State of California Air Resources Board

Board Item Summary

Item # 22-16-2: Public Meeting to Consider Proposed Contract on the Impact of Air Pollution Exposure on Metabolic Health Outcomes for California Residents

Staff Recommendation:

The California Air Resources Board (CARB or Board) staff recommends that the Board approve funding of the proposed research contract with the University of California, Berkeley titled "Impact of Air Pollution Exposure on Metabolic Health Outcomes for California Residents". The execution of this contract will help CARB better evaluate health benefits of air pollution regulations and policies in California. This item is listed on the agenda due to the contract amount and to comply with Board approval requirements in Government Code section 1091 because Board member Balmes is affiliated with U.C. Berkeley.

Discussion:

In April 2020, the Board adopted Resolution 20-13 directing CARB staff to expand health analysis methodologies to provide a more comprehensive analysis of air pollution impacts, including use of additional health endpoints. In response to the Board direction, this proposed study will develop statewide concentration-response (C-R) functions to evaluate single and multiple air pollutants (criteria pollutants and air toxics) effects on metabolic health endpoints including incidence of diabetes, diabetes medication use, diabetes-related emergency department visits, hospitalizations, and mortality. The study will also estimate economic benefits from reducing air pollution exposures on metabolic health outcomes. In this study, the researchers will utilize existing health data from California Health Interview Survey, Department of Health Care Access and Information (formally known as the Office of Statewide Health Planning and Development), and California Department of Public Health Vital Records. This research will examine health effects in racial and ethnic subgroups in addition to statewide average population effects. The research findings will inform CARB's efforts to expand its analysis of health benefits associated with its current and future programs and regulations.

Summary and Impacts:

The information gained through this contract will support CARB's ability to evaluate the effects of its policies and programs, including a wide range of public health benefits. The project will provide CARB with concentration-response functions that will be used in the health impact assessment. An amount of \$ 475,000 is requested to fund this contract. Approval by the Board will authorize staff to put this contract in place to undertake the activities described.