STAPPA / ALAPCO

STATE AND TERRITORIAL
AIR POLLUTION PROGRAM
ADMINISTRATORS

ASSOCIATION OF
LOCAL AIR POLLUTION
CONTROL OFFICIALS

S. WILLIAM BECKER
EXECUTIVE DIRECTOR

October 2, 2006

Attention Docket ID Number EPA-HQ-OAR-2002-0009
Air and Radiation Docket
U.S. Environmental Protection Agency
Mailcode 6102T
1200 Pennsylvania Avenue, 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), the national associations of clean air agencies in 54 states and territories and over 165 metropolitan areas across the country, thank you for this opportunity to comment on the proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for Halogenated Solvent Cleaning, which were published in the *Federal Register* on August 17, 2006 (71 *Federal Register* 47670).

The Halogenated Solvent Cleaning operations that would be subject to this proposal use several chemicals resulting in emissions of Hazardous Air Pollutants (HAPs), primarily methylene chloride, perchloroethylene (PCE), 1,1,1-trichloroethane and trichloroethylene. All four substances can cause acute and/or chronic non-cancer health effects and three of the four have been identified as "probable" or "possible" human carcinogens. We are very concerned about the adverse health effects associated with the emissions from this source category that remain after the implementation of the Maximum Achievable Control Technology requirements. Accordingly, we believe EPA should do everything possible to limit unhealthful levels of exposure to these chemicals through the adoption of effective Residual Risk standards under Section 112(f) of the Clean Air Act.

Selection of Control Options

EPA has requested comment on two control options: Option 1, calls for a facility-wide annual emission limit of 40,000 kilograms (kgs), while Option 2 requires a facility-wide annual emission limit of 25,000 kgs. According to EPA's estimates in the proposal, approximately 630,000 people would be exposed to cancer risks of equal to or greater than 1-in-one-million under Option 1 and approximately 200,000 people would be exposed to that level of risk under Option 2.

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While STAPPA and ALAPCO believe that Option 2 still presents unacceptably high risks, we note that it is preferable over Option 1. We recommend that EPA reassess the risks (taking into the consideration the issues identified below) and consider other options that will result in lower emissions and greater protection for public health.

We are concerned about the residual risk analysis conducted to support the two proposed options. In particular, we do not agree with the conclusions in the residual risk analysis that state that the procedures used in the analysis are likely to over-predict the risk. Based upon the following issues, we believe the analysis under-predicts the risk.

1. The residual risks were determined using point-source emissions and did not include fugitive emissions. EPA acknowledges that "carry out" emissions are substantial, but there is no attempt in the residual risk assessment to characterize or model them. These emissions will have a significant near-source impact on the maximum individual risk (MIR) determination, which is lost when the sources are modeled using average facility stack parameters.

2. The use of average facility stack parameters from an extremely limited data set in this assessment is a questionable approach to residual risk conservatism. Table 8 of the residual risk assessment document provides a wide range of stack heights (0.3 - 86 m) and then selects an average value (9.42 m). The selection of this value is a critical component to any residual risk analysis, as documented in the sensitivity analysis that demonstrated that stack height is one of the most important variables in predicting risk. Our concern relates to the use of the arithmetic mean as the measure of central tendency for all of the stack parameters, including stack height, when the values may not be normally distributed and are skewed to the low-end scenario. The stack data come from 611 facilities, of which 50 percent are default values added to the National Emissions Inventory (NEI). Thus, there are only approximately 305 real data points to work with to determine which parameters should be used for air dispersion modeling. The selection of the average values from data that is not normally distributed and skewed to the low-end scenario can result in an underestimation of risk.

3. In assessing the cancer risks related to the source category, EPA used long-term concentrations affecting the most highly-exposed census block for each facility. This analysis dilutes the effect of sources' emissions by estimating the impact at the centroid of the census block instead of at the property line. Census blocks can be large geographically, depending on the population density, so the maximum point of impact can be far from the centroid, including at or near the property line where people may live or work. Further, even if the area near the property line is not developed, over time homes and businesses could locate closer to the facility. While it is possible that population distribution is homogenous over a census block, this assumption is not necessarily accurate in considering the predicted impacts from a nearby point source. Accordingly, STAPPA and ALAPCO believe the impact from all of the sources should have been calculated based on concentrations at the property line and beyond and should have taken into account the maximum exposed individual.

Cancer Unit Risk Estimate

EPA has requested comment on which Unit Risk Estimate (URE) should be used in calculating the emission limit for PCE: the California Environmental Protection Agency (CalEPA) URE, the EPA Office of Pollution Prevention and Toxic Substances URE or another value. We recommend that EPA use the CalEPA URE for several reasons: 1) EPA's Air *Toxics Risk Assessment Reference Library* recommended the use of the CalEPA URE for PCE, 2) the EPA Office of Air Quality Planning and Standards (OAQPS) recommended the use of the CalEPA URE in situations in which there are no Integrated Risk Information System (IRIS) data available (see EPA's "Prioritization of Data Sources for Chronic Exposure" web site), and 3) OAQPS used the CalEPA URE for PCE when conducting the 1999 risk assessment for the National-Scale Air Toxics Assessment. We believe there is an established precedent for EPA's use of the CalEPA URE and recommend it be selected for this residual risk standard as well.

Weighted Approach for Multiple HAPs

The proposal includes a weighted approach for calculating the facility-wide annual emission limits for affected sources that use more than one of the three HAPs subject to the rule. While we find the approach to be generally reasonable, we are concerned about the use of the "equivalent" terminology in EPA's proposal. Specifically, the use of the term "methylene chloride equivalent" is somewhat misleading because, rather than a toxic equivalent, this methodology reflects a weighted-emission approach using toxicity-weighted emission rates. The intent of this approach was to facilitate the use of an annual emissions cap for multiple pollutants and allow flexibility in reducing the facility-wide emissions to meet the emissions cap. However, a traditional toxic-equivalency approach relies on both the existence of toxicologic dose-response data for at least one component of the mixture (referred to as the index compound) and scientific judgment as to the toxicity of the other individual compounds in the mixture as a whole. The toxicity of the related compounds is predicted from the index compound by scaling the exposure level of each compound by its toxicity relative to the index compound. This scaling factor (or proportionality constant) is based on an evaluation of the results of a (usually) small set of toxicologic assays or analyses of the chemical structures (EPA/630R-00/002, August 2000).

While EPA conservatively added the cancer and noncancer toxicity-weighted emissions rates, their scaling factors were simply the ratio of the cancer unit-risk estimates and noncancer reference concentrations multiplied by the post-MACT emission rate or exposure level. Because EPA did not specifically conduct toxicological comparisons (common mode of action and metabolites and possible synergistic interactions among the components of the mixture) for perchloroethylene, trichloroethylene and methylene chloride, they should be careful not to use the term "methylene chloride equivalent" as a "toxic equivalent," because the latter is a specific term of art associated with a supporting body of literature and documented methodology.

Compliance Deadline

EPA has proposed a two-year compliance deadline, which we support. However, as proposed, existing solvent cleaning machines will not be required to comply with the facility-wide annual emission limitation until three years after the final rule is promulgated, because of a

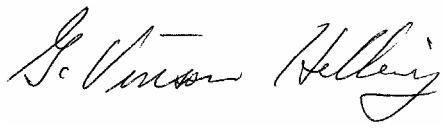
12-month extension related to the collection of emissions data. We do not believe a residual risk standard proposal is the proper place for EPA to present a legal argument about harmonizing compliance dates between Section 112 subsections. STAPPA and ALAPCO believe the Congressional intent behind the compliance deadlines in Section 112(f) was to insure an expedited compliance schedule (90 days with a possible two-year extension) for controlling emissions from facilities that result in unacceptable risk levels.

Acute Risk Assessments

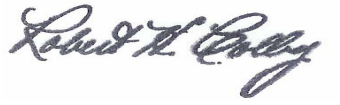
STAPPA and ALAPCO oppose the use of emergency guideline values (i.e. "Immediately Dangerous to Life or Health"/10, "Acute Exposure Guideline Levels" and "Emergency Response Planning Guideline" levels) to assess the acute public health impacts. Unlike the residual risk assessment for ethylene oxide commercial sterilizers, this assessment represents a positive step forward by using CalEPA's Acute Reference Exposure Levels (RELs) to assess potential acute effects. However, we are concerned about the use of 50 meters as the generic distance to the nearest receptor because, in urban settings, the proximity to receptors can be much closer.

Thank you for this opportunity to comment on this proposal. Please contact us if we can provide additional information.

Sincerely,



Vinson Hellwig
Chair
STAPPA Air Toxics Committee



Robert Colby
Chair
ALAPCO Air Toxics Committee