

State of California  
**Air Resources Board**

**BOARD ITEM SUMMARY**

**ITEM # 20-9-3: Public Meeting to Hear an Informational Update on California's Air Toxics Program**

**STAFF RECOMMENDATION:**

Staff recommends that the California Air Resources Board (CARB or Board) adopt a resolution that will outline California's Air Toxics Program for 2020 and beyond, focus on reducing localized health impacts in communities, and support near-term and future CARB actions that will reduce localized health impacts.

**DISCUSSION:**

California has a comprehensive Air Toxics Program designed to identify and control toxic air contaminants, inform the public of significant emissions of air toxics from stationary sources, assess the health risks from those exposures, and reduce those risks. The Air Toxics Program addresses the health impacts of air toxics exposures to communities and includes measures to adequately protect children and other sensitive receptors.

The following outlines CARB's authority to control air toxics:

- Assembly Bill 1807 (1983) - Established the framework of our Air Toxics Program putting in place a two-step process for risk identification and risk management of toxic air contaminants.
- Assembly Bill 2588 (1987) and Senate Bill 1731 (1992) - Air Toxics "Hot Spots" Information and Assessment Act ("Hot Spots" Program) - The goals of the "Hot Spots" Program are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks.
- Senate Bill 25 (1999) - Amended our toxics framework established by AB 1807, to consider the effects of infants and children when evaluating hazardous substances for identification as air toxics.
- Assembly Bill (AB) 617 (2017) - Refocused the Air Toxics Program to provide additional priority in reducing toxics exposures in communities most impacted by air pollution.

In the mid-1980s the focus of the Toxic Air Contaminant program was on stationary industrial sources such as hexavalent chrome from cooling towers and chrome plating operations. In the late 1980s and 1990s, CARB's focus was on reducing emissions

from smaller commercial sources like dry cleaners and gas stations – with fuel specifications and vapor recovery controls to address benzene emissions.

In the late 1990s and early 2000s, our emphasis turned to diesel particulate matter (diesel PM). At that time, the Board took a major step forward with the adoption of the Diesel Risk Reduction Plan. This plan has pushed the Board to address some of the most important health concerns and led to many public health successes. Some of the most significant diesel regulations occurred in the 2010s, when CARB adopted the Truck and Bus, and Advanced Clean Trucks regulations.

To date, CARB had adopted and implemented 26 statewide airborne toxic control measures (ATCMs) for air toxics. More than a dozen of these measures target diesel PM and the rest address a diversity of sources and industries that span the entire State from composite wood products and medical waste incinerators, to outdoor burn barrels and brake cleaners.

Since 1990, and as a result of our air toxics regulations, we have seen an approximately 80 percent reduction in air toxics exposures statewide even with the increases in both population and in vehicle miles traveled. In fact, over 30,000 sources have reduced emissions through our ATCMs resulting in significant emission reductions in communities impacted by those sources. We have also reduced air toxic emissions through the adoption of motor vehicle and fuel controls.

Although significant progress has occurred statewide, there is much more to be done to address localized health risk, especially in disadvantaged communities. Many sources, such as chrome plating and other metal finishing operations, continue to have localized community scale impacts with disproportionality larger impacts in disadvantaged communities. In addition, facilities such as gas stations and auto body shops can be numerous and in close proximity to each other and to residents, leading to high cumulative exposures for those nearby. CARB will begin to develop a methodology to consider cumulative impacts in its future airborne toxic control measure development.

In 2020 and beyond, CARB will enhance its efforts to address air toxics within AB 617 communities and other disadvantaged communities. CARB staff will work with communities to identify what is driving community exposure, improve the tools used to guide decision-making, and reduce emissions from the sources of greatest concern. Additionally, CARB staff will work with communities to identify which toxics are driving near-source risk to communities. This will include evaluating criteria such as emissions, toxicity, persistence and bioaccumulation, and proximity of emission sources to where people live and work.

Over the next few years, CARB staff plans to bring forward several stationary source toxic-related actions, in addition to its ongoing efforts to reduce diesel PM. One of these actions is proposed amendments to the Emissions Inventory and Criteria

Guidelines Regulation and the Criteria and Toxics Reporting Regulation. Amendments to these regulations will ensure continued protection of public health by collecting more comprehensive emissions data, provide CARB and the local air districts with a better understanding of stationary source emissions, and enhance public access to information on air toxics emissions. This data will be used as part of California's "Hot Spots" Program, which requires the reduction of localized health risks at facilities that may present significant impacts. The proposed amendments are also designed to support community-focused efforts at CARB to reduce criteria pollutant and air toxic emissions from California's most disadvantaged communities. These amendments are scheduled to be considered during the Board's November 2020 public hearing.

CARB is also developing air toxics guidance documents to help reduce emissions from smaller, yet numerous, air toxic sources. CARB staff, in cooperation with the California Air Pollution Control Officers Association (CAPCOA), is currently preparing the Gas Station Industrywide Technical and Supplemental Policy Guidance Documents for public review. The joint CARB/CAPCOA Technical Guidance Document assists both the districts, facilities, and community members with the emission inventory and health risk assessments requirements of the "Hot Spots" Program. CARB's Supplemental Policy Guidance provides policy recommendations for local air districts when permitting gas stations and considerations for local governments on land use decisions. These documents are expected to be finalized in early 2021.

In addition, two ATCM amendment actions will be presented for Board consideration. The Chrome Plating ATCM amendments will evaluate the feasibility of transitioning the chrome plating industry from hexavalent chromium to less-toxic trivalent chromium. This action alone will significantly reduce emissions of hexavalent chromium, while at the same time reduce the use of per- and polyfluoroalkyl substances (PFAS) that are often used in hexavalent chrome plating operations. The Composite Wood ATCM amendments will further reduce formaldehyde exposures from composite wood products by considering the inclusion of additional product categories (i.e. bamboo and cork flooring) and bringing consistency on how products are tested. Following the Chrome Plating ATCM and Composite Wood ATCM amendments, CARB staff plans to propose additional statewide ATCMs.

Other ongoing improvements include CARB's work on expanding health analyses to help to support rule development. This work will lead to a more complete evaluation of the health benefits of our regulations. CARB is also currently assessing its air toxics monitoring network to ensure that resources are directed to the highest priority needs. In addition, CARB is currently evaluating opportunities to expand its source testing capabilities, as source testing needs are currently handled through contracts or assistance from local air districts. All these improvements are critical elements of a successful Air Toxics Program and necessary to support the development of regulations and other emissions reduction strategies.

**SUMMARY AND IMPACTS:**

Although CARB has had a comprehensive Air Toxics Program for decades, there is more to be done to address sources of concern in communities. Going forward, CARB will enhance its focus on reducing localized health risks in communities. CARB staff will build upon knowledge gained from AB 617 implementation, and continue to improve community engagement in an open public process to ensure community involvement in the California Air Toxics Program. The upcoming amendments will help to reduce emissions of hexavalent chromium from chrome plating operations and formaldehyde from composite wood products. Additional upcoming measures will improve our data quality and transparency, and will help us to begin to develop the tools to assess the health impacts from cumulative exposures. These actions will provide health benefits for all Californians as we continue to reduce the potential health impacts from airborne toxic emissions.