

Toxicological Advisory Committee

AIR TOXICS REPORT

Prepared for

State of Vermont

Agency of Natural Resources



February, 1998

Table of Contents

I. Executive Summary	1
II. Review of Hazardous Ambient Air Standards	7
III. Measurement of Hazardous Air Contaminants in Ambient Air	19
IV. Priority Compounds	27
V. Management Options	56
VI. Risk Issues	58
VII. Future Actions	63
Appendix A	Category I - Algorithm and Tables
Appendix B	Category II and Category III Tables
Appendix C	Air Monitoring Data - Tables
Appendix D	Research Status Report-Mercury Deposition and Effects in the Lake Champlain Basin
Appendix E	The Toxicological Advisory Committee

List of Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists

AEGL - Acute Exposure Guideline Level

Agency - Vermont Agency of Natural Resources

Category I - A contaminant that is known or suspected to be a carcinogen.

Category II - A contaminant that is a noncarcinogen with potential/systemic effects due to long term exposure.

Category III - A contaminant that is a noncarcinogen considered to have primarily short term irritant effects.

CPF - Cancer Potency Factor

CPF_i - Inhalation Cancer Potency Factor

CPF_o - Oral Cancer Potency Factor

Committee - Toxicological Advisory Committee

HAAS - Hazardous Ambient Air Standard

HEAST - Health Effects Summary Tables, US EPA

IARC - International Agency for Research on Cancer

IRIS - Integrated Risk Information System database, US EPA

MDL - Method Detection Limit

NCI - National Cancer Institute

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicological Program

OSHA - United States Department of Labor Occupational Safety and Health Administration

PAH - Polynuclear Aromatic Hydrocarbons

PCB - Polychlorinated Biphenyl

PCDD/PCDF - Polychlorinated Dibenzo-P-Dioxins/Furans

PEL - Permissible Exposure Limit, derived by OSHA

REL - Recommended Exposure Limit, derived by NIOSH

RfC - Inhalation Reference Concentration

TLV - Threshold Limit Value, derived by ACGIH

US EPA - United States Environmental Protection Agency

VOC - Volatile Organic Compound