

## ALASKA TOP TEN HAZARDOUS AIR POLLUTANTS

#10	ETHYL BENZENE	
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## Inventory Estimate

Community	Total Emitted (tons per year)	Top Sources
Anchorage	50	Painting, cars/trucks, off-road mobile sources
Fairbanks	24	Painting, cars/trucks, off-road mobile sources
Juneau	55	2-stroke outboards, 2-stroke personal watercraft, 2-stroke 6 horsepower chainsaws
Total of 3 Communities	129	

## Ethyl Benzene Sources

vehicles	power generators	boats and ships
airports	non-road sources like chainsaws, snow blowers, snowmobiles, outboards, and personal watercraft	wastewater facilities
asphalt plants and paving	military bases	service stations
hospitals	consumer products like automotive care and sealant products	refineries
painting activities		

## Ethyl Benzene Emission Inventory Improvements

- Measure activity levels for painting
- Refine off-road assessments such as locomotives if possible
- Refine evaporative emissions from fuel storage, loading and dispensation
- Refine emission factors

## Ethyl Benzene Health Effects

**Low level (< 5 - 100 ppm):** No known effect. Odor threshold around 0.5 ppm. Possible effects nearing 100 ppm

**Medium level (100 - 1000 ppm):** Irritation for 8 hour per day exposures at 100 ppm. Eye irritation at 200 ppm. Tolerance can be built at 1000 ppm levels, though first exposure very irritating to eyes.

**High level (> 1000 ppm):** Immediate eye irritation at 2000 ppm. 5000 ppm intolerable irritation of eyes, nose and throat, chest constriction, eye irritation, dizziness effects on blood, liver, and kidneys.

**Cancer ranking:** EPA does not classify ethyl benzene as a carcinogen.

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