

July 9, 1979

TO: W. W. Madden

FROM: R. J. Campion *RJC*

With reference to Bill Slick's need for information on atmospheric CO₂ buildup as a potential emerging issue for API to consider, we recommend that this not receive a high priority from the EITF for the following reasons.

- 1) The industry's credibility on such issues is not high at the present time, and should an API study indicate no serious CO₂ problems, the results would be greeted with skepticism.
- 2) The DOE and the American Association for the Advancement of Science (AAAS) held a symposium in April 1979, which concluded that no catastrophic hazards would be associated with the CO₂ buildup over the next 100 years and that society can cope readily with whatever problems ensue such as
 - some increase in ocean level, due to polar ice cap melting,
 - the main concern that crop-growing regions would shift northward to Siberia and Canada, leaving central regions too warm for food production.

Both of these effects would be very gradual and could be adjusted for via shoreline improvements and better irrigation methods over the next 100 years. The report of this National Workshop on CO₂ is due to be published momentarily, and will have high credibility, due primarily to AAAS involvement.

Exxon Research and Engineering will start a 300k\$ pilot study ("The Greenhouse Project") next month that will have three goals:

- 1) to measure CO₂ in the air and water over Exxon tanker routes (Esso Atlantic in early August)
- 2) to assess the CO₂ mass transfer coefficient between air and water by measuring the Rn²²²/Ra²²⁶ ratio
- 3) to determine the historic source of CO₂ in the atmosphere by studying the C¹²/C¹³ ratio in preserved and dated wines.

ER&E hopes to receive government support (~1.5 million \$) to broaden the study, and DOE seems interested, but concerned about the cost. The ER&E work is being carried out jointly with a contractor, the Oceanographic Institute at Columbia University, which has an excellent reputation in this area. The 300k\$ has been approved by the ER&E Management Committee. Dr. Henry Shaw of ER&E is our contact for information on this program.

RJC:F

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