

BAN ON THE SALE AND APPLICATION OF COAL TAR-BASED SEALANTS

Ban Specifics:

- The ordinance amends the City Code to ban the use and sale of pavement sealants containing coal tar within the City's planning jurisdiction (full purpose city limits and Extra Territorial Jurisdiction), with the exception that the sealant may be sold if the intended application area is outside the City's ETJ.

History:

- Staff publicly announces City's pavement sealant hypothesis (January 2004 press conference at Barton Springs)
- Council instructs staff (Resolution 030605-56) to evaluate the usage, environmental impact and potential regulation of coal tar-based parking lot sealant (June 2005)
- City requests voluntary ban on coal tar sealants (April 2004)
- Completion of physical, chemical and biological research on sealants (June 2005)
- Briefings with pertinent Environmental Protection Agency (USEPA), Department of Interior and United States Geological Survey (USGS) Headquarter offices (June 2005)
- National publication of initial findings substantiating City hypothesis (June 2005)
- Council votes unanimously to ban coal tar containing sealants. (November 17, 2005)

Rationale:

- Staff research indicates pavement sealants are abrading off area parking lots and washing off into local creeks
- Coal tar-based pavement sealants contain extremely high levels of polycyclic aromatic hydrocarbons (PAHs)
- Product analysis and parking lot washoff studies show that coal tar-based sealants are significantly higher in PAH concentrations than asphalt-based sealants (More than 1000 times higher in pure product, 6 times higher in runoff)
- Hot spots of concentrated PAHs have been found in 13% of area creeks at levels known to impact aquatic life
- Laboratory studies document that coal tar sealants are indeed toxic to aquatic life at levels found in Austin creeks; field studies verify impact to aquatic life in local streams
- Core sampling indicates concentrations of PAHs in sediments in Town Lake have increased dramatically over the past 30 years, a nationwide urban trend
- USGS/City studies indicate that pavement sealants may account for a majority of PAH loads in Texas watersheds studied
- Estimates from local producers indicate that over 600,000 gallons of sealant are applied annually in the Austin area, over 90% coal tar-based

Public Outreach to Date:

- Community Forum on Barton Springs contamination (January 2004)

- WPDRD Pavement Sealant Website:
(http://www.ci.austin.tx.us/watershed/coaltar_main.htm)
- Local retailer, producer and applicator industry mail-out explaining issue and requesting voluntary ban
- On Your Doorstep newsletter (July 2004)
- Numerous presentations to area environmental agencies and professional organizations
- Stakeholder meeting with sealant industry (January 2004)
- Stakeholder meeting with sealant industry (July 2005)
- Environmental Board meeting (October 2005)
- Planning Commission meeting (November 2005)
- City Council meeting (November 2005)

National Interest

- USGS/COA journal article in Environmental Science and Technology (June 2005)
- Technical briefings to EPA, Department of the Interior, USGS Washington Headquarters (June 2005)
- Governing Magazine article (September 2005)
- Multiple local and state presentations
- Significant Internet presence
- Scheduled presentations:
 - NW Pavement Management Assoc. in Vancouver, WA (October)
 - SETAC meeting in Baltimore ; three papers (November)
 - Congressional Briefing on Capital Hill (December)
 - National Water Quality Monitoring Council in San Jose (2006)

Economic Impact:

- Economic impacts to the industry are mitigated by the availability of a less toxic alternative, asphalt-based sealants

Communication With:

- Neighboring jurisdictions and state and federal delegations
- State and Federal Regulatory agencies
- Austin's citizenry
- Austin area producers, retailers and applicators
- National pavement sealant industry
- Research institutions and storm water professionals
- Publication of three manuscripts in national journals

Summary:

- PAHs are a high-profile pollutant of growing concern nationwide, due to increasing concentrations in waterways

- City research has discovered a major source of PAHs; a ban provides an unprecedented opportunity to eliminate a significant pollutant threat to our local water resources
- The combination of chemical tracing, laboratory toxicity, and field-verified degradation provides ample evidence to support regulatory action to remove the use of coal tar sealants within the City's jurisdiction.