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STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION ALBANY, NEW YORK 12233-1010

ERIN M. CROTTY COMMISSIONER

DEC 12 2003

Mr. Jeffrey Holmstead
Assistant Administrator
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. Holmstead:



This is in continuance of New York State's request for a waiver of the oxygenated fuel requirement as provided for in the Clean Air Act (42 USC 7545(k)(2)(b)). New York's original request to the United States Environmental Protection Agency (EPA) was dated January 6, 2003, and resulted in a reply and request for additional information in support of our request on April 1, 2003. In the interim, New York has been watchful of two important developments in this field: the Davis v. EPA case (9th Circuit, No. 01-71356), in which California challenged EPA's denial of its waiver request, and the federal energy bill.

Davis v. EPA, filed July 17, 2003, may prove instructive in framing the parameters by which EPA may review waivers under the Clean Air Act (Act), and consequently the New York State Department of Environmental Conservation (Department) has reviewed our previously submitted information with that case in mind. As California's waiver request is currently in remand to EPA, it is still unclear how EPA will respond to the court's decision.

In addition, the federal energy bill, in provisions passed by both houses and carried in the conference report, eliminates the oxygen mandate from the reformulated gasoline requirements contained in the Act. New York State appreciates the recognition that it is time for this antiquated and unnecessary requirement to be removed from the Act, and looks forward to further Congressional action to eliminate the oxygenate requirement. As it is recognized that the addition of oxygenate no longer provides benefits toward meeting the ozone national ambient air quality standard (NAAQS), the Department hopes that EPA will grant this waiver request.

The Department believes that our initial request showed that the continuation of an oxygenate requirement, when fulfilled by ethanol, could interfere with attainment. EPA's response sought additional information. The Department will discuss that response below. It is important to note that the Department's request for a waiver was based on the expectation that ethanol, used as an oxygenate, would be used at 5.7 percent volume. New York sought relief from the exygenate mandate in order to reduce the risks known to come from exygenating

components of gasoline. The Department is concerned that replacing one unnecessary component of gasoline with another will create environmental problems. The solution we saw to minimizing this risk was for EPA to waive the oxygenate requirement.

PERCENTAGE OF ETHANOL IN GASOLINE

However, the Department is troubled to learn that the need for an oxygenate is no longer the driving factor in determining the levels of ethanol that will appear in gasoline in New York and other states that have banned MTBE. Instead, the 5.3 cent reduction in the federal gasoline excise tax, awarded to fuels with a 10 percent mix of alcohol (including ethanol) by volume, has created an incentive for gasoline suppliers to plan for the use of 10 percent ethanol -- far above the 5.7 percent that would be required to meet the oxygenate mandate.

When the Department originally wrote to EPA in January, our request assumed that fuel providers would request, and EPA would promulgate, an adjustment to the reformulated gasoline (RFG) volatile organic compound (VOC) performance standard similar to the precedent setting adjustment granted by EPA for the Chicago and Milwaukee RFG areas (66 Federal Register 37164, July 17, 2001). The Department expressed both NAAQS and toxics concerns as a result. In the intervening months, the Department took some comfort from analysis that showed ethanol blended fuel could meet reed vapor pressure (RVP) requirements, and from the understanding that gasoline refiners have not made any requests for VOC adjustments. However, having learned over the last few weeks that refiners will, almost uniformly, be blending 10 percent ethanol, concerns are raised anew that refiners may seek a VOC standard adjustment from EPA. The Department submits that any increase in emissions resulting from a VOC standard adjustment would potentially interfere with the attainment of the ozone NAAQS.

Further, the Department has recently become aware of an enforcement discretion letter, issued December 3, 2003 by John Peter Suarez, Assistant Administrator of the Office of Enforcement and Compliance Assistance, to Edward H. Murphy, Downstream General Manager of the American Petroleum Institute. The letter references "recently promulgated state laws banning the use of methyl tertiary butyl ether (MTBE) in gasoline sold in the States of New York and Connecticut." The Department notes that New York's ban was enacted in May 2000, giving industry more than three and a half years to plan for compliance. This letter, while specific to fuels destined for the New York and Connecticut markets, was never shared or discussed with New York. The Department only became aware of it when it was posted on an industry website. The relevance of this letter is that it seems to offer refiners providing reformulated gasoline blendstock for oxygenate blending (RBOB) to New York and Connecticut an alternative method of compliance with quality assurance (QA) requirements, but makes this compliance contingent on the refiners ensuring that the fuel is blended at no less than 9 percent and no more than 10 percent ethanol. This alternative compliance method is based on EPA's intent to initiate a rulemaking to establish such an alternative QA program for RBOB sold for use in New York and Connecticut RFG areas. Again, the Department is surprised to learn of such an

intent. The ostensible reason for this enforcement discretion is the "complex gasoline marketplace in New York and Connecticut." The Department questions why our market is considered somehow "more complex" than other RFG areas. Further, the Department knows of no basis for EPA to require fuels containing this level of ethanol, well above the levels required to meet the oxygenate requirement, and know of no reason why such an alternative compliance method should not have been discussed with the affected states.

This is, in fact, the second time this year that EPA has acted to change fuel rules for the industry in ways that could affect New York's air quality without consulting the Department. Earlier this year, a refiner sought a change in its gasoline toxics baseline, based on a quirk in the regulation that would have penalized the company for overcompliance. While the Department ultimately understood and agreed with the EPA's intent, we only learned of this issue when informed of it by the refiner's representatives.

EPA, through its new enforcement discretion, has enacted a requirement for fuels containing 10 percent ethanol, and indicated its intent to follow this with a rulemaking. EPA has done so without any discussion or sharing of the modeling or analysis that the Department presumes would be needed in order to justify such an action. Further, it would appear that by doing so, EPA has absolutely precluded the granting of an oxygenate waiver, again without any consultation with the State of New York.

OXYGENATES PROVIDE NO ENVIRONMENTAL BENEFIT

Vehicle technology has rendered the need for an oxygenate requirement obsolete. The need for control of tailpipe emissions of carbon monoxide through oxygenated fuels was driven by poor control of the fuel system such that too much fuel was provided for the amount of oxygen available at any given moment. Modern fuel injection systems linked to feedback computer control and on-board diagnostic (OBD) fault detection systems have virtually replaced carburetor control. Such systems control fuel accurately with routine ease. Oxygenated fuels "tricked" the carburetors by mixing less fuel energy with the same amount of air. Conversely, all fuel injection systems constantly compensate for changes in fuel property; oxygenated gasoline will merely cause the fuel injection system to compensate for the additional oxygen and oxygenated gasoline no longer provides a benefit. While manufacturers created these systems largely to reduce emissions, there has been a parallel benefit to the consumer in terms of better drivability of vehicles.

New York has conducted a study of the effects of oxygenate on tailpipe emissions. The Department has verified the lack of need for an oxygenate through laboratory testing of automobiles both with and without oxygenated fuel (project report enclosed). While the data set is small, perhaps the most important element of this testing was evaluation of OBD data that indicated that the fuel control system recognizes the fuel it is using, and adjusts accordingly.

Note that Federal Certification fuel does not contain oxygenate.

It is apparent that Congress believes that oxygenate is not necessary, as evidenced by its passage of language in the Energy Bill that provided for the removal of the oxygenate mandate. The Department followed the Congressional debate closely, believing that removal of the mandate on a national scope was the most effective way to deal with the issues surrounding oxygenates. It is the Department's understanding that EPA supported the energy bills in each of the last two years. California clearly also believes an oxygenate is unnecessary, as indicated by their request for an oxygenate waiver. It is for the above reasons that the Department request relief from an oxygenate requirement that is widely regarded as providing no environmental benefit.

RESPONSE TO REQUEST FOR MORE INFORMATION

Your letter identifies several areas of "deficiency" that must be completed and supplemented before EPA will act on the request: New York must provide (1) refinery modeling or comparable analysis that projects fuel quality with and without a waiver; (2) emissions modeling that demonstrates what impact the fuel quality changes associated with a waiver would have on emissions from on road and nonroad vehicles; and (3) an air quality analysis that indicates the effect of such emissions impacts on air quality and attainment of air quality standards. EPA further suggests that New York should provide similar information for other areas whose fuel quality would be affected by a waiver.

The Department takes issue with your request for refinery modeling to determine the properties of compliant gasoline. Such modeling goes far beyond the scope of the language contained in section 211 of the Clean Air Act and was clearly not contemplated by Congress when it drafted section 211(k)(2)(B) of the Act. A wide range of gasoline formulations are possible which could meet the performance standards specified in the Act. Precise formulations are the responsibility of refiners, and outside the purview of the State. Further, the benefits of such modeling in this application are questionable. While the models are useful tools in consideration of new nationwide programs, such as the gasoline and diesel sulfur regulations promulgated by EPA, the information they provide is of limited applicability in an instance such as this. The best example of this is the recent decision in the matter of Oxygenated Fuels Association v. Pataki (attached) in which the court ultimately dismissed the refinery modeling model.

If EPA wishes refinery modeling to be performed, despite the lack of necessity, the Department believes it is more reasonable and appropriate for EPA to perform the modeling, as New York lacks refineries or the authority to collect specific information on their production plans. EPA commissioned such a study for California's waiver application. (MathPro, Inc., Analysis of the Production of California Phase 3 Reformulated Gasoline With and Without Oxygen Waiver, Final Report to U.S. Environmental Protection Agency, Office of Transportation and Air Quality, enclosed).

New York has however performed an evaluation of anticipated fuel quality through discussions with fuel providers, and by reviewing the federal tax credit for use of ethanol and the recently issued Office of Compliance and Enforcement Assurance enforcement discretion memo (enclosed) which seems to assume the use of 10 percent ethanol by volume. Based on the Department's review of these items, we believe that it is most likely that fuel suppliers will provide gasoline containing 10 percent ethanol despite the need for only approximately 5.7 percent by volume of ethanol to comply with the federal oxygenate mandate.

New York has carefully considered EPA's request for extensive emissions modeling to justify the waiver, and found that such analyses cannot be reasonably completed with the approved tools available - specifically the MOBILE and Nonroad models. As you know, the allowed user inputs for the two models are different, and the nonroad model does not model RFG at all. The MOBILE model does not provide for differing the oxygenate amounts when modeling RFG, nor does it allow the user to differentiate between oxygenate types - the very purpose of the requested modeling. Most importantly, this modeling effort has been requested in order to support removal of a fuel additive that is no longer necessary.

Assessment of the impacts of permeation and commingling presents a unique set of difficulties. In our waiver request we included a draft paper on permeation. There is little published data in this area, and in the case of commingling, a wide range of variables that impact the VOC emissions that cannot be accurately predicted with the tools available. There can be little argument, however, that directionally these conditions lead to an increase in VOC emissions from gasoline in which ethanol is included as an oxygenate, even if accurate quantification cannot be made. Therefore, the reduction in ethanol usage that would result from an oxygenate waiver would directly reduce the permeation and commingling VOC emissions. In any event, EPA should not allow a program to continue that creates any additional VOC emissions without commensurate environmental benefit. Given the tremendous expected growth in the use of ethanol in motor fuels, which may be mandated under a federal energy bill, the Department calls on EPA to conduct the research that will quantify the effects that permeation and commingling will have on air quality throughout the nation. New York, which lacks authority to specify vehicle emission controls that would reduce these effects, is unable to provide such research.

New York included in the January 6, 2003 waiver request emissions modeling reflecting the potential impact of ethanol as an oxygenate replacement for MTBE. The Department believes that the modeling remains accurate for the purposes of this discussion, and I am enclosing a copy for your convenience.

ADDITIONAL MTBE ISSUES

EPA's Blue Ribbon Panel on MTBE in 1999 issued substantial recommendations to enhance and improve public health protection. Few if any of those recommendations have been undertaken by EPA, despite its announced intention to carry them out. The states have been left to protect our resources on our own, and 17 states have acted to ban MTBE from gasoline. It is incumbent on EPA to ensure that we not continue to threaten our natural resources and public health by maintaining an antiquated oxygenate requirement.

New York and other states have suffered tremendous environmental damage as a result of the use of MTBE in fuel. The Department is currently aware of more than 600 spill sites contaminated by MTBE, and expect to uncover many more. The use of ethanol as a substitute oxygenate presents similar concerns -- an additive that, when spilled, behaves differently than the other constituents of gasoline, creating difficulties in cleanup and additional threats to public health. Owing to the permeation and commingling issue alone, and acknowledging that no environmental benefits are gained through an oxygenate, EPA can make the required determination that compliance with the oxygenate requirement could interfere with attainment by New York of a national primary ambient air quality standard. To maintain a requirement for a fuel oxygenate in the face of increased risks of air quality and groundwater concerns is contrary to the mission of our agencies. New York urges you to waive the oxygenate requirement.

If I or my staff can be of any assistance to you or your staff in EPA's review of New York's oxygenate waiver, please feel free to contact me at (518) 402-8540.

Sincerely,

Erin M. Crotty

Enclosures

ENCLOSURES:

Oxygenated Fuels Association v. Pataki, US District Court, Northern District of New York, November 21, 2003

Analysis of the Production of California Phase 3 Reformulated Gasoline with and without an Oxygen Waiver by MathPro Inc., January 19, 2001

"Refiner and importer requirements for downstream oxygenate blending," letter from Assistant Administrator John Peter Suarez to Edward H. Murphy, American Petroleum Institute.

Program Report: Emission Impacts of Fuels to Accommodate the New York State Oxy-Waiver Request and MTBE Ban, NYSDEC, May 6, 2003

"Enclosure G" from NYSDEC's January 6, 2003 oxygenate waiver request, estimating increases from use of ethanol at various RVP levels.