

Overview of the Emission Inventory Criteria and Guidelines Regulation for the Air Toxics “Hot Spots” Program

The California Air Resources Board (CARB or Board) compiles air toxics emissions data for stationary sources as required by the Air Toxics “Hot Spots” Act (the Act, also known as AB 2588). Under this program, stationary source facilities are required to report the types and quantities of toxic substances they routinely release into the air. The objectives of this program are to compile information on toxics emissions; identify facilities having potential for localized impacts; evaluate their health risks; notify nearby residents about significant risks; and ultimately reduce the risks below a health protective threshold.

The Emission Inventory Criteria and Guidelines (EICG) Regulation

AB 2588 required CARB to adopt a regulation to provide guidelines to facility operators on how to compile and submit an air toxics emission inventory. The Act also requires CARB to compile and maintain a list of substances posing chronic or acute health threats when present in the air. The EICG Regulation specifies which facilities are subject to emission inventory reporting, and identifies the information that a facility operator must include in their report. The EICG is unique in that it requires toxics emissions data collection and reporting to support the prioritization of facilities based on their toxic emissions, health risk assessments for the highest rated facilities, community notification of facility based risks, and the requirement to prepare and implement plans to reduce those risks. Facilities meeting the applicability criteria submit an emission inventory to their local air district, and those subject to update requirements must update their inventories every four years. Air districts report the emissions data to CARB, where it is available to the public through various online portals.

Regulation Amendments

On November 19, 2020, the Board adopted amendments to the EICG Regulation. The primary goals of the amendments are to provide CARB and air districts with a better understanding of stationary source emissions, enhance the public access to information on toxic pollutant emissions, and further reduce the pollutants’ impacts on public health by ensuring that many new and emerging chemicals of concern are reported.

In the years since the last EICG update in 2007, there have been significant advances in our understanding of the toxic health risk posed by many chemicals and their impacts on public health at different stages in life. Most notably, the latest scientific evidence shows that early-life exposures to air toxics contribute to an increased lifetime risk of developing cancer, or other adverse health effects, compared to exposures that occur in adulthood. Overall, these studies concluded that lifetime inhalation cancer risk could be increased by a factor of 3 times higher than previously estimated. In response, the Office of Environmental Health Hazard Assessment updated their Guidance Manual for Health Risk Assessments in 2015, and the EICG is now being updated to reflect this latest guidance.

CARB staff identified over 900 new substances that meet the criteria for reporting under the Act, and the Scientific Review Panel on Toxic Air Contaminants was instrumental in reviewing, providing input to, and supporting the framing and scope of the proposed updates to the chemical list.

The EICG is a cornerstone of the foundation needed to support CARB and air district health protection programs, both at the statewide and community level. It has helped locate sources of substances not previously under evaluation, and has provided exposure information necessary to prioritize substances for control measures and other regulatory actions. Also, the preparation of the emission inventory makes facility owners aware of their toxic emissions. As a result, facilities have taken steps to reduce emissions of air toxics. Limited district and facility surveys done during the program's early years identified reductions of millions of pounds per year of air toxics emissions from facilities in California.