

MEMORANDUM

TO: Winston H. Hickox
Agency Secretary

FROM: Joan E. Denton, Ph.D.
Director

DATE: December 24, 2001

SUBJECT: ADOPTION OF CHRONIC REFERENCE EXPOSURE LEVELS FOR
AIRBORNE TOXICANTS

In accordance with Health and Safety Code, Section 44300 *et seq.* (The Air Toxics Hot Spots Information and Assessment Act, AB 2588, Connelly as amended by SB 1731, Calderon), the Office of Environmental Health Hazard Assessment (OEHHA) hereby adopts Chronic Reference Exposure Levels (RELs) for 12 chemicals (attachment).

OEHHA is mandated to develop risk assessment guidelines to be used by state and local agencies in implementing the Air Toxics Hot Spots program. Development of these guidelines is proceeding in stages. There are four technical support documents, which have been adopted. These describe the scientific basis for (respectively) acute RELs, cancer potency factors, chronic RELs, and exposure assessments. A fifth document, currently in preparation, is a guidance manual based on the four technical support documents.

The third technical support document, *Air Toxics Hot Spots Program Risk Assessment Guidelines. Part III. The Determination of Chronic Reference Exposure Levels for Airborne Toxicants*, was adopted on February 23, 2000. A chronic REL is an airborne level that would pose no significant health risk to individuals indefinitely exposed to that level. RELs are based solely on health considerations, and are developed from the best available data in the scientific literature. This technical support document provided chronic RELs for 22 chemicals, with a summary for each describing its chemical and physical properties, its chronic health effects, and the data used to calculate the REL.

The Scientific Review Panel, (SRP) has reviewed a number of other proposed chronic RELs at previous meetings, beginning in September 1999. At its November 28, 2001 meeting, the SRP endorsed 12 additional RELs, bringing the total number of chemicals for which chronic RELs are provided to 72. The expanded list and supporting summaries will be available on our

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Web site. Additional RELs are currently undergoing review by the public and the SRP, and revision by OEHHA; these will be presented in due course.

Attachment

Chronic Reference Exposure Levels Adopted by OEHHA – December 2001

<i>Substance (CAS #)</i>	<i>Chronic Inhalation REL ($\mu\text{g}/\text{m}^3$)</i>	<i>Hazard Index Target(s)</i>
Acrylonitrile (107-13-1)	5	Respiratory system
Beryllium (7440-41-7) and beryllium compounds	0.007	Respiratory system; immune system
Chloropicrin (76-06-2)	0.4	Respiratory system
Diethanolamine (111-42-2)	3	Cardiovascular system; nervous system
Ethylene dibromide (106-93-4)	0.8	Reproductive system
Isophorone (78-59-1)	2000	Development; liver
Maleic anhydride (108-31-6)	0.7	Respiratory system
Methyl isocyanate (624-83-9)	1	Respiratory system; reproductive system
Methylene dianiline (4,4'-) (101-77-9)	20	Eyes; alimentary system (hepatotoxicity)
Selenium and selenium compounds (other than hydrogen selenide)	20	Alimentary system; cardiovascular system; nervous system
Sulfuric acid (7664-93-9)	1	Respiratory system
Vinyl acetate (108-05-4)	200	Respiratory system

OEHHA
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