

**Responses to Comments on the
Technical Support Document**

Public Health Goal

For

Thallium

In Drinking Water

Prepared by

**Pesticide and Environmental Toxicology Section
Office of Environmental Health Hazard Assessment
California Environmental Protection Agency**

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INTRODUCTION

The following are responses to major comments received by the Office of Environmental Health Hazard Assessment (OEHHA) on the proposed public health goal (PHG) technical support document for thallium as discussed at the PHG workshop held on October 6, 1998, or as revised following the workshop. Some commenters provided comments on both the first and second drafts. For the sake of brevity, we have selected the more important or representative comments for responses. Comments appear in quotation marks where they are directly quoted from the submission; paraphrased comments are in italics.

These comments and responses are provided in the spirit of the open dialogue among scientists that is part of the process under Health and Safety Code Section 57003. For further information about the PHG process or to obtain copies of PHG documents, visit the OEHHA web site at www.oehha.org. OEHHA may also be contacted at:

Office of Environmental Health Hazard Assessment
301 Capitol Mall, Room 205
Sacramento, California 95814
(916) 324-7572

RESPONSES TO MAJOR COMMENTS RECEIVED

U.S. EPA

Comment 1: “Considering the President’s initiative to present material in ‘plain language,’ all documents should be written to be understood by the general public. Some items and terminology used to discuss those items can be confusing. Be careful to explain clearly. Some material is too technical for the public to understand.”

Response 1: This is a technical support document, therefore technical terms are used. OEHHA has also developed educational and outreach documents, including a glossary of terms, that are available to the general public and can be accessed on the OEHHA website (<http://www.oehha.org>).

Comment 2: “In most cases, the principal study used is not clearly defined in the Summary (e.g. thallium, heptachlor, heptachlor epoxide).” “Principal study should be stated in the Summary.”

Response 2: Suggestion was incorporated.

Comment 3: Specific to the thallium document “...clarification should be made as to what statistically significant vs insignificant is.”

Response 3: It is true that it would be more complete to include the p-value whenever stating that a finding was statistically significant. We have done this wherever possible, especially for the principal studies. This is not always possible when citing secondary sources where the information is not reported. A term such as “biological” or “statistical” was added in the text of the document to clarify the use of the words significant or significance when necessary.

Comment 4: Referring to the discussion on page 13 (Dose-Response Assessment), “...discussion is not clear. In second paragraph the statement is made that treatment-related alopecia was observed even at the lowest dose of .0081 mg/kg-day. However, later in the discussion you show incidence of alopecia attributed to thallium exposure for low-, mid-, and high-dose females was 0/20, 3/20, and 5/20. Although Table 2 shows that male rats at all dose levels experienced alopecia, this discussion does not mention the male gender.”

Response 4: We reevaluated the Stoltz et al. (1986) data and found that in all but two cases in which alopecia was observed, it was likely that the hair loss in male or female rats resulted from causes other than from thallium treatment. The two cases of alopecia in female rats administered 0.2 mg/kg-day thallium daily by gavage appeared to be treatment-related. Therefore, we selected the mid-dose level of 0.04 mg/kg-day as the NOEL that was used in the derivation of the PHG for thallium in drinking water. The references to dose-response effects and relevant discussions have been revised in the technical support document to reflect our reevaluation of the data.