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Subject Environmental Defense comments on Antimony  
Diphenyldithiocarbamate (CAS# 15890-25-2)

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Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for **Antimony Diphenyldithiocarbamate (CAS# 15890-25-2)**.

R.T. Vanderbilt Company, Inc., in response to EPA's High Production Volume (HPV) Chemical Challenge, has submitted robust summaries and a test plan describing available data for the lubricant additive, antimony diphenyldithiocarbamate.

This submission consists of a brief and disorganized test plan and an incomplete set of robust summaries containing many blank pages. The test plan has no title page, does not identify the manufacturer of antimony diphenyldithiocarbamate responsible for this submission and provides no references for the data cited. The robust summaries consist largely of calculated data and only four referenced studies.

The test plan appears to take the stance that, because this chemical has been produced for over 30 years, is used primarily in industrial applications and human exposure is largely limited to occupational settings, it is safe. We disagree with the assertion of safety in the absence of data; antimony diphenyldithiocarbamate is an additive used in a large variety of lubricants in virtually every industry. Thus, human exposure is very significant. The National Occupational Exposure Survey estimates the number of workers exposed occupationally to antimony diphenyldithiocarbamate to be 230,775, of whom 22,150 are female. Antimony diphenyldithiocarbamate-containing lubricants are also widely transported and used all over the world, resulting in a very significant release of these lubricants into the environment. Therefore, antimony diphenyldithiocarbamate is an important industrial chemical in need of considerable additional study to determine what risks its use may pose to human or environmental health.

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The very limited toxicological data provided for antimony diphenyldithiocarbamate indicate that it has low acute toxicity to mammals and is probably not a mutagen. However, other SIDS elements required by the HPV Challenge are, at present, largely unaddressed. Thus, we support the proposed additional studies to determine its biodegradation, chronic toxicity to daphnia, repeat dose toxicity and reproductive/developmental toxicity. We would also argue that the ability to conduct a study of chronic toxicity in daphnia is evidence that it is possible to test the toxicity of this compound to other aquatic species. The test plan matrix indicates studies of antimony diphenyldithiocarbamate toxicity to fish and aquatic plants are not relevant because it is not soluble in water. Yet, according to Table 1 of this submission, its solubility in water has not been determined, only estimated. Therefore we recommend the Sponsor conduct an actual determination of antimony diphenyldithiocarbamate's solubility in water and studies of its toxicity to fish and aquatic plants.

In summary, this submission, while not very well prepared, will be minimally acceptable if the proposed additional studies are conducted. We believe its value would be enhanced significantly by experimental determination of the solubility of antimony diphenyldithiocarbamate in water and by conducting studies of its toxicity to fish and aquatic plants.

Thank you for this opportunity to comment.

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