

11/02/09: "Rubber Meets Road"

Technology, innovation, and collaboration drive sustainable environmental results. One of the best examples in the nation is right here in Arizona: crumb rubber asphalt.

What is it and why is it important? Scientists have developed and entrepreneurs deployed a technology for shredding waste tires and putting the crumbs to work in asphalt, turf, landscaping, and other products. Who wins? The environment, the economy, the traveling public, and communities.

The Arizona Department of Transportation (ADOT) is a national leader in the use of crumb rubber for roads and highways. ADOT has been using it in the state since 1988 and says it takes about 1,500 tires to produce one lane of rubberized asphalt one mile long. Most new construction of roads and highways includes rubberized asphalt. That's good news, particularly when you consider the positive performance track record regarding safety and durability so far.

CRM of America, with a major plant in Mesa, is creating jobs, coordinating with researchers at Arizona State University and the Rubber Pavements Association, and contracting with state and local agencies to reduce the stockpiling, landfilling, and exporting of waste tires.

Why do we support such recycling and beneficial reuse efforts? Waste tires can litter the landscape, go up in smoke, and leach into the ground, threatening aquifers. One has to look no further than the 8 million waste tires accumulated by Envirotech upwind from the Valley to illustrate the potential environmental devastation that the tires could cause.

Making a market for a beneficial use of a seemingly endless waste product prevents pollution and boosts the economy. It's getting attention in climate change circles, as well, as policymakers are looking for ways to reduce energy consumption and greenhouse gas emissions. Water- and maintenance-free synthetic turf (made with crumb rubber) will likely be included in adaptation plans for arid or drought-prone areas in the future, too.

And one of its greatest benefits: Rubberized asphalt reduces noise on freeways by 50 percent, prompting some to call it the "quiet pavement."

It is also emerging as a key tool for good relations and sound diplomacy with our neighbor to the south, Mexico. ADEQ and other agencies under Gov. Jan Brewer are continuing to work with Sonora and other Mexican states through the Border Governors environment committee and the Arizona Mexico Commission to prevent waste tire and "dirty export" problems and instead increase asphalt rubber opportunities.

I'm learning at least one of the roads to progress is paved with rubberized asphalt and it's expanding well beyond Arizona. Other technologies will emerge, no doubt.

Do you have any suggestions on how ADEQ can appropriately advance crumb rubber use?

Do you know of any other good projects or potential projects involving technology, innovation, and collaboration that can be models for environmental and economic progress?

Is left-over Halloween candy a potential road-building or landscaping material?

I look forward to your comments.

-- Ben