

ALASKA TOP HAZARDOUS AIR POLLUTANTS

HYDRAZINE

#9

Non Cancer Endpoint

The inventory method and available data do not indicate emissions occurring in the three inventoried communities. However, this does not mean there are no emissions of this pollutant in the state.

Reference Concentration (from the California Environmental Protection Agency)

- Hydrazine - 0.0002 mg/m³ for liver and thyroid effects - rats

Inventory Estimates of Hydrazine

| Community | Ranking by Mass | Total Emitted (tons per year) | Top Sources |
|------------------------|-----------------|-------------------------------|-------------|
| Anchorage* | n/a | --- | n/a |
| Fairbanks* | n/a | --- | n/a |
| Juneau* | n/a | --- | n/a |
| Total of 3 Communities | | --- | |

* No data to indicate emissions

Hydrazine Sources Expected* in Alaska

* No data to indicate emissions

Potential Occupational Exposure to Hydrazine

| | | |
|--|---|-------------|
| pesticide application | pharmaceutical production (chemical intermediate) | photography |
| anti-corrosion treatment in boiler water | cloth dyes | rocket fuel |

Hydrazine Emission Inventory* Improvements

* No data to indicate emissions

Hydrazine Health Effects

There is not enough data to ascertain specific effects from specific exposure concentrations. Some studies indicate the following: High concentrations can lead to fluid in the lungs. Exposures to high concentrations can lead to nervous system effects like fatigue and tremor. Lung and liver damage also occurs. Eventually, death may result. Blood cell alterations can occur as well.

NOTE: Hydrazine has been found in cigarette smoke.

Cancer ranking: EPA has classified hydrazine in Group B2, a probable human carcinogen. Based on lung and liver tumor development in mice.