

Wheels: An email from Frank states: “It seems to me that if the pollution generated by tires on motor vehicles was measured by E-Check instead of the exhaust, then no one would pass. The Missouri Department of Natural Resources estimates that approximately 4,000,000 waste tires are generated yearly. They also estimated that the average weight of a new tire is 25 pounds, and at the time it is scrapped it weighs only 20 pounds. This means that five pounds of tire material (rubber and carbon black), per scrapped tire never makes it to the landfill.

Five pounds each, times 4,000,000 tires, comes to 20,000,000 pounds, or 10,000 tons of tire dust being generated each year in the US.

On February 21, 2003, the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, added carbon black to the list of chemicals known to the State to cause cancer.

Could this be a significant source of carcinogens? If so, what is being done to reduce or eliminate it? Why is it that nobody ever talks about it?”

Halderman: You are correct that carbon is dangerous and is called particulate matter or PM if airborne. Particulate matter is usually a product of combustion where hydrocarbons (HC) are burned in an engine and the hydrogen burns off first leaving the carbon. This carbon is exhausted into the air where it can then be breathed. The carbon and rubber from tire dust is much larger than the carbon from exhaust and quickly drops to the ground. This dust is not inhaled and is therefore not considered to be a major source of air pollution. According to tire engineers, the tire manufacturers are reducing the amount of carbon black used in tires and replacing it with silicon which gives better tire performance on wet roads and increases tire life.

