

ILLINOIS POLLUTION CONTROL BOARD  
January 5, 1989

IN THE MATTER OF: )  
 )  
LIMITS TO VOLATILITY OF ) R88-30  
GASOLINE )

Request for Written Public Comment.

ORDER OF THE BOARD (by J.D. Dumelle):

The hot summer of 1988 resulted in high levels of ozone in the Chicago and Metro East non-attainment areas. Readings as high as 0.22 ppm by volume were recorded which is some 83% above the Federal and Illinois air quality standard of 0.12 ppm by volume.

Ozone is created in the photochemical process involving sunlight, reactive volatile organic compounds, and oxides of nitrogen and carbon monoxide. The control strategy in the United States and in Illinois has been to attempt to reduce emissions of volatile organic compounds.

It is obvious that further large reductions in volatile organic compounds must be achieved if the ozone standard is to be reached and public health protected.

One strategy to reduce volatile organic compound emissions is to reduce the vapor pressure of gasoline used in Illinois from its present 11.5 pounds per square inch (psi) Reid vapor pressure (RVP) to 9.0 psi. Some eight states have set limits such as this or are in the process of doing so. These states are California (which has had such limits since 1971), Connecticut, Massachusetts, Maine, New York, Rhode Island, and Vermont (which have promulgated rules that go into effect during the 1989 summer) and New Jersey (which is preparing responses to comments on its rule).

The Board has enacted all of the Reasonably Available Control Technology ("RACT") rules for industry requested of it by IEPA which has followed USEPA direction. It has been estimated that reducing gasoline RVP to 9.0 psi could result in summertime weekday emission reductions of 103,000 kg/day or 41,000 tons/yr. Such a reduction would probably reduce ozone levels 10%-15%. While this alone would not solve the ozone problem it would be a significant step forward.

The cost of reduction in gasoline RVP to 9.0 psi appears to be on the order of 1.0 cent per gallon based upon estimates in other states.

A Federal rule reducing vapor pressures nationally is pending but the pace of its adoption is uncertain. The Federal rule would require the following schedule of compliance (with RVP standards expressed in psi):

1989 - 1991  
(May 16 to September 15)

Illinois	May	June	July	Aug.	Sept.
North of 40 <sup>0</sup> latitude	10.5	10.5	10.5	10.5	10.5
South of 40 <sup>0</sup> latitude	10.5	10.5	9.1	9.1	10.5

1992 and Subsequent Years  
(May 16 to September 15)

Illinois	May	June	July	Aug.	Sept.
North of 40 <sup>0</sup> latitude	9.0	9.0	9.0	9.0	9.0
South of 40 <sup>0</sup> latitude	9.0	9.0	7.8	7.8	9.0

The Board will accept written public comment on this subject, and particularly asks for comment on the following:

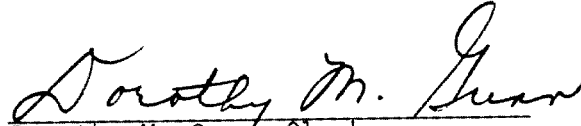
1. Whether it is feasible to achieve 9.0 psi Reid vapor pressure in gasoline sold in Illinois by the summer of 1989. If not, then what is a feasible date?
2. What is the anticipated cost increase per gallon of gasoline to achieve 9.0 psi in Illinois?
3. What is the up-to-date status of the USEPA pending rule on gasoline volatility?
4. In the event that it is not technically feasible to achieve 9.0 psi vapor pressure by the summer of 1989 is there an intermediate level, such as 10.0 psi that could be achieved by that date? What is the cost for that level?
5. Should alcohol additives (ethanol and methanol) be exempted from the 9.0 psi limit?
6. Are there any significant public health hazards created by additives likely to be used to reduce gasoline vapor pressure?
7. Are there marketing problems in producing gasoline for Illinois at a vapor pressure lower than nearby states?

Written public comments will be received thru March 1, 1989. Specific proposals, including regulatory language and supporting technical and economic information are particularly solicited from potential proponents. After analysis of any comments received, the Board will determine what further actions may be appropriate, such as holding inquiry hearings or publication of a First Notice proposal subject to fiscal constraints.

IT IS SO ORDERED.

Board Member B. Forcade concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 5<sup>th</sup> day of January, 1989 by a vote of 7-0.

  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board