

## **HAZARDOUS AIR POLLUTANTS**

### **ENVIRONMENTAL HEALTH ISSUE PROFILE**

Community Action for a Renewed Environment (CARE)  
Environmental Sustainability for the Salina Community

**Issue:** Hazardous air pollutants (HAPs) from local industries

#### **Background:**

HAPs are chemicals which can cause adverse effects to human health or the environment. Congress has identified more than 188 of these pollutants, including substances that cause cancer and neurological, respiratory, and reproductive effects.

In most areas of the country, high concentrations of HAPs are primarily due to pollution sources like trucks or small businesses that have not had the same regulatory scrutiny as large industrial facilities. Moreover, a very small number of chemicals and chemical categories appear to account for the majority of health risks associated with hazardous air pollutants, in particular, diesel emissions from vehicles and equipment.

Nationally, just eight chemicals account for 99% of estimated cancer risks. One pollutant—diesel emissions—accounts for almost 80% of the estimated lifetime cancer risk associated with outdoor hazardous air pollutant exposures.

#### **Top eight cancer HAPs**

- diesel emissions
- benzene
- carbon tetrachloride
- chromium
- polycyclic organic matter (pom)
- 1,3 butadiene
- formaldehyde
- coke oven emissions

#### **Top three non-cancer HAPs**

- acrolein
- formaldehyde
- diesel emissions

**Standards:** The Kansas Air Quality Act has requirements for air pollution sources. An air operating permit is needed if a business has the potential to emit (PTE) annually—

- 10 tons or more of any hazardous air pollutant (HAP) as defined in the federal Clean Air Act
- 25 tons or more of any combination of HAPs
- 100 tons or more of any other regulated air pollutants including nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), particulate matter less than 10 microns (PM<sub>10</sub>), volatile organic compounds (VOC), and carbon monoxide (CO)

#### **Community-specific indicators:**

What does the data say?

Salina is home to several industries which not only play an important role in the community, but provide products nationwide. Some of the larger industries include manufacturers of fluorescent lamps, vehicle batteries, mid-sized commercial buses, frozen pizzas, airplane parts, agricultural equipment, wooden cabinets, and structural steel.

The Toxics Release Inventory (TRI) is a database containing detailed information on nearly 650 chemicals and chemical categories that approximately 22,000 industrial and federal facilities manage through disposal or other releases, or recycling, energy recovery, or treatment. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. This data base is accessible to the public at [www.epa.gov/TRI/](http://www.epa.gov/TRI/).

Although nine Salina businesses reported to this data base (2008 is the most recent data available), only three released hazardous air pollutants (HAPs), as defined by the Clean Air Act and as summarized in the table below.

Facility Name	Street Address	Hazardous Air Pollutant	2008 reported emissions	
			(lbs)	(tons)
Philips Lighting Co	3861 S 9th St	lead compounds	39.6	0.02
Philips Lighting Co	3861 S 9th St	mercury	51.6	0.03
Exide Technologies	413 E Berg Rd	lead compounds	4016	2
Exide Technologies	413 E Berg Rd	arsenic compounds	1	0.0005
Exide Technologies	413 E Berg Rd	antimony compounds	22.4	.01
Eldorado National	1655 Wall St	n-hexane	12779	6.39
Eldorado National	1655 Wall St	toluene	13613	6.81

How is the community affected? It appears from the data available that the community is not negatively impacted by air emissions from local industries.

What are the environmental conditions? Actual emissions from the Salina businesses who reported on the TRI data base are below the thresholds for needing the more stringent, Kansas Class I air operating permit. These businesses most likely operate under a Class II permit, which limits their PTE. Annual reports are submitted to the Kansas Department of Health and Environment (KDHE) to make sure each business is complying with the limits of its operating permit.

As a result, the environmental conditions do not appear to be negatively impacted.

**Data sources:**

Where did the data come from?

U.S.EPA Envirofacts Data Warehouse - <http://oaspub.epa.gov/enviro>

U.S. EPA Toxics Release Inventory (TRI) Program- [www.epa.gov/TRI](http://www.epa.gov/TRI)

KDHE Bureau of Air - [www.kdheks.gov/bar/index.html](http://www.kdheks.gov/bar/index.html)

Green Media Toolshed Scorecard - [http://scorecard.org/env-releases/def/hap\\_drivers.html](http://scorecard.org/env-releases/def/hap_drivers.html)

Age of data? 2008 to present

*Paper prepared by Barb Johnson, January 2010.*