

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Collection/Record Group: Clinton Presidential Records
Subgroup/Office of Origin: Council on Environmental Quality
Series/Staff Member: Kathleen (Katie) McGinty
Subseries:

OA/ID Number: 2886
FolderID:

Folder Title:
Tom Harkin

Stack:	Row:	Section:	Shelf:	Position:
S	61	5	9	2



OFFICE OF THE VICE PRESIDENT

WASHINGTON

June 8, 1993

The Honorable Tom Harkin
United States Senate
Washington, D.C. 20510

Dear Senator Harkin:

A handwritten signature in dark ink, appearing to read "Tom", written over the word "Harkin" in the address line.

Thank you for contacting me regarding your thoughts about the use of ethanol and its role in the Clean Air Act's Reformulated Fuels Program and the Great Lakes Governor's study in this regard. It was good to hear from you, and I enjoyed our recent meeting in this regard.

As you know, I share President Clinton's commitment to the protection of our global environment. I certainly appreciate hearing of your views about the relationship between volatile organic chemical emissions and ozone formation. I agree that all reliable scientific data should be considered in order to come to an informed decision in compliance with the Clean Air Act on this very important matter.

I understand your concerns about the impact of this policy on corn growers. I look forward to working with you on this issue.

Again, thank you for keeping me apprised of your thoughts and concerns.

Sincerely,

A handwritten signature in dark ink, appearing to read "Al", written in a cursive style.

Al Gore

AGJ/avl

United States Senate

WASHINGTON, DC 20510-1502

May 24, 1993

The Honorable Albert Gore, Jr.
Vice President
Old Executive Office Building
Washington, D.C. 20501

Dear Al:

I would like to thank you for taking time to meet with me and my colleagues on May 18 to discuss the ethanol issue. I thought the discussion was valuable, and appreciate your assurances that you would consider the results of the Council of Great Lakes Governors study before the Clean Air Act regulations are finalized with regard to oxygenated fuel additives to reformulated gasoline.

Our message can be summarized by two points:

- * EPA should focus on ozone formation, not VOC mass emissions, since ozone is the main health threat in summer smog; and
- * EPA should rely on the latest scientific evidence and complex computer modeling of ozone formation, since the simple "spread sheet" calculations fail to predict the actual space-time variation of ozone formation above an urban air space.

During the meeting, when I described how one auto/oil company study showed that the gasoline formulation with the least ozone did not reduce VOCs at all, you asked a very important question: how can ozone be reduced without a reduction in VOC mass emissions? By reducing NOx?

This question gets to the heart of the VOC mass emission vs. ozone formation issue. Not all VOCs are the same. Some are highly photoreactive, readily forming ozone. Others are not. If an oil company replaced highly photoreactive and volatile gasoline ingredients such as the olefins with ethanol, for example, ozone formation would decrease without any reduction in VOC mass emissions, and without any decrease in NOx emissions. For example, pentene, an olefin, has about the same blending vapor pressure as ethanol, but is between 8 to 20 times more photoreactive, meaning it could form 8 to 20 times more ozone than ethanol, even though both would evaporate at about the same rate.

210 WALNUT ST.
733 FEDERAL BLDG.
DES MOINES, IA 50309
(515) 284-4574

350 WEST 6TH ST.
315 FEDERAL BLDG.
DUBUQUE, IA 52001
(319) 582-2130

6TH AND BROADWAY, BOX H
317 FEDERAL BLDG.
COUNCIL BLUFFS, IA 51502
(712) 325-0036

BOX 74884
LINDALE MALL
CEDAR RAPIDS, IA 52407-4884
(319) 393-6374

131 E. 4TH ST.
314B FEDERAL BLDG.
DAVENPORT, IA 52801
(319) 322-1338

320 6TH ST.
110 FEDERAL BLDG.
SIOUX CITY, IA 51101
(712) 252-1550

The Vice President
May 24, 1993
Page 2

Therefore it is possible to reduce ozone formation without reducing total VOC or NOx mass emissions. This illustrates that, from an environmental perspective, focussing on VOC mass emissions instead of ozone formation can lead to undesirable results.

Past Urban Airshed models have shown that the difference in ozone formation between ethanol and MTBE is so small that it can't be measured. Assuming that future studies confirm this trend, the next question facing EPA would be how to write the regulations to accommodate the 15 percent reduction in "ozone forming" VOCs required by law. I would suggest that EPA has the latitude to define "ozone forming" VOCs to include photoreactive VOCs and to exclude nonreactive VOCs. In fact, EPA already makes such distinctions, since ethane and methane, which do not form ozone, are excluded from VOC measurements.

Similarly, I understand that carbon monoxide is excluded from VOC emission measurements, even though CO is partially photoreactive and does contribute to ozone formation. Thus EPA could include CO as an "ozone forming VOC," in which case ethanol would achieve a 15 percent VOC reduction, primarily through CO reductions. Or EPA, in their VOC mass accounting, could exclude a percentage of VOC emissions from ethanol blended gasoline to acknowledge the fact that ethanol emissions are less photoreactive.

Again, thank you for taking the time from your busy schedule to address the ethanol/reformulated gasoline issue. I look forward to working with the Administration on this important matter.

Sincerely,



Tom Harkin
United States Senator