Thank you. I am Deborah Drechsler, and am speaking on behalf of the California Air Resources Board (CARB).

CARB reviewed the proposed revisions to the health-based standard, and agrees with the U.S. EPA's conclusion that the current 8-hour ozone standard of 75 parts per billion does not adequately protect public health. Review of the associated Integrated Science Assessment clearly demonstrates that the scientific literature related to ozone health effects and exposure has become stronger and even more compelling since the previous review, completed in 2008. In addition, the analyses presented in the Risk and Exposure Assessment confirm that even with attainment of the current ozone standard a significant number of Californians are at increased risk of experiencing adverse health impacts. CARB strongly supports your conclusion that the ozone standard needs to be strengthened.

We note that the proposed range for the standard of 65 to 70 ppb does not include the lower bound of 60 ppb, as advised by CASAC. Although a level of 70 ppb is more health protective than the current standard, it does not likely include an adequate margin of safety. In addition, we recognize that selecting a level below 65 ppb would require placing considerable weight on the uncertainties in the available data, as was discussed in the proposed rule. However, setting the standard at the lower bound of 60 ppb would offer more public health protection than levels of 65 or 70 ppb.

We note that a new study demonstrates that some healthy adults engaged in moderate exercise would be expected to experience reductions in lung function and an increase in respiratory symptoms with 6.6 hour exposure to an ozone concentration of 72 ppb ozone. Two additional studies show that a small number of
healthy individuals would likely experience reduced lung function with similar exposures at 60 ppb. It is widely believed that people with chronic lung diseases, such as asthma and chronic obstructive pulmonary disease, are likely to be more vulnerable than healthy people. New epidemiologic studies suggest that ozone-related hospital admissions or emergency department visits for asthma or other respiratory causes and mortality can


occur in communities that meet the current ozone standard. New toxicological literature provides increased evidence for biological mechanisms and modes of action that substantiate the results of the controlled human exposure and epidemiologic studies.

A more stringent standard will provide health benefits nationwide. Strengthening the ozone standard would provide important health benefits for California, particularly in the South Coast Air Basin and the San Joaquin Valley, including reduction in premature mortality, hospitalizations, emergency department visits for asthma, and lost work and school days. Nearly two-thirds of Californians reside in these two extreme non-attainment areas, including large numbers with well-established health risk factors, including children, and the elderly, as well as people with asthma and other chronic heart or lung diseases, and nearly a half-million asthmatic children. There is also a substantial population of outdoor workers who are at increased risk due to their high levels of exposure.

California has made significant air quality progress due to our comprehensive emission control programs while the population and economy continued to grow. Due to the effectiveness of these efforts, today two-thirds of Californians live in communities that meet the 75 ppb standard, and over 80 percent live in communities meeting the previous 80 ppb standard. Meeting the standards in the nation's only two extreme nonattainment areas, the South Coast Air Basin and the San Joaquin Valley, will require large emission reductions across all source sectors and the use of zero and near-zero technologies along with the cleanest fuels. CARB will need to partner with U.S. EPA to promote the advanced technologies that are essential to meet the current and

revised standards. These efforts to meet more health protective standards will also support a broad range of public health goals including meeting Governor Brown’s initiatives to reduce petroleum usage by 50 percent by 2030 and achieving steep reductions in carbon pollutants to address the ongoing threat posed by climate change.

Although it will be a challenge to attain more stringent standards, it is clear that strengthening the ozone standard is necessary to protect public health in California and the nation.