

# Limited EPA Crumb Rubber Study Finds Low Level of Concern

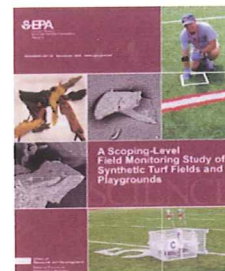
The U.S. Environmental Protection Agency has released results of a limited field monitoring study of artificial turf playing fields and playgrounds constructed with recycled tire material or tire crumb. The study was intended to gain experience conducting field monitoring of recreational surfaces that contain tire crumb. EPA will use the information to help determine possible next steps to address questions regarding the safety of tire crumb infill in recreational fields.

"The limited data EPA collected during this study, does not point to a concern and represents an important addition to the information gathered by various government agencies," Peter Grevatt, director of EPA's Office of Children's Health Protection said. "It helps set the stage for a meeting this spring, where EPA will bring together officials from states and federal agencies to evaluate the existing body of science on this topic and determine what additional steps should be taken to ensure the safety of kids who play on these surfaces."

In response to concerns raised by the public, EPA conducted the limited "scoping study" of tire crumb in response to concerns raised by the public about the safety of tire crumb artificial turf fields and in playgrounds. The study consisted of collecting air and wipe samples at three locations near EPA laboratories in Raleigh, N.C., Athens, Ga., and Cincinnati, Ohio. Sampling also was conducted in the Washington, D.C. area.

The limited study, conducted in August through October 2008, found that the concentrations of materials that made up tire crumb were below levels considered harmful. However, given the limited nature of the study (limited number of constituents monitored, sample sites, and samples taken at each site) and the wide diversity of tire crumb material, it is not possible, without additional

data, to extend the results beyond the four study sites to reach more comprehensive conclusions, the EPA said. The study confirmed that most of the methods tested were accurate, reproducible and appropriate for measuring concentrations of tire crumb constituents and therefore can be used in future studies.



Particulate matter, metals and volatile organic compound concentrations were measured in the air samples and compared with areas away from the turf fields (background levels). The levels found in air samples from the artificial turf were similar to background levels.

## Study findings

- No tire-related fibers were observed in the air samples.
- All air concentrations of particulate matter and lead were well below levels of concern.
- More than 90 percent of the lead in the tire crumb material was tightly bound and unavailable for absorption by users of the turf fields.
- Zinc, which is a known additive in tires, was found in tire crumb samples. However, air and surface wipe monitoring levels of zinc were found to be below levels of concern.

EPA is aware that studies by other agencies were undertaken or completed while this survey was under way. EPA is planning a 2010 meeting with federal and state agencies to review all new study data and determine next steps. More information on artificial turf: [www.epa.gov](http://www.epa.gov) ♦

## Tire Industry Groups Praise EPA Crumb Rubber Study

*Liberty Tire, RMA applaud EPA finding that crumb rubber in fields poses no human health or environmental risk*

EPA's report is a welcome validation of what numerous studies and tests have shown over the years, namely that the use of recycled tire rubber in consumer applications such as playground and athletic fields are not only safe but have several significant safety benefits, Michael Blumenthal, Rubber Manufacturers Association (RMA) vice president said.

Last year, the RMA sponsored a review of the available scientific literature on the health and environmental effects of artificial turf made from recycled tire rubber. The review found no significant negative effects, and the EPA study reaffirms the RMA findings.

Industry leader Pittsburgh-based Liberty Tire Recycling L.L.C., also gave the EPA study high marks, noting that the "findings of previous studies together with this new EPA study

should ease any concerns that people might have about products that are made from recycled rubber tires. They're safe."

"People have a right to be concerned about their health and the health and safety of their children," said Liberty Tire Chairman and CEO Jeffrey Kendall.

The EPA plans to host a meeting in the spring of 2010 involving federal and state government agencies to review the results of all crumb rubber studies and determine future actions. Recycled rubber industry stakeholders and members of the general public will be asked to provide information and testimony for the meeting, said Peter Grevatt, director of the EPA's Office of Children's Health Protection.

Approximately 13 million scrap tires are used annually for athletic fields and playground cover, according to the RMA. ♦