

Concept Paper for the California Smog Check Contingency Measure

Executive Summary

The California Air Resources Board (CARB or Board) is developing a Smog Check Contingency Measure Concept (Smog Check Contingency Concept) to address State Implementation Plan (SIP) contingency measure requirements of the federal Clean Air Act (Act) for certain areas designated as “nonattainment” of the national ambient air quality standards (NAAQS or standards) within the State. CARB staff plans to develop a proposal for a contingency measure utilizing California’s Smog Check program to bring to the Board for consideration in the coming months. If adopted by the Board, CARB will submit the proposal to the U.S. Environmental Protection Agency (U.S. EPA) as a revision to the California SIP.

Staff will be soliciting comments and input from the public at the upcoming Public Workshop for the Smog Check Contingency Concept scheduled for August 24, 2023. The Smog Check Contingency Concept would:

- Change the existing smog check inspection exemptions in CARB’s Smog Check Program in any applicable nonattainment area that fails to meet a reasonable further progress (RFP) milestone or fails to attain by the applicable attainment date.
- Apply to the California nonattainment areas and standards as listed in [Table 1](#).
- Be triggered within 30 days of a U.S. EPA finding the nonattainment area failed to meet an RFP milestone or attain the NAAQS by the attainment date.

Table 1: Nonattainment Areas and Applicable Standards

Area	Applicable Standards
Coachella Valley	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone
Eastern Kern County	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone
Mariposa County	70 ppb 8-hour Ozone
Plumas County	12 µg/m ³ annual PM2.5
Sacramento Metro Area	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone
San Diego County	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone
San Joaquin Valley	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone, 80 ppb 8-hour Ozone, 15 µg/m ³ annual PM2.5, 35 µg/m ³ 24-hour PM2.5, 12 µg/m ³ annual PM2.5
South Coast Air Basin	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone, 12 µg/m ³ annual PM2.5
Ventura County	70 ppb 8-hour Ozone

Western Mojave Desert	70 ppb 8-hour Ozone, 75 ppb 8-hour Ozone
Western Nevada County	70 ppb 8-hour Ozone

California has mature control programs with most mobile source categories being driven to zero-emissions due to CARB regulations and with many mobile sources being primarily federally regulated, opportunities for triggered contingency measures are scarce. CARB staff worked to identify a viable contingency measure to be aligned with requirements under the Act and are developing this Smog Check Contingency Concept to address these requirements.

More background on the Smog Check Program and additional details on the Smog Check Contingency Concept are provided in the sections below.

Smog Check Program

The Smog Check Program is a vehicle inspection and maintenance program administered by the Bureau of Automotive Repair (BAR) that aims to reduce air pollution in the state by identifying vehicles with harmful excess emissions for repair or retirement. Vehicle inspection and maintenance programs are required by the Act to be implemented in nonattainment areas. While BAR administers the program, the California Department of Motor Vehicles (DMV) provides the vehicle registration and licensing information to support administration and enforcement of Smog Check. Smog checks are required biennially as a part of the vehicle registration process and/or when a vehicle changes ownership or is registered for the first time in California, depending on the area and severity of the air quality problem. Certain areas with worse air quality issues are subject to an enhanced version of the program with stricter requirements. All gasoline-powered vehicles, hybrid vehicles, and alternative-fuel vehicles that are model-year 1976 and newer, as well as all diesel vehicles model-year 1998 and newer with a gross-vehicle weight rating of 14,000 pounds and less, are subject to Smog Check. Motorcycles and electric-powered vehicles are exempt from Smog Check. Additionally, per California Health and Safety Code (H&SC) § 44011(a)(4)(B)(ii), all motor vehicles eight or less model-years old are also exempted from biennial Smog Check, unless CARB finds that providing an exception for these vehicles will prohibit the state from meeting the state commitments with respect to the SIP. The authority to make the relevant finding for HSC § 44011(a)(4)(B)(ii) purposes is within CARB’s authority, and the other state agencies that implement California’s Smog Check program will be bound by it.

Smog Check Contingency Measure Concept

The Smog Check Contingency Concept would consist of changing the existing smog check inspection exemptions in CARB’s Smog Check Program in any applicable nonattainment area that fails to meet a reasonable further progress (RFP) milestone or fails to attain by the applicable attainment date. The smog check exemption change would be triggered within 30 days of a U.S. EPA finding the nonattainment area failed to meet an RFP milestone or attain the NAAQS by the attainment date. Currently, motor vehicles eight model years and newer

are exempt from a biennial smog check inspection in California. Specifically, California Health and Safety Code (H&SC) § 44011(a)(4)(B)(ii) exempts “all motor vehicles eight or less model-years old, unless the state board finds that providing an exception for these vehicles will prohibit the state from meeting the requirements of... the state's commitments with respect to the state implementation plan required by the federal Clean Air Act.” In lieu of a smog check inspection and paying a smog check certification fee, these exempted motor vehicles now pay a \$25 smog check abatement fee of which \$21 is directed to the Air Pollution Control Fund to fund vehicle and equipment incentives through the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program).

California has not attained the federal NAAQS in all areas of the state, due in significant part to emissions from the use of motor vehicles. While CARB’s regulations require motor vehicles to meet emission standards throughout their useful lives, this is not guaranteed in practice. Staff recommends that the Board should exercise the authority under this statute and find that exempting motor vehicles that are less than 8 years old from the requirements to confirm their ongoing emissions meet applicable limits is preventing the state from meeting its commitments under the Clean Air Act. Subjecting vehicles to the Smog Check Program to reduce emissions when areas do not meet the Act’s requirements would help the state meet its commitments under the Act.

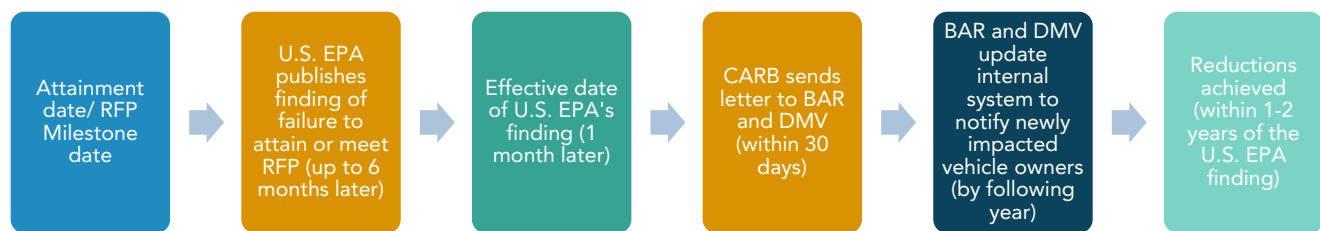
If this Smog Check Contingency Concept is triggered per a U.S. EPA finding, the smog check inspection exemption would then change from the existing eight or less model-years old to seven or less model-years old in the applicable nonattainment area. The Measure can be triggered a second time for a nonattainment area where the smog check exemption would apply to vehicles six or less model-years old. These motor vehicles in the applicable nonattainment area would then be required to have biennial smog check inspections, resulting in additional emissions control equipment failures being identified and corrected, thereby reducing emissions that typically result when emissions control equipment age over time and are not performing as designed. Further, under current state law, motor vehicle owners newly subject to a smog check inspection under this Smog Check Contingency Concept would no longer pay the smog abatement fee as a part of their annual motor vehicle registration and would instead be subject to the relevant fees for the biennial smog check inspection consisting of the smog check certification fee and any cost for the test at the station. If triggered, implementation of this Smog Check Contingency Concept would require coordination with the Bureau of Automotive Repair (BAR) and the California Department of Motor Vehicles (DMV).



Measure Implementation

Within 30 days of the effective date of U.S. EPA finding that a nonattainment area failed to meet an RFP milestone or failed to attain the standard in one of the nonattainment areas listed in Table 1, CARB will transmit a letter to BAR and DMV conveying its finding under H&SC § 44011(a)(4)(B)(ii) that removing the smog check inspection exemptions for certain motor vehicles less than a specified number of model-year from smog check is necessary for the State to meet commitments with respect to the SIP. CARB will then work with BAR and DMV to initiate the Smog Check Contingency Concept and notify newly impacted motor vehicle owners and continue administering the Smog Check Program. Figure 1 below illustrates the implementation timeline for the Smog Check Contingency Concept if triggered in a specified nonattainment area.

Figure 1. Timeline for Implementation



Potential Impacts

CARB is committed to ensuring a clean and healthy environment for all Californians. If triggered, the Smog Check Contingency Concept would require additional motor vehicles to have biennial smog check inspections, which would lead to emission reductions of certain precursors of ozone and particulate matter, including oxides of nitrogen (NOx) and reactive organic gases (ROG), as well as directly emitted particulate matter. Smog check inspections are required to identify emissions control equipment failures so that equipment can be repaired, thereby reducing emissions that typically result when emissions control equipment is not performing as designed. CARB staff is working to quantify these potential emissions reductions for the various nonattainment areas listed in Table 1.

Certain communities tend to experience higher concentrations of air pollution and are disproportionately burdened by its harmful impacts. CARB staff analyzed the impact of the Smog Check Contingency Concept to determine whether there would be disproportionate impact on disadvantaged communities (DAC) within the affected nonattainment areas if the Smog Check Contingency Concept is triggered. Based on preliminary analysis, the impacts are not disproportionate, as seven and eight model-year old vehicles make up the same or smaller percentages of the passenger vehicle fleet in DACs compared to other parts of the relevant nonattainment areas. The proportion of vehicles impacted if the Smog Check

Contingency Concept is triggered registered in DACs account for a similar percentage of all vehicles registered in DACs.

Additionally, if the Smog Check Contingency Concept is triggered, the funds collected through the smog abatement fee, a portion of which is directed to the Air Pollution Control Fund to fund vehicle and equipment incentives through the Carl Moyer Program, would be reduced. The remaining portion of the fee is directed to BAR for the Smog Check Program and would be regained through collecting the smog check certification fee. As an example, if the Smog Check Contingency Concept were to be triggered in the San Joaquin Valley in 2023 for a failure to meet the 80 ppb 8-hour ozone standard, after implementation of the measure, statewide Carl Moyer Program funding would be reduced by approximately \$3.8 million.

History of Contingency Measure Requirements

The Act specifies that SIPs must provide for contingency measures, defined in section 172(c)(9) as “specific measures to be undertaken if the area fails to make reasonable further progress, or to attain the national primary ambient air quality standard by the attainment date....”¹ In the absence of specific requirements for the amount of emission reductions required, in 1992, U.S. EPA conveyed in written guidance that the “contingency measures should represent one year’s worth of progress amounting to reductions of 3 percent of the baseline emissions inventory for the nonattainment area”. Since that time, areas in California and across the country had met contingency requirements by demonstrating that continued turnover in future years of vehicles that meet increasingly stringent State mobile source emission control programs achieved the required level of emissions reductions. In 2016, in *Bahr v. U.S. Environmental Protection Agency*² (*Bahr*), the Ninth Circuit determined U.S. EPA erred in approving a contingency measure that relied on an already-implemented measure for a nonattainment area in Arizona, thereby rejecting U.S. EPA’s longstanding interpretation of section 172(c)(9) of the Act. U.S. EPA staff interpreted this decision to mean that contingency measures must include a future action triggered by a failure to attain or failure to make RFP.

In response to *Bahr* and as part of the 75 ppb 8-hour ozone standard SIPs due in 2016, CARB developed the statewide Enhanced Enforcement Contingency Measure (Enforcement Contingency Measure) as a part of the *2018 Updates to the California State Implementation Plan* to address the need for a triggered action as a part of the contingency measure requirement. CARB worked closely with U.S. EPA regional staff in developing the contingency measure package that included the triggered Enforcement Contingency Measure, a district triggered measure for each nonattainment area and emission reductions from implementing CARB’s mobile source control program. However, as part of the *San*

¹ 42 U.S.C. § 7502(c)(9).

² *Bahr v. U.S. Environmental Protection Agency*, (9th Cir. 2016) 836 F.3d 1218.

Joaquin Valley 2016 Ozone Plan for 2008 8-hour Ozone Standard SIP action, U.S. EPA wrote in their final approval that the Enforcement Contingency Measures did not satisfy requirements to be approved as a “standalone contingency measure” and approved it only as a “SIP strengthening” measure. U.S. EPA did approve the district triggered measure and the implementation of the mobile reductions along with a CARB emission reduction commitment as meeting the contingency measure requirement for this SIP.

Subsequently, the Association of Irrigated Residents filed a lawsuit against the U.S. EPA for its approval of various elements within the *San Joaquin Valley 2016 Ozone Plan for 2008 8-hour Ozone Standard*, including the contingency measure element. The Ninth Circuit issued its decision in *Association of Irrigated Residents v. EPA*³ (*AIR*) that U.S. EPA’s approval of the contingency element was arbitrary and capricious and rejected the triggered contingency measure that achieves less than one year’s worth of RFP. Most importantly, the Ninth Circuit said that, in line with U.S. EPA’s longstanding interpretation of what is required of a contingency measure and the purpose it serves, together with *Bahr*, all reductions needed to satisfy the Act’s contingency measure requirements need to come from the contingency measure itself and the amount of reductions needed for contingency should not be reduced absent U.S. EPA adequately explaining its change from its historic stance on the amount of reductions required. U.S. EPA staff has interpreted *AIR* to mean that triggered contingency measures must achieve the entirety of the required contingency measure emission reductions on their own. In addition, surplus emission reductions from ongoing programs cannot reduce the amount of contingency measure reductions.

In 2021, U.S. EPA convened a nationwide internal task force to develop updated guidance to support states in their development of contingency measures. The draft guidance released in March 2023 is currently undergoing a public review process. The draft guidance proposes a new method for how to calculate one year’s worth of progress for the targeted amount of contingency measures reductions and provides updated guidance on the reasoned justification that would be needed for contingency measures with a lesser amount of reductions. Per the draft guidance, the reasoned justification would need to include an infeasibility analysis detailing why there are insufficient measures to meet one year’s worth of progress.

CARB Opportunities for Contingency Measures

Much has changed since the early 1990s when the Act and U.S. EPA’s original guidance on contingency measures were written. Control programs across the country have matured as have the health-based standards. U.S. EPA strengthened ozone standards in 1997, 2008 and 2015 with attainment dates out to 2037 for areas in “extreme” nonattainment. California has the only three extreme ozone nonattainment areas in the country, and CARB and the relevant local air districts are implementing the most stringent control programs across these

³ *Association of Irrigated Residents v. U.S. Environmental Protection Agency*, (9th Cir. 2021) 10 F.4th 937

areas and the State to provide for attainment. As all available control measures are needed for meeting the NAAQS as expeditiously as possible, there are few options available to be held in reserve for contingency purposes. Additionally, according to U.S. EPA's original guidance, contingency measures need to achieve a significant amount of reductions, and these reductions must be achieved within one year. Draft U.S. EPA guidance allows up to two years following the year in which the failure to attain or meet RFP has been identified to achieve the reductions and provides states the option to demonstrate a lack of feasible measures to achieve the required amount. Control measures achieving the level of reductions required often take more than two years to implement and will likely not result in immediate reductions. Options for a technically and economically feasible triggered measure that can be implemented and achieve the necessary reductions in the time frame required are scarce in California.

In order to explore all available options, CARB staff analyzed the suite of control measures for all sources under CARB's authority to identify potential contingency measures. CARB currently has programs in place or under development for most of these sources and has evaluated a variety of regulatory mechanisms within existing and new programs for potential contingency triggers. Based on CARB's feasibility analysis, there are a few common components of CARB regulations that limit the options for triggered contingency measures, the first of which is the fact that the majority of CARB regulations are technology-forcing. This makes it difficult to amend regulations or pull compliance timelines forward with only 1 to 2 years notice as industry needs time to plan, develop, and implement new technologies.

More specifically, CARB regulations that require fleet turnover or new engine standards require a long lead time for implementation. Engine and equipment manufacturers would need lead time to design, plan, certify, manufacture, and deploy cleaner engines to meet a new or accelerated engine standard, while fleet regulations necessitate that manufacturing is mature so that there is enough supply available to meet that demand. Fleet regulations also require vehicle and equipment owners and operators to plan, purchase and deploy new, often zero-emission, equipment which may require changes to their business operations and the installation of new infrastructure. Thus, measures that require fleet turnover or new engine standards are not appropriate to be used as a triggered contingency measure.

There are few sources of air pollution remaining in California that are not already being aggressively controlled by CARB or the local air districts, and those sources that are not as well controlled are primarily-federally regulated sources. This includes interstate trucks, ships, locomotives, aircraft, and certain categories of off-road equipment, constituting a large portion of emissions in California and of potential emissions reductions. Since these are primarily regulated at the federal and, in some cases, international level, options to implement a contingency measure with reductions approximately equivalent to one year's worth of progress are limited, especially considering that CARB is already fully committed to driving sources of air pollution in California to zero emissions everywhere feasible and as expeditiously as possible. Through this analysis of measures, CARB was able to identify Smog

Check Contingency Concept as the most feasible option for a contingency measure aligned with the Act requirements and U.S. EPA guidance.

Timeline and Next Steps

A public workshop is scheduled for August 24, 2023 to solicit comments and feedback on the Smog Check Contingency Concept. CARB staff currently plan to post the Board proposal in mid-September, at least 30 days prior to the October 26, 2023 CARB hearing at which CARB staff plans to propose this item for Board consideration.