

**Comments on DTSC's "Notice of Scoping"  
for the Proposed Revisions of the  
California Hazardous Waste Classification System**

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**G. Fred Lee & Associates**

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Maria Gillette  
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Dear Ms. Gillette:

I am responding to the request for comments on "Notice of Preparation: Revision of California Non-Resource Conservation and Recovery Act (RCRA) Waste Classification Regulation Focused Environmental Impact Report - Notice of Scoping Process." My comments on areas that should be included in the Department of Toxic Substances Control (DTSC) Environmental Impact Report (EIR) for the proposed revisions of hazardous waste classification system are presented below.

**Background**

I have been an active participant in the DTSC Regulatory Structure Update (RSU) project devoted to revision of the waste classification regulations over the past several years. I have provided detailed comments on some of the technical problems that I have found with DTSC's proposed approaches for modifying the "California-only" hazardous waste classification. My comments have been based on my almost 40 years of professional work devoted to evaluating the public health and environmental impacts of chemicals. I obtained a bachelors degree in environmental health sciences from San Jose State College in 1955, and a Master of Science degree in Public Health from the University of North Carolina in 1957. After obtaining my Ph.D. in Environmental Engineering from Harvard University in 1960, I held university graduate-level teaching and research positions for 30 years at several major universities. During this time I conducted over five million dollars in research and published over 500 papers and reports. In 1989 I retired from university teaching and research and expanded my part-time consulting to full-time. Much of my work as a university professor and as a private consultant has been directed toward

developing approaches for managing hazardous chemicals in the environment as they may impact public health and the environment.

I have been involved in and concerned with the approaches being used in the United States for hazardous waste classification since the US EPA first proposed the RCRA classification system that involved the use of the EP Tox test. I have extensive experience in conducting research devoted to leaching of hazardous chemicals from soils, sediments, and wastes with respect to evaluating the factors affecting leaching and the water quality significance of the leached chemicals. I have published extensively on these topics. Copies of many of my publications are available as downloadable files from my website, <http://members.aol.com/gfredlee/gfl.htm>. In 1981 Dr. Jones and I published the paper,

Lee, G.F. and Jones, R.A., "Application of Site-Specific Hazard Assessment Testing to Solid Wastes," in: Hazardous Solid Waste Testing: First Conference, ASTM STP 760, ASTM, pp 331-334 (1981)

which specifically discussed the problems with the US EPA's proposed approach for hazardous waste classification involving leaching of the wastes. This paper was judged by the ASTM conference organizers as the best paper presented at the conference. Further, Dr. Jones and I published a paper,

Lee, G.F. and Jones, R.A., "A Risk Assessment Approach for Evaluating the Environmental Significance of Chemical Contaminants in Solid Wastes," in: Environmental Risk Analysis for Chemicals, Van Nostrand, New York, pp 529-549 (1982)

which pioneered in developing hazard assessment approaches for appropriate management of solid/hazardous waste. Since the early 1980s, I have continued to be involved in evaluating the potential public health and environmental problems associated with current waste management approaches.

It is with this background that I wish to make the following comments on issues that should be included in a properly developed EIR covering DTSC's proposed approach for perpetuating the California-only hazardous waste classification system.

### **Overall Conclusion**

Based on my experience, there is no technical justification for the State of California to continue to develop California-only hazardous waste. This approach represents a significant economic burden to the people of the state, and provides little in the way of real, significant public health and/or environmental protection above that provided by the US EPA's hazardous waste classification approach. As I have documented in papers and reports, the current TCLP testing procedure and its implementation for waste classification is fundamentally flawed as a proper approach for determining the hazards that constituents in wastes and/or soils/sediments represent to public health and the environment. The current DTSC's proposed revised hazardous waste classification does

not address the fundamental problems with the approaches being used for classifying waste with respect to the type of landfill into which the wastes are to be placed. Both the so-called municipal solid waste and the hazardous waste landfills, as currently being developed in California, at best only postpone for a short period of time when the wastes in either type of landfill will pollute groundwaters, impairing their use. The original, as well as the currently proposed California-only hazardous waste classification does not change the overall threat to public health and the environment associated with the management of these wastes. The DTSC-proposed revisions of the California-only hazardous waste classification approach is basically tinkering with a fundamentally flawed system that will cost California industry, commerce, and the public significant funds without providing significant additional public health and environmental protection. Background information on these issues has been discussed in Dr. Jones-Lee's and my publications on solid waste management.

### **Recommendations for Scoping**

I have frequently been involved as a reviewer of EIRs for proposed projects. I have repeatedly found that project proponents, whether public or private, are able to have their EIRs certified without complying with CEQA requirements for full disclosure of the potential impacts of the project. Basically, EIRs, as currently developed, are self-serving documents on behalf of the project proponents that fail to provide decision-makers and the public with the necessary information to fully understand the impacts of the project on public health and the environment, as well as the economic resources available to the public. Specific recommendations on issues that I feel need to be addressed in this EIR are presented below.

### ***Justification for Continuation of California-Only Hazardous Waste***

The EIR, in order to comply with CEQA requirements for full disclosure, must provide the information that the decision-makers and the public can use to reliably assess the additional public health and environmental protection that Californians will have from the hazards associated with the proposed management approaches for the California-only hazardous waste. This information should include a detailed documentation of the additional protection that Californians have that the people in the other 49 states do not have, since they have not adopted the same waste management regulatory requirements as California. The people in California, who are being asked to pay the increased waste management costs, should be entitled to know the incremental public health and environmental protection that they will receive, compared to the hazards that people in the other 49 states are experiencing, associated with using the federal hazardous waste classification approach.

There are many, including the author, who find that, from an overall prospective, the people of California are gaining little, if anything, in the way of increased public health and environmental protection associated with the California-only hazardous waste classification/management approach.

***Implications of Adopting the California-Only Hazardous Waste Classification Approach to Non-Waste Management Issues***

A credible EIR should provide full disclosure on the DTSC's proposed hazardous waste classification approach, which perpetuates the California-only hazardous waste classification/ management system, as this classification approach may impact the management of non-wastes, such as contaminated soils or sediments. The proposed classification approach has important implications in classifying materials as hazardous waste that would not be hazardous waste otherwise if the state used only the federal classification approach. The current, original DHS, now DTSC, hazardous waste classification, which requires that a waste containing lead above 1,000 mg/Kg has caused the people of California to spend many tens of millions of dollars in managing highway stormwater runoff residues as hazardous waste that accumulate in stormwater conveyance structures. This situation is a result of a court order arising out of an environmental group-initiated lawsuit against Caltrans that asserted that since some of the residues in highway stormwater runoff conveyance structures contain lead above the arbitrarily-developed 1,000 mg/Kg associated with the California-only hazardous waste classification approach, that Caltrans must initiate a highly expensive program of removing the conveyance structure residues in order to control the adverse impacts of the "hazardous wastes" on Santa Monica Bay.

Basically, the judge ruled that, since these residues contain lead above the 1,000 mg/Kg hazardous waste classification level, allowing these residues to remain in the stormwater conveyance structure that ultimately discharges into Santa Monica Bay must be adverse to the Bay. However, the critical review of the characteristics of Santa Monica Bay shows that there are no known public health or aquatic life impacts associated with particulate lead entering the Bay from highway and urban street stormwater runoff. In fact, a number of studies have shown that the lead derived from these types of sources is in an inert form, and therefore is not adverse to public health or the environment.

DTSC's proposed revised hazardous waste classification approach could cause similar types of inappropriate use of the classification information, that could cost the people of California large amounts of funds unnecessarily in the name of environmental and/or public health protection, where no real adverse impact will occur if California adopts the approach that is being used in the other states of classifying hazardous wastes based on federal standards. This EIR must address this issue so that the decision-makers and the public understand the potential consequences of adopting the proposed approach for hazardous waste classification.

***Review of the CEQA "Initial Study for Waste Classification Regulations"***

Accompanying the request for comments on the scope of the proposed EIR is a 22-page "Workbook" in which various "Findings" are presented. On page 3 under "Analysis of Potential Impacts," it is stated that these impacts will be significant unless mitigated. DTSC should be required to reliably document this assessment where factual information is provided on the hazards to public health and the environment and the actual damage

that has occurred in other states which use only the federal classification approach for determining whether a waste is a hazardous waste.

Page 5 under "Analysis of Potential Impacts" states, "*Surface and groundwater are primary media potentially impacted by release of hazardous constituents. Therefore, the projects (sic) potential to substantially impact surface and groundwater will be analyzed in the EIR.*" DTSC must, in a credible EIR, provide detailed discussions of how the perpetuation of the California-only waste management approach results in significant adverse impacts to surface and groundwater quality in the state. A similar situation occurs with respect to adverse impacts to ecological risks to plant or animal life and ecological systems, including sensitive and endangered species listed on page 6.

The discussions of these issues should not be a superficial "motherhood"-type discussion, but must include quantification of the additional risk that would be occurring in various waterbodies within the state of using only the federal classification system compared to the currently proposed DTSC California-only hazardous waste classification system. Further, this discussion should include documentation of how the waters in other states have been significantly degraded because those states didn't follow California's approach of creating the equivalent of a California-only hazardous waste classification system to protect their states' waters. It is my understanding that the California-only hazardous waste classification approach was adopted in the mid-1980s. Certainly, if there is technical validity to this approach, which would cause DTSC to propose to perpetuate it, there should be documentation that shows that the money spent in implementation of this approach by the public and private interests has resulted in a significant improvement in the surface and groundwater quality of the state. Further, the failure of other states to follow the same approach should be reflected in poorer water quality in those states that only use the federal hazardous waste classification approach.

### ***Cumulative Effects***

The EIR presentation of cumulative effects must include a critical review of how failing to classify various proposed California-only hazardous wastes as a hazardous waste that requires special management and additional costs compared to the federal requirements will result in significant public health and/or environmental damage. DTSC should present plausible scenario examples for various types of California-only waste streams which demonstrate that managing these waste streams in accordance with the proposed regulations will, in fact, provide the public and the environment with significant additional public health and environmental protection over that which would be achieved if California adopted the approach of other states of classifying their hazardous wastes based on federal classification approaches.

### ***Impact on Economic Resources***

The perpetuation of the California-only hazardous waste classification approach causes Californians and California business and commercial interests to spend additional funds on hazardous waste management compared to the costs for managing the same types of

wastes in other states. A properly conducted EIR should include a discussion of the potential economic impacts of using funds for managing ill-defined impacts, many of which may be non-existent, associated with California-only hazardous wastes compared to the use of these funds to meet other highly significant societal needs. California has many significant problems for which there is need for substantial funding that are not being addressed today because of lack of funds. Utilizing funds for chasing ill-defined ghosts of problems associated with the California-only hazardous waste stream is not in the best interest of California. The EIR should discuss these issues and present quantification of why the California-only hazardous waste stream created by the proposed regulations represents such a significant threat to public health and the environment that it merits the use of some of the limited funds available for the control of this waste stream compared to the use of the funds to meet other societal needs.

***Suggested Approach***

Because of the importance of this issue to the future of California, it is suggested that DTSC appoint an independent peer review panel that would work with DTSC staff/management in developing this EIR, to be sure that it adequately and reliably covers the issues that should be addressed to provide full disclosure of potential impacts of the proposed regulations. If there is interest, I would be happy to assist DTSC in this matter. If there are questions about these comments, please contact me.

Sincerely yours,

G. Fred Lee, PhD, DEE

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***Reference as: "Lee, G.F., 'Comments on DTSC's "Notice of Scoping" for the Proposed Revisions of the California Hazardous Waste Classification System,' letter to M. Gillette, Department of Toxic Substances Control, Sacramento, CA, (1998)."***