DEPARTMENT OF ECOLOGY

March 10, 1997

TO:

Mr. Steve Gano

Gano and Associates

FROM:

Megan White, P.E., Manager

Hazardous Waste and Toxics Reduction Program

SUBJECT:

Response to concerns on Ecology's "Turning the Tide" publication

As I indicated in our recent telephone conversation, Ecology is opposed to the language in the amended version of HB 1602. We do not see the problem that this proposed law is designed to solve. HB 1602 as amended would act to shut off the flow of information to the public. Ecology wants to provide the most accurate information possible to the public. We want to have industry groups, individual business people, or members of the general public identify where our information may be in error. We will respond by investigating those concerns and making changes to our information as appropriate.

To follow-up on that point and per our telephone conversation, I want to make you aware of our review of Mr. Barry Ziman's comments on an Ecology document titled, "Turning the Tide on Toxics in the Home." Mr. Ziman had a number of specific comments regarding this document and a document produce by the state of Oregon. We were able to find only three specific comments regarding the Ecology publication. Our responses to those concerns follow.

Air Fresheners/Deodorizers

Comment: Formaldehyde, methylene chloride, o-phenylphenol, and p-dichlorobenzene are listed as "common hazardous ingredients" in these products, but in actuality are not used in any common household air freshener.

Response: O-phenylphenol can be found in liquid disinfectants and p-dichlorobenzene can be found in cake deodorizers (e.g., mothballs) (Ellenhorn and Barceloux, 1988). Formaldehyde is used as a disinfectant for dwellings, ships, storage houses, etc. (Budavari et al., 1989). Methylene chloride is used as a propellant in some aerosols. Spray-type deodorizers may contain methylene chloride (Gosselin, et al., 1984).

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2. Disinfectants

Comment: Household disinfectants do not generally contain aromatic hydrocarbons, formaldehyde or hydrocarbon solvents. Rubbing alcohol (isopropyl alcohol, usually over 70%) is recommended as a safer alternative to commercial disinfectants, and is falsely described as an "excellent, yet relatively nontoxic disinfectant," despite the fact that it is more flammable and more toxic than virtually any commercial disinfectant, and has insufficient antimicrobial efficacy to be considered a disinfectant by the EPA. Borax solution is also recommended as a substitute, even though data have clearly shown that it is not efficacious as a disinfectant against infectious bacteria.

Response: Liquid disinfectants may contain acids, alkali, alcohol, pine oil, phenol, or cationic detergents (Ellenhorn and Barceloux, 1988). Thus, disinfectants can contain corrosive compounds (e.g., acids and alkalis), flammable substances (e.g., ethanol), aromatic hydrocarbons (e.g., phenol), and hydrocarbon solvent derivatives (e.g., pine oil containing terpene alcohols). Both isopropyl alcohol and borax are used for their antiseptic properties (Budavari et al., 1989; Olson et al., 1990).

3. Drain Cleaners

Comment: Drain cleaners do not contain trichlorobenzene or trichloroethane.

Response: Some drain cleaners have been reformulated to contain 1, 1, 1-trichloroethane, rather than a caustic (Ellenhorn and Barceloux, 1988). Gosselin, et al., 1984, states that drain and pipe cleaners may contain trichlorobenzene.

As the information presented above outlines, we don't think there is a problem with the information presented in the subject document. Even so, we are planning to review this document and determine whether the information needs to be updated to most accurately reflect current conditions.

Please let me know if you have questions regarding any of the information presented in this memo. My telephone number is (360) 407-6702.

FROM: WASHINGTON PEER_

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References

Budavari, S., M.J. O'Neil, A. Smith, and P.E. Heckelman (eds.), 1989. The Merck Index, 11th ed., Merck and Co., Inc., Rahway, NJ.

Ellenhorn, M.J. and D.G. Barceloux, 1988. <u>Medical Toxicology: Diagnosis and Treatment of Human Poisonings</u>. Elsevier, New York, NY.

Gosselin, R.E., R.P. Smith, and H.C. Hodge, 1984. <u>Clinical Toxicology of Commercial Products</u>. Williams and Wilkins, Baltimore, MD.

Olson, K.R., C.E. Becker, N.L. Benowitz, J.F. Buchanan, F.J. Mycroft, J. Osterloh, and O.F. Woo (eds.), 1990. <u>Poisoning and Drug Overdose</u>. Appleton and Lange, Norwalk, CT.