NACAA
national association of clean air agencies

December 6, 2010

EPA Docket Center
EPA West (Air Docket)
Attention Docket ID No. EPA-HQ-OAR-2010-0600
U.S. Environmental Protection Agency
Mailcode 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Sir/Madam:

On behalf of the National Association of Clean Air Agencies, thank you for this opportunity to comment on the proposed National Emission Standards for Hazardous Air Pollutant Emissions: Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks; Group I Polymers and Resins; Marine Tank Vessel Loading Operations; Pharmaceuticals Production; the Printing and Publishing Industry; and Steel Pickling-HCl Process Facilities and Hydrochloric Acid Regeneration Plants, which were published in the *Federal Register* on October 21, 2010 (75 *Federal Register* 65068). The National Association of Clean Air Agencies (NACAA) is the national association of air pollution control agencies in 52 states and territories and over 165 metropolitan areas across the country.

We believe the provisions Congress included in Section 112(f) of the Clean Air Act that were intended to ensure that unacceptable risks do not remain after the imposition of Maximum Achievable Control Technology (MACT) are a critical component of our country's clean air program. Likewise, the requirements under Section 112(d)(6) that call for EPA to review and revise the MACT standards as necessary to account for developments in controls are an important way of ensuring that our hazardous air pollution (HAP) program remains protective of public health. Therefore, we are concerned that EPA has determined that no additional controls are necessary for several of the source categories and fear that the agency may be missing an important opportunity to ensure that public health is improved and maintained.

In light of the importance of the residual risk and technology review programs, NACAA would like to offer the following comments on the proposal.

444 North Capitol Street, NW • Suite 307 • Washington, DC 20001 • phone 202.624.7864 • fax 202.624.7863 • www.4cleanair.org

Property-line Concentrations

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. NACAA was pleased to learn that EPA did consider the acute risks for HAPs at the "point of highest off-site exposure for each facility (i.e., not just the census block centroids)" for the non-cancer health effects (page 65078). However, NACAA recommends that the impact of carcinogens and non-carcinogens from all of the sources in a source category be calculated based on concentrations at the property line and beyond and take into account the maximum exposed individual.

Acute Exposure

We are gratified to see that EPA increased its reliance on the California Reference Exposure Levels (RELs) to address acute exposures in the residual risk assessments. We have urged EPA to use the RELs for these assessments. However, we note that EPA is also using Acute Exposure Guideline Levels (AEGLs) or Emergency Response Planning Guidelines (ERPGs) values to address acute exposures in the residual risk assessments, which NACAA does not endorse. These limits were developed for accident release emergency planning and are not appropriate for assessing daily human exposure scenarios. In the December 2002 EPA document, "A Review of the Reference Dose and Reference Concentration Processes", EPA states that the primary purpose of the AEGL program is to develop guidelines for once-in-a-lifetime short-term exposures to airborne concentrations of acutely toxic chemicals. They are not meant to evaluate the acute impacts from routine emissions that occur over the life of a facility. Unlike the reference concentrations (RfCs) for chronic exposures, the AEGLs and ERPGs do not include adequate safety and uncertainty factors and cannot be relied upon to protect the public from the adverse effects of exposure to toxic air pollutants. The use of AEGLs or ERPGs in residual risk assessments is not appropriate and does not ensure that public health is adequately protected from the acute impacts of HAP exposure.

Actual Emissions

NACAA has recommended in the past (November 24, 2008) that EPA consider potential or allowable emissions, rather than actual emissions, in evaluating residual risk. Since facility emissions could increase over time for a variety of reasons, and with them the associated impacts, the use of potential or allowable emissions is more appropriate. We believe an analysis based on actual emissions from a single point in time could underestimate the residual risk from a source category. Further, the major source hazardous air pollutant (HAP) thresholds are based on maximum potential-to-emit, as opposed to actual emissions, and air agencies issue permits

based on potential emissions. Limiting the scope of a risk evaluation to actual emissions would be inconsistent with the applicability section of Part 63 rules. While we were happy to see that EPA is relying on actual emissions less than in previous residual risk assessments, we would still prefer to see the use of allowable emissions.

Startup, Shutdown and Malfunctions

NACAA is also gratified that the proposal calls for the elimination of the Startup, Shutdown and Malfunction (SSM) exemption in all six of the standards covered by the notice. Since NACAA agreed with the court decision of December 19, 2008 stating that there should not be an exemption to HAP standards during SSM events, we applaud EPA for proposing not to exempt SSMs, but instead calling for the established standards to apply at all times, including during SSM situations.

Facility-Wide Risks

We agree that it is necessary to put the risks posed by the source categories in context. Therefore, we are pleased that EPA has paid extra attention to the impact of emissions from all HAP-emitting operations in a facility to determine the facility-wide risks. However, the sources that are co-located and contributing to an increased risk could be described in much greater detail than is currently discussed in the proposal for chromium electroplaters.

Environmental Justice

We commend EPA for considering environmental justice issues by expressing concern about the disproportionate impacts of the HAP emissions on certain social, demographic and economic groups. We believe improvements are needed in the proposals to address environmental justice and we encourage EPA to continue to consider these factors in developing the final rule and subsequent regulations.

EPA asked for comment on the following environmental justice issues:

> *To examine the potential for any environmental justice issues that might be associated with each source category, we evaluated the distributions of HAP-related cancer and non-cancer risks across different social, demographic, and economic groups within the populations living near the facilities where these source categories are located. The development of demographic analyses to inform the consideration of environmental justice issues in EPA rulemakings is an evolving science. The EPA offers the demographic analyses in this rulemaking as examples of how such analyses might be developed to inform such consideration, and invites public comment on the approaches used and the interpretations made from the results, with the hope that this will support the refinement and improve utility of such analyses for future rulemakings. (page 65080)*

NACAA wonders why other factors EPA recommended in the Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT)[1] were not considered in this risk assessment. Of greater concern is the absence of stricter controls, since the risk assessment identified an environmental justice impact for hard chromium platers[2], based on the limited criteria (demographic and economic) evaluated. As stated in EPA's "Interim Guidance on Considering Environmental Justice During the Development of an Action"[3], the agency should consider addressing existing disproportionate impacts on minority, low-income, or indigenous populations during rulemaking. NACAA recommends that EPA conduct a full evaluation of disproportionate impacts following the guidance in EJSEAT and an evaluation of how this risk assessment could reduce impacts to those communities. EPA's Online Tracking Information System database appears to do this already at the facility-specific level and can be incorporated into the assessment to more accurately define the number of the individuals impacted by the emissions and the demographics of the impacted community. Additionally, we recommend you work with the EPA Office of Environmental Justice to adequately evaluate the proposed rulemaking with regard to communities experiencing disproportionate impacts.

Acceptable Risk and Ample Margin of Safety

The proposal included a request for input on determining acceptable risk and an ample margin of safety: "*We are also seeking comment on how best to consider various types and scales of risk estimates when making our acceptability and ample margin of safety determinations under CAA section 112(f)*" (page 65074). For carcinogens, NACAA believes the metrics related to the population at risk for cancer (e.g., the number of people at greater than one-in-one million risk, greater than ten-in-one-million risk, and greater than 100-in-one-million risk) that EPA uses are among the most transparent ways to make risk management decisions concerning acceptability and ample margin of safety determinations under Section 112(f) of the Clean Air Act. We concur with EPA's plan for addressing risk as described in the agency's *Residual Risk Report to Congress* (March 1999), in which the agency stated (quoting from the 1989 benzene NESHAP):

> In notifying the public of the 1989 benzene NESHAP, the Agency stated that it "strives to provide maximum feasible protection against risks to health from hazardous air pollutants by (1) protecting the greatest number of persons possible to an individual lifetime risk level no higher than approximately 1 in 1 million and

[1] EPA Office of Enforcement and Compliance Assurance, Environmental Justice Strategic Enforcement Assessment Tool. Available online at: http://www.epa.gov/environmentaljustice/resources/policy/ej-seat.html.

[2] The assessment reported risks to be higher for hard chromium electroplating, decorative chromium electroplating and chromic acid anodizing facilities. The results were detailed in *Risk and Technology Review - Analysis of Socio-Economic Factors for Populations Living Near Hard Chromium Electroplating Facilities* and parallel reports for decorative chromium electroplating, and chromic acid anodizing facilities. The results for the hard chromium platers specifically states "for those [facilities] with cancer risk greater than one in a million due to the hard chromium electroplating source category, risks may be significantly higher for the 'Minority,' 'African American,' 'Other and Multiracial,' and 'Hispanic or Latino' demographic groups, and somewhat higher for the 'Over 25 without a high school diploma' and 'Below the Poverty Level' demographic groups than we would normally expect, based on the typical distribution of those demographic groups across the U.S."

[3] EPA's Action Development Process Interim Guidance on Considering Environmental Justice During the Development of an Action. USEPA Office of Policy, Economics and Innovation. July 2010. Available online at: http://www.epa.gov/environmentaljustice/resources/policy/ej-rulemaking.html.

(2) limiting to no higher than approximately 1 in 10 thousand the estimated risk that a person living near a plant would have" (page ES-11).

Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks

We are especially concerned about the proposal for Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (chromium electroplating). The residual risk assessment for this source category was not conservative enough, especially considering the significant public health hazard that emissions from chromium electroplating facilities, including hexavalent chromium, can pose. We do not believe the residual risks that remain after the imposition of the MACT standards are "acceptable" and recommend that additional control measures be adopted.

EPA based its risk assessment on source data for only 166 facilities out of approximately 1,770 covered by the MACT standard, which is an insufficient number. EPA's prediction of the inhalation cancer risk from the other facilities not represented in the data base relied on default assumptions that underestimate the risk. These include assumptions about stack parameters (including flow rates), emission rate estimates and downwash.

With respect to facility parameters, such as flow rates, while we are happy to see an attempt to estimate the community impacts based on allowable emission rates, we have concerns about some of the facility parameters (e.g. flow rates) that were used to model the community impacts.

We are also concerned that EPA did not consider downwash in the risk analysis, which results in an underestimation of maximum risks near facilities. Since many of these facilities are in densely populated urban areas, there are a significant number of people near these plants who would be subject to higher-than-estimated risks. EPA should be especially mindful of the environmental justice issues resulting from an insufficient estimate of the risks around facilities.

We are concerned that the risk assessment assumes compliance with the MACT standard. If sources are not in compliance, the risk assessment becomes less conservative. Because most chromium electroplaters are small sources and may not be subject to regular inspections, it may be difficult to assume compliance without a comprehensive evaluation of compliance and enforcement information.

The Supplemental Risk Modeling - Weighted Average Approach upon which EPA relied generated population risk predictions that are extremely suspect. The value of the supplemental analysis for the chromium electroplating source category is further undermined by the following statement in the October 21, 2010 *Federal Register* notice: "These results indicate that the estimated risks are uncertain and are highly sensitive to input assumptions and that the conservative assessment may substantially overstate risks" (page 65090) In our opinion, we do not believe that this assessment, characterized as conservative, substantially overstates risks. We believe the supplemental assessment, which has been used to support a decision for no further air pollution control requirements, is biased toward low population risk estimates.

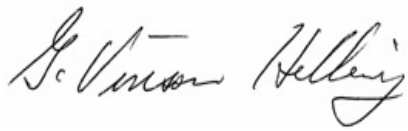
In several points in the preamble EPA rightly expresses its own reservations about the conclusions it puts forth related to its risk assessment for chromium electroplaters in the proposal and we believe those concerns warrant additional analysis and consideration. NACAA recommends that the risk assessment for this source category be re-evaluated using accurate emissions data and source parameter information.

Emissions Reporting

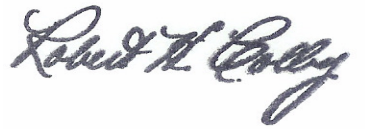
The fact that there were only 166 facilities out of approximately 1,770 chromium electroplating facilities with emissions information that EPA could rely upon to conduct residual risk assessments highlights the need for a consolidated emissions reporting requirement for all sources of HAPs regulated under the Part 61 and 63 NESHAPs program. The lack of a federal requirement to collect basic information on how HAPs are released into surrounding neighborhoods continues to be an extremely serious limitation of the risk and technology assessments that EPA has conducted and will need to carry out in the future.

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

Sincerely,



G. Vinson Hellwig
Michigan
Co-Chair
NACAA Air Toxics Committee



Robert H. Colby
Chattanooga, Tennessee
Co-Chair
NACAA Air Toxics Committee