

STAPPA / ALAPCO

STATE AND TERRITORIAL
AIR POLLUTION PROGRAM
ADMINISTRATORS

ASSOCIATION OF
LOCAL AIR POLLUTION
CONTROL OFFICIALS

S. WILLIAM BECKER
EXECUTIVE DIRECTOR

August 21, 2003

Air and Radiation Docket and
Information Center (6102T)
Attention Docket Number A-98-44
Room B108
U.S. Environmental Protection Agency
1301 Constitution Ave., NW
Washington, DC 20460

Dear Sir or Madam:

On behalf of the State and Territorial Air Pollution Program Administrators (STAPPA) and the Association of Local Air Pollution Control Officials (ALAPCO), thank you for this opportunity to comment on the proposed rule to remove Methyl Ethyl Ketone (MEK) from the list of Hazardous Air Pollutants (HAP) under Section 112 of the Clean Air Act. The proposal was published in the *Federal Register* on May 30, 2003 (68 FR 32606). For reasons that are described below, we disagree with EPA's assessment that potential outdoor exposures to MEK may not reasonably be anticipated to cause human health or environmental problems. We believe, therefore, that removing MEK from the list of HAPs would be a serious error and urge the U.S. Environmental Protection Agency (EPA) not to take this proposed action.

MEK is ubiquitous and toxic. The Toxic Release Inventory (TRI) for 2001 indicates that there were 14,536 tons of MEK emitted from the covered industries in the United States during that year. In addition, although the Reference Concentration (RfC) for MEK is quite high (1.0 mg/m^3), this level is set to protect against birth defects, a serious health endpoint that warrants an adequate margin of safety to protect the public. We believe that a decision to delist MEK would be in direct opposition to the Clean Air Act goal of protecting the public from excessive exposure to HAPs for the following reasons:

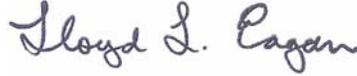
1. Delisting could result in widespread switching to MEK from other solvents, such as acetone. When acetone was delisted as a volatile organic compound (VOC), many operations switched to this solvent; however, its flammable nature makes it less than ideal for manufacturing use. It is very likely that many operations would find MEK to be a highly desirable solvent if it was removed from the HAP list and would switch to MEK from acetone, as well as from many of the common HAP solvents (see attached examples describing facilities in Nebraska and in Washington.) Note that this is a very different scenario from when caprolactam was removed from the list of Section 112 HAPs. Caprolactam was rarely used by any industry and is likely to be used even less in the future.
2. Actual emissions of MEK may currently result in environmental concentrations below the Reference Concentration (RfC), but allowable emissions will not. The analysis upon which the proposal to delist is based uses actual emission rates in the calculation. Without MACT standards to require controls on these sources, the actual emissions of MEK could increase by a factor of two in many cases (see attached examples from Oregon and Wisconsin) and could then result in impacts above the RfC. Since allowable emissions could cause air concentrations of MEK to reach well above the RfC, EPA cannot state that potential exposures to MEK may not reasonably be anticipated to cause human health or environmental problems.
3. The Margin of Safety between the predicted MEK concentrations and the RfC is not adequate. The worst-case analysis described in the delisting proposal, predicts that annual average MEK concentrations could be as high as 1.2 mg/m^3 . This is actually greater than the RfC (set at 1.0 mg/m^3), but it is discounted because the adjacent property in this case is industrial. If MEK is delisted, there is nothing to prevent other facilities with residential neighbors from emitting similar quantities of MEK and causing environmental concentrations to exceed the RfC in areas where people live.
4. MEK reacts in the atmosphere to form formaldehyde and acetaldehyde, which are two HAPs of concern throughout the country, as demonstrated by the National-scale Air Toxics Assessment (NATA). The risk estimate maps for formaldehyde on the NATA website show cancer risks greater than one in one million throughout the entire country and as high as four in ten thousand in many areas. While the predicted risks for acetaldehyde are somewhat lower, they are still on the order of 3-10 in one million in many of the most populated areas of the country, such as the northeastern states and southern California. If MEK emissions rise as a result of delisting, the concentrations of formaldehyde and acetaldehyde could also rise above their currently high levels.

For these reasons we strongly urge you *not to remove* MEK from the list of HAPs under Section 112 of the Clean Air Act. Thank you for your attention to our comments. If you require any additional information, please do not hesitate to contact us.

Sincerely,



Robert Colby
Chair
ALAPCO Air Toxics Committee



Lloyd Eagan
Chair
STAPPA Air Toxics Committee

cc: Kelly Rimer, EPA

EXAMPLES

Nebraska: In Nebraska, about 25% of the facilities that emit MEK (14 Major Sources) have taken restrictions on their permits to become synthetic minors and avoid permitting under the Title V Operating Permit program. It is likely that, if MEK were delisted, many of these facilities would find it advantageous to switch to MEK from other HAP solvents, thus significantly increasing MEK emissions in that state. Other state and local agencies also have specific examples of solvent switching, such as a printer ribbon coating facility which reduced its MEK emissions from 240 tons per year (TPY) to 108 TPY by reformulating its dye using acetone; and a cabinet component manufacturing facility with potential to emit 296 TPY of MEK, plus 690 TPY of other HAP solvents, which could be replaced by MEK in future coating formulations.

Washington: In Spokane, Washington, one source that emitted large quantities of MEK switched to acetone in order to become exempt from the Title V Operating Permit Program. After switching to acetone, this source burned to the ground; it is likely that acetone played a part in this accident. It is expected that this source, as well as other sources, will switch back to MEK if it is delisted because of flammability issues, thus increasing the concentration of MEK and risk exposures.

Oregon: A facility in Southern Oregon currently emits 400 to 500 tons per year of MEK, although its Title V permit would allow emissions up to about 2200 tons per year. A simple screening model (most likely similar to the Tier 1 or Tier 2 analysis submitted by the petitioner) of this facility at the allowable emission rate predicts maximum annual average concentrations of MEK at about 1.1 mg/m^3 , which is slightly higher than the RfC. The short-term (24-hour) peak concentration is estimated to be about 75.8 mg/m^3 , which is more than twice as large as the short-term exposure RfC suggested by the petitioner.

Wisconsin: A facility near Madison, Wisconsin has a potential to emit MEK that is three to four times higher than its actual emissions. Modeling of the actual emissions results in a maximum annual average concentration of about 0.5 mg/m^3 . If the company were to emit at its maximum allowed rate, the annual MEK concentration could increase to as high as 1.8 mg/m^3 , which is much higher than the RfC.