ITEM # 03-5-1: Board Update on Health Effects of Air Pollution: Particulate Air Pollution and Cardiovascular and Respiratory Hospitalizations in the Central Valley

STAFF RECOMMENDATION: Informational item.

DISCUSSION: The Air Resources Board (ARB) staff provides the Board with monthly updates on the health effects of air pollution. This month’s update reports the results of an ARB-funded study of particle air pollution and hospitalizations for cardiovascular and respiratory symptoms in the Central Valley.

Only a few epidemiology studies have focused on the potential effect of particulate matter on the California population. In this recent study of hospitalizations and emergency room visits by residents of the Central Valley, researchers found that admission rates for acute and chronic respiratory conditions rose with increasing levels of most particulate pollutants and some gaseous pollutants. Few consistent findings were found between increasing pollutant levels and admissions for cardiovascular diagnoses and no effect was observed for ozone.

SUMMARY AND IMPACTS: These results contribute to our knowledge of how hospitalization rates for certain conditions may increase in areas of high particulate matter. ARB will use this information to further our understanding of the health impacts of air pollution on existing vulnerable populations.