M E M O R A N D U M

TO: Winston H. Hickox
Agency Secretary

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

DATE: April 25, 2000

SUBJECT: ADOPTION OF CHRONIC REFERENCE EXPOSURE LEVELS FOR AIRBORNE TOXICANTS

In accordance to 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 16 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, three of which have been adopted, and the fourth is currently being reviewed by the Scientific Review Panel (SRP) on Toxic Air Contaminants. These describe the scientific basis for (respectively) acute RELs, cancer potency factors, chronic RELs, and exposure assessments. The fifth document 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 SRP had initially reviewed a number of other proposed chronic RELs at previous meetings, beginning in September 1999. At its April 13, 2000 meeting, the SRP endorsed 16 additional RELs, bringing the total number of chemicals for which chronic RELs are provided

to 38. The expanded list and supporting summaries will be available on our 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.

Should you have any questions, please contact me at (916) 322-6325.

Attachment

Attachment

Chronic Reference Exposure Levels Adopted by OEHHA – April 2000

	Substance (CAS #)	*Chronic Inhalation REL ($\mu g/m^3$)*	*Hazard Index Target(s)*
1	Chloroform (67-66-3)	300	Alimentary system; kidney; development
2	Dioxane (1,4-) (123-91-1)	3,000	Alimentary system; kidney; cardiovascular system
3	Ethyl chloride (75-00-3)	30,000	Development; alimentary system
4	Ethylene glycol (107-21-1)	400	Respiratory system; kidney; development
5	Hexane (n-) (110-54-3)	7000	Nervous system
6	Hydrogen cyanide (74-90-8)	9	Nervous system; endocrine system; cardiovascular system
7	Hydrogen sulfide (7783-06-4)	10	Respiratory system
8	Manganese & manganese compounds	0.2	Nervous system
9	Methanol (67-56-1)	4,000	Development
10	Naphthalene (91-20-3)	9	Respiratory system
11	Phenol (108-95-2)	200	Alimentary system; cardiovascular system; kidney; nervous system
12	Propylene (115-07-1)	3,000	Respiratory system
13	Styrene (100-42-5)	900	Nervous system
14	Toluene (108-88-3)	300	Nervous system; respiratory system; development
15	Trichloroethylene (79-01-6)	600	Nervous system; eyes
16	Xylenes (m-, o-, p-)	700	Nervous system; respiratory system

OEHHA
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