

SUMMARY OF BOARD ITEM

ITEM # 03-1-1: Health Update

STAFF RECOMMENDATION: Informational Item

DISCUSSION: Staff will update the Board on ultrafine particulate matter exposure and health effects

SUMMARY AND IMPACTS: The health implications of exposure to ultrafine particulate matter (PM)—a sub-fraction of PM₁₀ and PM_{2.5}—is of considerable interest from a public health standpoint. Due to their small size and large surface area per unit mass, ultrafine particles possess unique chemical and physical characteristics, including an enhanced ability to penetrate deeply into the lungs and circulatory system. The health update this month will focus on presenting a clear definition of ultrafine PM and its potential significance as an air pollutant from a public health standpoint. In addition, the issue of complexity of exposure to ultrafine PM will be described and briefly discussed. Finally, the update will summarize key points from recent health-related studies on ultrafine PM, including relevant ARB-sponsored projects, such as the Children's Health Study and particle research conducted at the Southern California Particle Center and Supersite.

