

"BIBLE" FOR MUSKIE HEARING

Need to Define the Scope and Contents

- A. Medical aspects.
- B. Refinery economics (includes effects of removing TEL from gasoline).
- C. Automotive application of lead antiknocks.

AUTOMOTIVE APPLICATION OF LEAD ANTIKNOCKS

I. Emissions from Automotive Vehicles--General

Amounts from exhaust, crankcase, and fuel evaporation.

Total number of vehicles, etc.

II. Use of Lead Antiknocks

U.S. lead consumption--breakdown of various uses.

History of TEL--when introduced, etc.

Composition of Motor Mix.

Facts and figures on concentration on past, present and projected future use of Pb antiknocks.

TML, MLA's, physical mixtures, P, 4th ml, Mn.

Changes in halides.

III. Photochemical Smog as Related to TEL

Ethyl work at Midwest Research Institute.

Oxides of Nitrogen.

IV. Ethyl Programs--past, current, and future.

A. "In House" programs:

- 1. Research on induction systems
- 2. Research on other engine design factors
- 3. Exhaust gas catalysts
- 4. Control of NO_x

B. Cooperative Programs on the "Outside":

1. Participation and manpower support of CRC programs in the broad field of air cleanliness.
2. Financial and manpower support of Lead Industries Association activities relating to all health aspects of the use of lead including lead antiknock compounds.
3. Financial and manpower support of AHI activities relating to problems of air cleanliness.
4. Financial and manpower support of U.S. Public Health Service past and projected surveys of lead in the atmosphere.
5. Under contract with the USFHS, Ethyl has and continues to utilize their capabilities developed in the field of automotive emissions.

V. Ethyl's Expenditures Related to Health Aspects of Lead Antiknocks and Air Cleanliness

VI. Policy Statements on:

1. Effect of combustion chamber deposits on emissions as affected by TEL.
2. Effect of TEL on spark plug performance and emissions.
3. Exhaust gas catalysts.
4. Muffler life (operating conditions more important than TEL).
5. "Tune-up" of older cars.

VII. Comments on:

1. Tukey Report, "Restoring the Quality of our Environment," Nov. 1965 (291 pages) by the Environmental Pollution Panel of the President's Science Advisory Committee.
2. Report of the Air Conservation Commission of the American Association for the Advancement of Science, "Air Conservation," 1965 (324-page book).
3. Book on "Chemical Carcinogenesis and Cancers," by W. C. Hueper and W. D. Conway, published by Charles C. Thomas of Springfield, Ill.
4. Policy statement adopted by the House of Delegates of the American Medical Association at their Annual Convention in 1965, on the nation's air pollution program.