Gasoline Blending Streams – Comments of Environmental Defense

(Submitted via Internet 6/11/02)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Gasoline Blending Streams.

The American Petroleum Institute (API) prepared the test plan and robust summaries on gasoline blending streams. In preparing the test plan API had to deal with a number of complex and difficult issues and they handled them in a clear and objective manner. This is a well-written and very informative test plan and one of the more interesting ones to read.

There are 87 substances covered in the gasoline blending test plan and they were placed into four separate categories representing distinct mixtures. The categories are high paraffinic, high olefinic, high naphthenic and high aromatic. We support API's establishment of the four categories since they cover an appropriate spectrum of mixtures contained in the gasoline blending streams. The selected test substances for each category contain as much or more of a given chemical class as is found in gasoline. It would be a waste of resources and an unnecessary use of animals to test additional mixtures.

In regards to the specifics of the test plan we have the following comments:

1. We agree that there is sufficient data to characterize acute toxicity endpoints for all four categories.

2. We agree with the proposal to conduct a repeat dose inhalation study in rats using a heavy straight run naphtha or a heavy hydrocracked naphtha since only a dermal skin painting study is available for this category. In regards the kidney toxicity caused by the other categories in repeat dose studies, we thought that the discussion of the hyaline droplet mechanism was a bit overdone.

3. We tend to agree that there is adequate genetic toxicity data available but we do have one minor concern. Sweetened naphtha was used as the test substance in the in vitro and in vivo genetic toxicity studies for the high naphthenic category. It contains only 20.9% naphthenics (Table1), considerably less than the goal of 30% indicated in the justification for the establishment of the categories. Though it is a close call, we (somewhat reluctantly) concur that this study can be used for purposes of the HPV screening program.

4. We agree with the proposal to conduct a reproductive/developmental study on a stream high in naphthenic content (heavy straight run naphtha or heavy hydrocracked naphtha) since there are no existing reproductive/developmental studies on this category.

5. We did not review the test plan for ecotoxicity and environmental fate endpoints.

Thank you for this opportunity to comment.

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