ASPAHLT-RUBBER AIR QUALITY

Breathe a sigh of relief!

Asphalt Rubber Italia

Asphalt-Rubber pavements use thousands of scrap tires every mile reducing the potential for tire fires. Because smoke from tire fires is very harmful, some believe that the granulated tire rubber mixed with hot asphalt cement must be harmful as well. That is not the case. The rubber material is never processed in temperatures high enough to cause the tire rubber to smoke or burn.

Tracy Tire Fire, California 1999, photo courtesy of the Sacramento Bee, photographer Bart Ah You

The rubber particles are not small enough to become volatile or air borne as particulate matter or PM10.

Fume emissions studies from asphalt-rubber manufacturing and paving sites have been conducted routinely by state and federal air quality and health professionals since 1992. Every time, asphalt-rubber has been found to be the same as conventional, unmodified asphalt even when rubberized asphalt pavements were recycled.

The use of asphalt-rubber paving strategies can reduce the emission from trucks that haul the material to the paving site because the material can be placed in thinner layers.

It's easy to calculate: Asphalt–Rubber = Less Tons + Less trucks + Less Emissions

Its clear from the studies cited below, A-R emissions are similar to other asphalt products:

Air Pollutant Emissions Test Asphalt Plant Baghouse Stack
San Antonio, Texas
Southwestern Laboratories, Houston, Texas
July 1992

Evaluation of Exhaust Gas Emissions and Worker Exposure from Asphalt-Rubber Binders in Hot Mix Asphalt Mixtures
Kathryn O'C. Gunkel
Wildwood Environmental Engineering Consultants, Inc.
Michigan Department of Transportation 1994

NIOSH HEALTH HAZARD EVALUATION REPORT: HETA #2001-0536-2864
Crumb-Rubber Modified Asphalt Paving: Occupational Exposures and Acute Health Effects
2001

Rubber does not cause smoke at hot-plants, above, a hot plant during production of A-R. near Tucson, AZ.

California Stack Emission Testing of Asphalt-Rubber and Conventional Asphalt Concrete
Bay Area Air Quality Management District
Northern California Rubberized Asphalt Concrete Technology Center
February 5, 2002

www.rubberpavements.org/benefits/airquality

Rubber Pavements Association