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**Comments on OEHHA Pre-Regulatory Draft Green Chemistry Hazard Traits, Endpoints,
and Other Relevant Data Regulations
(Version Dated August 10, 2010)**

Dear Ms. Kammerer:

Sierra Club California thanks OEHHA staff for their hard work on the pre-regulatory draft. We believe the draft can and should be significantly improved by incorporating the comments below, which are based on a careful review by our scientific experts.

Most important comments

1. Wildlife definition. The definition of "wildlife," by referencing "animals" could be read to exclude aquatic organisms, fish, and insects. In colloquial usage (as opposed to scientific language), the word "animal" is used to mean only closer relatives of humans such as mammals and other vertebrates. It should be clarified that the definition is intended to apply to any organism in the kingdom animalia, including, but not limited to fish and other aquatic organisms, invertebrates, insects, reptiles, and birds.

2. Equal wording for environmental hazard traits. Wording for environmental hazard traits differs in problematic manners from equivalent wording for human hazard traits twice in the draft text:

(1) *Section 3.b i.1. Wildlife survival impairment*. As worded it contains a high standard ("significantly decreases the potential for wildlife survival in the environment") that would be challenging to prove scientifically. Suggest the following rewording to parallel other hazard traits:

1. The wildlife survival impairment hazard trait is defined as the occurrence of increased incidence of death, disease or other biological impairment, following

exposure to a chemical substance ~~that significantly decreases the potential for wildlife survival in the environment.~~

(2) *Section 2.k. definition of “hazard trait.”* Should treat environmental hazards equally with other hazards by using parallel wording:

“Hazard traits” are properties of chemicals that fall into broad categories of toxicity, ~~adverse environmental hazards effects~~, physical hazards, or exposure potential characteristics.

3. Chemical Hazard Trait Data Classification system (section 3, first paragraph and Section 4).

This system should only apply to hazard traits related to human health. No authoritative organization lists of environmental hazard or exposure potential chemical properties exist. Unless the regulations specify that the class system applies only to human health traits, all environmental hazard traits endpoints would be "unclassifiable" and therefore would be inadvertently de-prioritized.

4. Missing hazard traits. Hazard traits are needed to ensure that the state can address chemicals that interfere with waste processing and reuse, including but not limited to:

- biological treatment processes at municipal wastewater treatment plants (commonly called “Publicly-Owned Treatment Works [POTW] operational interference”)
- septic system operations (which rely on biological treatment by soil organisms and plants)
- safe and/or economic reuse of municipal wastes like green waste and sewage sludge (“biosolids”) (e.g., compost, energy production).

These treatment operations and waste management activities involve biological or non-biological processes that are not otherwise captured in the hazard trait definitions.

Other comments

Use of the term “impairment.” The regulatory preamble should clarify that the use of the word “impairment” in these regulations has no relationship to the use of this word in the state’s implementation of the Federal Clean Water Act. The Clean Water Act definition is reactive (i.e., after a water body is polluted) and has a high standard of evidence that would be inappropriate for these regulations.

Section 3.b.ii.2. The authors probably intended to reference “Induction” of vitellogenin production (in males) rather than “reduction” of vitellogenin production (in females).

Section 3.c.iii.2. Why are the persistence requirements greater for marine ecosystems than for fresh water? California’s bays, estuaries, and coast are just as precious as our rivers and streams.

Section 3.c.x. This section appears to be unnecessary since “chemical” is defined to include its degradates and metabolites. It could be problematic in that its presence might confuse the intent of the regulation and wind up limiting the inclusion of degradates in the implementation of the regulation. Suggest that consideration be given to deleting this section and instead including a definition of “degradata”:

“Degradata” is the product of transformation of a chemical in the environment. Degradates may be identified in the field, in laboratory studies, or reliably predicted through scientifically accepted methodologies, including but not limited to structure activity relationships.

We believe the changes we have suggested will bring the regulations closer to the letter and intent of SB 509. Thank you for considering our views.

Respectfully Submitted,

Bill Magavern
Director