State of California Air Resources Board

Board Item Summary

Item # 25-3-1: Public Meeting to Hear an Informational Update on the California Air Toxics Assessment

Staff Recommendation:

This is an informational item only. No action is required.

Discussion:

The California Air Toxics Assessment, or CATA, was initiated in 2017 with the purpose of providing support to communities and air toxics programs across the state. It is a statewide air toxics health risk assessment representing exposure at the census block and tract level, bridging the gap between national and more localized regional air toxics studies.

In addition to providing public information about major air toxics and associated health risks throughout the state, CATA also supports various regulatory efforts at CARB. Through an iterative computational process, CATA estimates ambient concentration and exposure of air toxics over time, tracks trends in health risk reduction, and provides insights into future toxics control measures. Additionally, health risks are assessed independently for more than 30 emission sectors, such as on-road mobile sources, ocean-going vessels, and locomotives. Through detailed source apportionment, CATA helps evaluate the progress of sector-based regulations and helps assess health benefits of those regulations.

At the community level, the CATA assessments have helped AB 617 communities identify the major air toxics and emission sources impacting them, as well as the dominant trends and spatial patterns of health risks associated with air toxics. These data have been useful in developing community emission reduction plans, or CERPs, and filling in information that community monitoring cannot provide, such as areas where monitoring is scarce, and providing detailed source attribution of total health risks. While modeling cannot replace monitoring, we will never have as much monitoring as we need to fully assess air toxics exposure and sector-based risk trends in communities throughout California. Therefore, modeling is an important tool as a companion to monitoring and will continue to play an important role in understanding community risk. Similarly, CATA also complements the current toxics monitoring network at the statewide level, by helping to fill in the gaps between monitoring locations.

Future iterations of CATA will provide more insight into the health benefits of existing and new regulations as they unfold, as well as the impact of wildfires, and new developments in our understanding of emissions inventories through improved reporting and emerging air toxics such as parachlorobenzotrifluoride and ethylene oxide.

Summary and Impacts:

Not applicable. This is an informational item only and doesn't suggest any regulatory changes that would have an economic or environmental impact.