EPA has set Maximum Achievable Control Technology standards for this sector on facility operations and control technologies to control for those compounds and particulate matter. The specified SIC and NAICS codes, and the activity level reporting threshold, will capture a comprehensive inventory of the sector.

#### Purpose of Sector No. 44: Wood preserving

The purpose of including the permitted process “wood preserving,” at any activity level and occurring at a facility classified with SIC code 259x or NAICS code(s) 32114, 3212xx, is to establish that the owners or operators of those facilities are subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 44

Wood preserving has the potential to emit toxic air contaminants such as chromium, arsenic, dioxins, and methylene chloride. The U.S. Environmental Protection Agency has Maximum Achievable Control Technology standards for pressure and thermal treatment processes, including requirements to apply preservatives only within enclosed vessels or process treatment tanks equipped with an air scavenging system.

#### Purpose of Sector No. 45: Long term asbestos removal on a routine and predictable basis

The purpose of including the permitted process “long term asbestos removal on a routine and predictable basis” at an activity level reporting threshold of one year duration and occurring at a facility classified with any SIC or NAICS code, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 45

Removal of asbestos-containing materials have the potential to release asbestos, a toxic air contaminant and carcinogen. Long-term asbestos removal has a potentially

greater amount of emissions of asbestos to the environment. Due to the previously ubiquitous use of asbestos, limiting the SIC or NAICS codes for this category would not provide the confidence in coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617. However, as emissions reporting under CTR affects permitted processes (unless the air district requires quantification of an unpermitted emissions source), CARB staff does not anticipate this category to solely make any facility subject to the emissions reporting requirements of CTR.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG.

#### Purpose of Sector No. 46: Combustion of residual, distillate, or diesel oil, in agricultural operations-related industry sectors

The purpose of including the permitted process “combustion of residual, distillate, or diesel oil, in agricultural operations-related industry sectors” at an activity level reporting threshold of 100 gallons of fuel combusted per year, or over 5 hours per year of operation for Tier 4 or higher diesel engines; or 30 gallons of fuel combusted per year or 5 hours per year of operation for Tier zero through tier 3 diesel engines; or 100 gallons of fuel combusted per year for combustion devices other than compression ignition engines, and occurring at a facility classified with SIC code(s) 0110 through 0762, or NAICS code(s) 1111xx, 1112xx, 1113xx, 1114xx, 1119xx, 1121xx, 1122xx, 1123xx, 1124xx, 1125xx, 1129xx, 1151xx, and 1152xx, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 46

Diesel particulate matter is a toxic air contaminant and a carcinogen. Sector No. 8 made all facilities equal to or exceeding the activity level reporting threshold subject, except for those in the agricultural operations and medical-related sectors. This sector makes applicable those engines operating in the agricultural and medical-related sectors. The split between the applicable SIC and NAICS codes for this sector is to give those sectors more time to prepare for reporting and to reduce the workload on air districts.

Compared to the equivalent class of facilities listed in Appendix E of EICG, this sector limits the SIC and NAICS codes to only those that may be classified as agricultural operations or in a medical-related industry sector. The threshold has been split into two conditions: whether the engine is Tier 4 and diesel-fueled, or non-Tier 4 engines (i.e., all other engines combusting crude, residual, distillate, or diesel oil). The activity level reporting thresholds proposed are based on health risk assessment using revised OEHA methodology affecting inhalation risk estimates of the potential health risk of diesel particulate matter emitted near sensitive receptors.

#### Purpose of Sector No. 47: Boat and ship building and repair

The purpose of including the permitted process “boat and ship building and repair” at an activity level reporting threshold of 1 gallons of coatings used per year and occurring at a facility classified with SIC code(s) 3731, 3732, or NAICS code(s) 336611, 336612, 488390, 811490, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 47

Boat and ship building and repair has the potential to release toxic air contaminants, including styrene, methylene chloride, toluene, xylene, and methyl chloroform. Facilities equal to or exceeding the activity level reporting threshold are subject. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG, except the reporting threshold in Appendix E of EICG is 20 gallons per year of coatings, and all coating operations performed using handheld nonrefillable aerosol cans only are excluded.

#### Purpose of Sector No. 48: Collection and disposal of refuse

The purpose of including the permitted process “collection and disposal of refuse” at an activity level reporting threshold of 1 pound of vinyl chloride emitted per year or 1 pound of benzene emitted per year, and occurring at a facility classified with SIC code 4953, or NAICS code(s) 5622xx, 562920, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 48

Collection and disposal of refuse have the potential to release toxic air contaminants and carcinogens, including vinyl chloride and benzene. Facilities equal to or exceeding the activity level reporting threshold are subject. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector is consistent with the equivalent class of facilities listed in Appendix E of EICG, except the reporting threshold was decreased from 8.5 pounds of vinyl chloride gas emitted per year to either 1 pound of vinyl chloride or 1 pound of benzene emitted per year, based on updated and more health protective toxic risk values, and updated information about benzene emissions from the sector.

#### Purpose of Sector No. 49: Composting of organic waste

The purpose of including the permitted process “composting of organic waste” at an activity level reporting threshold of emissions of over one ton of particulate matter or total organic gases including methane and occurring at a facility classified with SIC code(s) 2875, 4953, or NAICS code(s) 325314, 562212, 562219, is to make applicable the owners or operators of those facilities to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 49

The process “composting of organic waste” has the potential to emit toxic air contaminants and other pollutants, including hydrogen sulfide and formaldehyde. Facilities that equal or exceed the activity level reporting threshold are subject to the reporting requirements of CTR. This sector only applies to facilities classified with the SIC or NAICS codes listed. This is expected to cover the majority of the emissions from this process.

#### Purpose of Sector No. 50: Recycling facilities, and material recovery facilities that separate organic waste from recyclable materials

The purpose of including the permitted process “recycling facilities, and material recovery facilities that separate organic waste from recyclable materials” at an activity level reporting threshold of emissions of over one ton of particulate matter or total organic gases including methane and occurring at a facility classified with SIC code 4953, or NAICS code(s) 562212, 562920, is to make applicable the owners or operators of those facilities to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 50

Recycling facilities, and material recovery facilities that separate organic waste from recyclable materials have the potential to emit toxic air contaminants and other pollutants, including hydrogen sulfide, formaldehyde, other solvent materials and metals. Facilities that equal or exceed the activity level reporting threshold are subject to the reporting requirements of CTR. This sector only applies to facilities classified with the SIC or NAICS codes listed. This is expected to cover the majority of the emissions from this process.

#### Purpose of Sector No. 51: Scrap and waste wholesale handling and recycling, including but not limited to junk metals, shredding operations, and auto dismantling

The purpose of including the permitted process “scrap and waste wholesale handling and recycling, including but not limited to junk metals, shredding operations, and auto dismantling” at an activity level reporting threshold of 40,000 tons of metal shredded per year or 1,000 tons of metal recycled per year and occurring at a facility classified with SIC code 5093, or NAICS code 423930, is to make applicable the owners or operators of those facilities to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 51

Scrap and waste wholesale handling and recycling, including but not limited to junk metals, shredding operations, and auto dismantling, have the potential to release toxic air contaminants, including metals. Facilities equal to or exceeding the activity level reporting threshold are subject. This sector applies to only those SIC and NAICS codes listed, which are expected to cover the majority of the emissions from this process.

This sector does not have an equivalent class of facilities listed in Appendix E of EICG, however proposed amendments to the EICG, if approved, would align with these proposed amendments to CTR.

#### Purpose of Sector No. 52: Combustion of natural gas or propane

The purpose of including the permitted process “combustion of natural gas or propane” at an activity level reporting threshold of 75 million standard cubic feet or 77,000 MMbtu combusted per year and occurring at a facility classified with any SIC code or NAICS code, is to make the owners or operators of those facilities subject to the emissions reporting requirements of CTR. This sector is included under Sector Phase 3.

#### Rationale for Inclusion of Sector No. 52

Combustion of natural gas or propane have the potential to release toxic air contaminants, including benzene, formaldehyde, and toluene. An activity level reporting threshold of 75 million standard cubic feet or 77,000 MMbtu combusted per year was determined based on cancer risk evaluation using currently accepted emission factors. Facilities equal to or exceeding the activity level reporting threshold are subject. Limiting the SIC or NAICS codes for this category would not provide the confidence in coverage of emissions data required for community right-to-know under AB 197 and the actions and requirements for reducing air pollution impacts on environmental justice communities as required by AB 617.

This sector does not have an equivalent class of facilities listed in Appendix E of EICG, however proposed amendments to the EICG, if approved, would align with these proposed amendments to CTR.

### **Appendix B. Additional Chemicals Subject to Initial Quantification and Reporting**

#### Purpose of Appendix B

The newly added Appendix B provides the list of additional chemicals in Table B-1 that are subject to quantification and reporting under CTR. The list identifies which additional toxics must be reported in addition to those that are currently reportable under the 2007 Air Toxics Hot Spots Emission Inventory Criteria and Guidelines Regulation (EICG), previously cited. The appendix also includes notes and information regarding reporting of the toxics identified in Table B-1.

#### Rationale for Appendix B

Under the existing regulation, reporting is only required for the 2007 Hot Spots list of toxic substances, as identified in the current definition for “Toxic air contaminants.” In order to be more health protective and to require reporting of additional toxics which are of significant health concern and have the potential for exposure risks, the Table B 1 list of substances is added to CTR.

The substances included are based on review of CARB’s own list of Toxic Air Contaminants, U.S. EPA’s Hazardous Air Pollutants, the International Agency for Research on Cancer, the California Proposition 65 (Prop 65), the National Toxicology

Program, and the Hazard Evaluation System and Information Service. The list may also include any additional substances recognized by the CARB as presenting a chronic or acute threat to public health when present in the ambient air.

In general, carcinogens were given high priority for inclusion on the list. Developmental and Reproductive Toxicants (DARTs) along with carcinogens, were also given high priority on the AB 2588 chemical list. Reproductive toxicants can impair reproductive capabilities in men and/or women and interfere with proper growth or health of a child at any point from conception to puberty. DARTs cover a wide range of health effects such as infertility, genetic defects, stillbirth, low birth weight, premature birth and stillbirth as well as childhood cancer or developmental disorders.

All other substances proposed for addition underwent a chemical-by-chemical review process by CARB staff and staff of the California Office of Environmental Health Hazard Assessment (OEHHA), who considered many factors to determine a chemical's potential for public health impacts including: the substance's potential toxicity, how the substance is used, and the potential for the substance to become airborne and travel beyond the boundaries of a facility or business.

To evaluate whether a substance can become airborne, staff reviewed the chemical structure and properties of these chemicals – for example, if a chemical is relatively light (i.e., if it has a low molecular weight or it has a fairly low boiling point), this can be an indication that the chemical is likely to be airborne. Staff also considered special conditions under which heavier substances can become airborne – for example, if a product is designed to be sprayed on a hot surface or a hot engine, or if it's a byproduct of combustion, the chemical could become airborne, even if it's not volatile at room temperature. In addition, see the Purpose and Rationale for Note 8 for additional information regarding the addition of functional groups.

#### Purpose of Appendix B Notes 1, 2, 4, 5, 6, 7

Most of the notes added for Appendix B are provided to provide clarifying descriptions regarding use of the table which could not be placed within the table itself due to space constraints. Notes 3 and 8, pertaining to degree of accuracy and functional groups are discussed separately because they provide more detailed background information.

#### Rationale for Appendix B Notes 1, 2, 4, 5, 6, 7

Most of the notes in Appendix B are provided to assist reporters in understanding and complying with the reporting requirements, by more fully describing notations used in the table. For example, Note 1 is used to indicate the notation used for substance group headings. Note 2 describes when substances must be reported individually, versus summed. Note 3 discusses degree of accuracy reporting, which is addressed in the following section. Notes 4, 5, and 6 discuss reporting of metals, pesticides and flame retardants, and Note 7 describes how substances with multiple Chemical Abstract Service (CAS) identifiers are handled for the same chemicals. Note 8, regarding reporting functional classes, is described below.



### Purpose of Appendix B, Note 3 – Degree of Accuracy Reporting

Note 3 is included to provide reporters instructions regarding how to use the degree of accuracy data in Table B-1 when reporting their toxics emissions data.

### Rationale for Note 3

Note 3 is necessary because without it those subject to CTR would not know how to use the specified degree of accuracy requirements when determining how to report the toxics listed in Table B-1. The following describes the rationale for establishing the specific degree of accuracy values provided in the table.

CARB staff developed the reporting degree of accuracy to communicate to facility operators how accurately they need to report their emissions at a level that is sufficient for characterizing exposure and risk. For example, a highly potent metal like hexavalent Chromium must be reported out to several decimal places in pounds per year, in order to have the reported emissions be useful enough to evaluate the possible public health implications for that facility. By contrast, the emissions of benzene are sufficiently accurate when reported to the nearest two pounds per year, and the emissions of toluene to the nearest 200 pounds per year.

All the listed substances were assigned a reporting degree of accuracy to ensure emissions data will be sufficient to be able to evaluate known health impacts. The reporting degree of accuracy (RDOA). The RDOAs are guided by a combined consideration of the basic toxicity information about the chemicals, and the levels and types of their usage.

Where an explicit health effects value is not available for a substance, the proposed degree of accuracy is based on an order-of-magnitude interval developed by the staffs of the CARB and (Office of Health Hazard Assessment) OEHHA that utilizes other available health information. The proposed degree of accuracy values for the substances in Table B-1 are based on available health effects data other than cancer potency or RELs and the following quantification techniques.

For example, when available, the Permissible Exposure Limits (PELs) from the Occupational Safety and Health Administration (OSHA)<sup>29</sup> were evaluated for the proposed Table B-1 chemical substances degrees of accuracy. PELs are enforced in workplaces. Even though PELs are not enforceable in establishments outside of Cal/OSHA's jurisdiction, the PELs can provide information on acceptable levels of chemicals in the workplace.

Of all the states that have OSHA-approved state plans, California has the most extensive list of PELs. CARB staff evaluated the calculation of a PEL which is based on a health worker (mostly male) and has proposed to convert the PEL value to a REL equivalent, or adjusted REL, to determine a relatively safe threshold for all age bins and account for the difference between an 8 hour threshold (PEL) and a 24 hour threshold (REL). More specifically the PEL was divided by a factor of 3 to account for

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<sup>29</sup> Occupational Safety and Health Administration. (2020) *Permissible Exposure Limits for Toxic Air Contaminants, Table AC-1*. Available: <https://www.osha.gov/dsg/annotated-pels/>. Accessed 8/10/2020:

the difference in averaged time and then divided by a factor of 15 to account for the difference between healthy workers and high-risk populations. Using the adjusted REL, CARB staff calculated a theoretical pounds per year of the emitted toxic substance.

Generally speaking, if the pounds per year calculated was high, on the scale of 100s or 1000s of lbs, it was given a more permissive degree of accuracy for reporting purposes with 200 lbs per year being the highest reporting accuracy. The smaller the amount emitted per year, the tighter the threshold.

An additional source staff used for degree of accuracy purposes was the American Chemistry Government of Industrial Hygienists Association (ACGIH) Threshold Limit Values (TLVs)<sup>30</sup> for the proposed Table B-1 substances when available. TLVs refer to airborne concentrations of chemical substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed, day after day, over a working lifetime, without adverse health effects. The same method described above in calculated and adjusted REL provided the PEL value applies to TLVs in the determination of a reporting degree of accuracy.

If a chemical substance fell into an existing Table B-1 grouping, for example, Antimony trisulfide, it was almost always given the same degree of accuracy as other related chemicals.

For any substances where a PEL or a TLV value was not available, CARB staff evaluated the substance's toxicity data, uses and health effects to gauge a substance's general potency, the types of processes where the substance would be emitted or used and in what general quantities given the types of processes. CARB staff roughly compared those substances to substances whose degrees of accuracy were already determined to get a general sense on what level the substance should be reported. In many cases where a substance falls under a specific grouping, groupings were generally given the same degrees of accuracy for reporting.

The degree of accuracy is a calculated value that represents the facility total amount of emissions of a particular substance that would result in a Hot Spots based prioritization score of approximately one based on those emissions. This ensures that toxics are reported to a level that is health protective. A facility that emits a toxic in an amount that is less than one-half the degree of accuracy is ensured that those emissions will not contribute to the risk at the facility.

Where a cancer potency or a Reference Exposure Level (REL) for chronic or acute effects is available for a chemical substance in Table B-1, the proposed degree of accuracy is a calculated value that represents the facility total amount of emissions of a particular substance that would result in a prioritization score of approximately one based on those emissions.. This ensures that toxics are reported to a level that is health protective. A facility that emits a toxic in an amount that is less than one-half the degree of accuracy is ensured that those emissions will not contribute to the risk at the facility. The RDOA values are into "bins" which were' chosen to group the values

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<sup>30</sup> American Chemistry Government of Industrial Hygienists Association (ACGIH) (2018) Threshold Limit Values (TLVs®) and Biological Exposure Indices (BEIs®).

into convenient intervals (for example, 0.1, 0.5, 1, 2, 5, 10). Each calculated amount was rounded to the nearest "bin". The degree of accuracy values based on this procedure would ensure that emissions will be reported to levels that will allow appropriate characterization of the health impacts.

#### Purpose of Appendix B, Note 8 – Reporting Functional Group Substances

Note is added to provide reporters instructions regarding how to report substances that are included within one of the specified functional group classes.

#### Rationale for Note 8

Note 8 is necessary to instruct reporters that if a chemical substance falls within a specific functional class, the specific CAS number, chemical name, and emissions must be reported for any substance in that class that is emitted by a facility. Without the note, there is the potential for reporters to report all substances within the class combined as a single substance, which would not provide the data needed for identification and analysis of substances.

In broader terms, Table B-1 includes three types of chemical functional groups for which emissions of any substance having the functional group must be reported. These chemical functional groups include: 1) any chemical containing an isocyanate functional group, 2) derivatives and substituted version of polycyclic aromatic compounds that contain any halogen atom, and 3) poly and per fluorinated chemicals (or PFAS-related chemicals).

These functional groups are included in Table B-1 because public health experts have raised concerns that many emerging chemicals go into commercial use only to be found later to pose significant public and environmental health threats. There is very strong evidence that chemicals containing one of the three functional group types above may pose chronic or acute health threats, and many are listed in the U.S. EPA's Significant New Use Rules (SNURs)<sup>31</sup> as substances that could result in exposures or releases of concern. Moreover, each of these groups may consist of thousands of individual substances, and it could be decades before any of these chemicals make it onto one of the six lists cited previously in the overall Purpose and Rationale for Appendix B. Therefore, CARB staff is proposing a more versatile and timely approach to address the reporting of a rapidly evolving list of new and slightly modified chemicals.

Under the existing model, chemicals in Appendix B are listed individually by their Chemical Abstract Service (CAS) number (or, in a few cases, as a group with ID number assigned by CARB). However, new and slightly modified chemicals do not usually have a CAS number and are therefore not subject to reporting requirements, regardless of their potential toxicity. Using the chemical functional group as the parameter that makes a substance subject to reporting is necessary to give the air districts and CARB the ability to collect data on the air emissions of highly toxic

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<sup>31</sup> U.S. EPA. (2019, July 31) Significant New Use Rules on Certain Chemical Substances (19-4.B). Available: [https://www.epa.gov/sites/production/files/2019-08/documents/prepubcopy\\_frl-9997-73\\_snur\\_19-4.b\\_nprm\\_2019-07-31.pdf](https://www.epa.gov/sites/production/files/2019-08/documents/prepubcopy_frl-9997-73_snur_19-4.b_nprm_2019-07-31.pdf). Accessed August 12, 2020.

chemicals without the need to explicitly list potentially tens of thousands of individual CAS numbers.

Staff has researched data and information on substances such as per and polyfluorinated alkyl substances (PFAS), isocyanates and PAHs in commerce and studies have shown that various substances within these larger groups have potential to be airborne. These substances are listed individually with their respective CAS Registry Number in larger groups within Table B-1. The functional groups exist to address the data on new and emerging classes of chemicals within these similar larger groups with an emphasis on growing new classes that are either more volatile or to cover sufficient breadth to address the well-observed phenomenon of slightly modifying a chemical or a type of chemical if it becomes a regulatory focus.

## XII. REFERENCES

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The following documents are the technical, theoretical, or empirical studies, reports, or similar documents relied upon in proposing these regulatory requirements, identified as required by Government Code, section 11346.2, subdivision (b)(3).

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## XIII. APPENDICES

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### **Appendix A – Proposed Regulation Order: Proposed Amendments to the Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants**

*[Provided as a separate document]*

### **Appendix B – U.S. EPA Unit Type Codes**

For Use in Data Reporting per Section 93404(b)(1) of the Proposed Amendments to the Regulation for the Reporting of Criteria Air Pollutants and Toxic Air Contaminants.

Based on facility-specific reporting requirements, certain facility owners or operators are required to report source-specific Unit Type Codes, as identified under section 93404(b)(1) of CTR. The unit type code is a three-digit numeric code that represents the broad category or type of a device and must be included in certain annual data reports.

Table B-1 includes the unit type codes provided in the “UnitTypeCode” value list defined in the U.S. EPA Data Element Registry Service (DERS)<sup>32</sup>. In addition to Table B-1 below, the DERS website which includes the codes is available here:

[https://iaspub.epa.gov/sor\\_internet/registry/datareg/searchandretrieve/valuelist/search.do?details=displayDetails&id=12300&verNr=1](https://iaspub.epa.gov/sor_internet/registry/datareg/searchandretrieve/valuelist/search.do?details=displayDetails&id=12300&verNr=1),

which is accessed from this parent page:

[https://iaspub.epa.gov/sor\\_internet/registry/datareg/searchandretrieve/valuelist/search.do](https://iaspub.epa.gov/sor_internet/registry/datareg/searchandretrieve/valuelist/search.do) (search for UnitTypeCode). The last updated date for items included in the EPA table is 1/7/2013.

When required, the unit type code must be reported for each device at a facility. This reporting is needed to clearly identify the types of sources that are reported, such as boilers, grinders, open burning, etc., which helps to categorize and identify the emission sources that may have the most significant impacts on community members. In general, unit type codes are reportable by facilities, unless they are subject to the baseline Abbreviated Reporting requirements as identified in section 93421.

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<sup>32</sup> U.S. EPA (2013, July 1) Data Element Registry Service (DERS). Available: [https://iaspub.epa.gov/sor\\_internet/registry/datareg/searchandretrieve/valuelist/search.do?details=displayDetails&id=12300&verNr=1](https://iaspub.epa.gov/sor_internet/registry/datareg/searchandretrieve/valuelist/search.do?details=displayDetails&id=12300&verNr=1). Accessed August 13, 2020.



**Table B-1. U.S EPA Unit Type Codes**

<b>Unit Type Code</b>	<b>Item Definition</b>
100	Boiler
120	Turbine
140	Combined Cycle (Boiler/Gas Turbine)
150	Duct Burner
160	Reciprocating IC Engine
170	Engine Test Cell
180	Process Heater
200	Furnace
210	Kiln
220	Calciner
250	Direct-fired Dryer
255	Dryer, unknown if direct or indirect.
260	Indirect-fired Dryer
270	Incinerator
280	Flare
285	Open Burning
290	Other combustion
300	Open Air Fugitive Source
310	Roof vents/Building vents
350	Process Equipment Fugitive Leaks
360	Process Equipment and Process Area Drains
390	Other fugitive
400	Storage Tank
410	Open Tank or Vat
430	Degreaser
450	Spray Booth or Coating Line
470	Printing Line
480	Gasoline Loading Rack or Arm
490	Other evaporative sources
600	Chemical Reactor
610	Oxidation Unit
620	Distillation Column/Stripper
640	Mixer

<b>Unit Type Code</b>	<b>Item Definition</b>
680	Cooling Tower
690	Other process equipment
720	Crusher
730	Grinder
740	Screen
760	Conveyor
770	Transfer Point
780	Silo
785	Open Storage Pile
790	Other bulk material equipment
999	Unclassified