

Sampling underway for “ultrafine” pollution

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Breathe California of Sacramento-Emigrant Trails is continuing independent research on particle pollution with a unique new study in Sacramento.

Dr. Robert Sawyer, chairman of the California Air Resources Board, has approved Breathe California’s proposal to initiate one year of sampling for very fine and ultrafine particles at the Air Resources Board’s 13th and T Street monitoring site.

Very fine particles range from 0.25 to 0.09 microns in diameter, while ultrafines are below 0.09 microns. Both are considered among the most toxic and damaging particles for lungs, but science is still emerging and neither is regulated by federal or state air agencies.

UC Davis DELTA Group will provide a new 8 DRUM sampler (on loan from Johns Hopkins University) to measure very fines and ultrafines and also identify traces for separation of diesel exhaust from wood smoke. We will also solicit funds to identify the pollution contributions of diesels and smoking cars to the aerosols bathing downtown Sacramento.

The studies are an outgrowth of earlier Breathe California efforts such as the 2002-2004 Sacramento I-5 Aerosol Transect Studies that measured aerosols across Sacramento to the foothills.

To our knowledge, there is no equivalent study of size/time/and compositionally resolved aerosols. The data will help Breathe California develop its position on a new state standard for very fines and ultrafines that would allow much greater analyses on composition, mass, elements and the role of organic compounds.

This could lead to aerosol-control strategies that are far more protective of health than are current standards.

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