Aminobiphenyl Page 1 of 2

ALASKA TOP HAZARDOUS AIR POLLUTANTS

4-AMINOBIPHENYL

Class A Carcinogen

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.

Inhalation Unit Risk Estimate

• 4-Aminobiphenyl - a unit risk estimate is not available. The chemical causes bladder cancer in people as determined by the International Agency for Research on Cancer.

Inventory Estimates for 4-Aminobiphenyl

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

4-Aminobiphenyl Sources Expected* in Alaska

Potential Occupational Exposure to 4-Aminobiphenyl

• 4-Aminobiphenyl is no longer manufactured commercially; it was used as a rubber antioxidant and a dye intermediate.

4-Aminobiphenyl Emission Inventory* Improvements

^{*} No data to indicate emissions

^{*} No data to indicate emissions

Aminobiphenyl Page 2 of 2

4-Aminobiphenyl Health Effects

There is not enough data to relate specific concentrations to specific health effects. Limited studies show short term inhalation of high concentrations produce headaches, lethargy, blueing of the skin, burning when urinating, and the presence of blood in urine.

NOTE: 4-Aminobiphenyl is found in tobacco smoke; smokers have been found to have higher levels of the breakdown products of 4-aminobiphenyl in their blood than nonsmokers.

Cancer ranking: IARC classifies 4-Aminobiphenyl as a Group 1 carcinogen for bladder cancer. IARC's Group 1 carcinogens are considered known human carcinogens, like cigarette smoke. They are equivalent to EPA's 'A' classification for know human carcinogens. There is no inhalation unit risk estimate for this chemical.