



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

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OFFICE OF  
AIR AND RADIATION

Elizabeth Yeampierre  
Chair, National Environmental Justice Advisory Council  
c/o UPROSE, Incorporated  
166-A 22<sup>nd</sup> Street  
Brooklyn, New York 11232

Dear Ms. Yeampierre:

On behalf of Administrator Lisa P. Jackson, I want to express our deep appreciation for the National Environmental Justice Advisory Council's (NEJAC) 2010 report titled, *Strategies to Enhance School Air Toxics Monitoring in Environmental Justice Communities*. The NEJAC's technical and policy recommendations are thoughtful, well-reasoned, and helpful. The advice provided on effective community outreach and communications strategies will prove valuable beyond the scope of this individual monitoring project.

The U.S. Environmental Protection Agency (EPA) plans to follow up on the School Air Toxics (SAT) initiative by resuming the Community-Scale Air Toxics Ambient Monitoring (CSATAM) grant competition in 2011. As the Agency moves forward with this program, we will look to the NEJAC recommendations to shape the criteria for project selection.

This letter serves as an update about how the Agency is responding to the NEJAC's recommendations and moving forward to strengthen our community monitoring efforts.

At the NEJAC public meeting in July, we reviewed and gave an initial response to the Council's recommendations on the School Air Toxics Monitoring Project. Since that time, monitoring at individual schools has been completed. We have quality assured the monitoring data and are working on analytical reports for each monitoring site. We expect these individual school reports to be completed by spring 2011 and that a final project summary report will be completed in the summer 2011.

One of the NEJAC's recommendations was that EPA should seek the advice of the NEJAC (or its Working Group as delegated) about designing and implementing the next phase of EPA's School Air Toxics Monitoring project and that the EPA's "Charge" to the NEJAC needs to be revised and expanded to incorporate areas other than effective communications strategies for engaging with the public about EPA's School Air Toxics Monitoring project.

In response to that recommendation, EPA has revised the Charge to solicit NEJAC's input on the development of the criteria for the CSATAM grants and also to provide advice on the issues that EPA should address in its School Air Toxics Monitoring project final report. EPA has re-engaged with the current NEJAC Working Group on these tasks.

With respect to NEJAC's other recommendations, the Agency's responses are in the enclosure. As you can see, we have embraced most of the NEJAC recommendations.

If you have any questions about our responses, please contact Chet Wayland of the Office of Air Quality Planning and Standards to arrange a discussion.

Again, we are grateful to the NEJAC and the members of its School Air Toxics Work Group for their hard work and insightful advice.

Sincerely,



Gina McCarthy  
Assistant Administrator

Enclosure

cc: NEJAC Members  
NEJAC Workgroup Members  
Lisa Garcia, Associate Assistant Administrator for Environmental Justice  
Victoria Robinson, NEJAC DFO

**EPA'S RESPONSE TO KEY RECOMMENDATIONS CONTAINED IN  
THE APRIL 2010 NEJAC REPORT ENTITLED  
"STRATEGIES TO ENHANCE SCHOOL AIR TOXICS MONITORING IN  
ENVIRONMENTAL JUSTICE COMMUNITIES"**

**November 3, 2010**

**I. COMMUNITY COLLABORATIONS AND EDUCATION**

**NEJAC Recommendation #1:**

**EPA should develop a community involvement and outreach plan for the next phase of this initiative that engages communities (including school communities) early in the planning process. EPA should support efforts to actively engage communities in project design, implementation, and evaluation. Communities should be informed and engaged early in the process of the proposed approach and scope of the project and given opportunities to shape decisions about the project design. The Agency should also invest time and thought in developing a method of involving students, and perhaps community members, directly in some aspect of the monitoring. EPA should provide funding to develop a summer program for teachers on engaging students and the community in hands-on environmental education opportunities, e.g., in conjunction with the National Association of Environmental Educators.**

EPA agrees that plans for future community air toxics monitoring projects should include a community involvement and outreach component. EPA plans to follow up on the School Air Toxics (SAT) initiative by resuming the Community-Scale Air Toxics Ambient Monitoring (CSATAM) grant competition in 2011. Although the State and Tribal Assistance Grant (STAG) appropriation limits applicant eligibility to state and local air pollution control agencies and federally recognized tribes, EPA intends to encourage eligible entities to engage with community groups in developing project proposals and implementing the funded projects. In an effort to encourage collaborative partnerships, the selection criteria in the Request for Proposals (RFP) will explicitly promote direct and substantial community involvement throughout the project, from planning project design through evaluating long term outcomes. Further, where appropriate, the evaluation criteria in the proposal will be designed to assess the degree to which the applicant plans to work with community organizations to develop the project plan and budget and the degree to which that budget addresses the resources needed to promote meaningful involvement.

EPA agrees it is valuable to involve students and/or community members in some aspect of the monitoring project and will design evaluation criteria to reflect this concept. EPA welcomes other ideas from the NEJAC on framing project evaluation criteria to help assure the effective engagement of community organizations and community members.

**NEJAC Recommendation #2:**

**EPA should provide adequate funding to support its community involvement and outreach plans. Outreach and collaborative work with community partners requires expertise and resources that need to be identified and budgeted for during project design through interpretation of findings and implementation of mitigation measures.**

Because of the extremely rapid start to the School Air Toxics monitoring initiative, it was not possible for EPA to provide time or resources for our regions or our state and local partners to plan for community involvement before monitoring began. As with the CSATAM grants, funding for the SAT was from the STAG appropriation; hence eligibility was limited to state, local and tribal air pollution control agencies. Available funding was used to purchase equipment, pay for sample analyses, and in select cases, pay for contract sampling support (i.e., for those state and local agencies who were unable to provide the needed monitoring operations staff). Outreach efforts varied considerably from school to school, with state or local air agencies taking the lead in some areas, and EPA regions handling most of the outreach in others.

While community involvement varied, considerable public outreach occurred between many jurisdictional air pollution control agencies and affected communities; a case in point is the Chicora Elementary School in Charleston S.C. (see <http://www.epa.gov/ttn/amtic/files/ambient/2009conference/Reynolds.pdf> for presentation on this matter). That said, the intended model for future air monitoring projects is to substantively incorporate community involvement and outreach into each grant. EPA agrees that as part of the application for the CSATAM grants, applicants should demonstrate that there are adequate resources devoted to community involvement, mitigation plans and responses.

**NEJAC Recommendation #3:**

**EPA should develop a feedback loop to assess the effectiveness of its communications during the implementation of the project and should provide oversight of how outreach activities are implemented. EPA should identify communities where communication methods appear to be successful, identify what factors contributed to the success, and ways to replicate those efforts in other communities. Similarly, where communications prove ineffective, there should be some effort to collect lessons learned.**

EPA agrees that evaluation of the effectiveness of its communications and providing oversight on this issue is an important component of any monitoring strategy. We have learned lessons from this project that will improve future projects. At the Work Group's request, we provided a spreadsheet that outlined every question the regions had received and documented about the project, the date the request came in, the type of person asking the question (local official, citizen, etc.), where the questioner was calling from, and the answer provided. Questions taken at OAQPS also were included; the total (including questions to OAQPS and regions) numbered close to 100.

Throughout the project, EPA regions and/or state/local air agencies have stayed in touch with officials at the schools being monitored to keep them updated on the status of the project and to let them know when new data would be posted to the Web. They have provided materials the

schools could send home to parents. In addition, at the outset of this project, OAQPS requested that EPA regions offer at least one meeting with the school/school community where the monitor was located. Some regions held more meetings, based on the school's interests. Other meetings were conducted at the state or local level.

The fast-paced rollout of this project meant that some regions or states had to create new channels for communication, while others were able to build on existing relationships they had established for other projects. The channels and methods for communicating were as individual as the schools and surrounding communities, and both approaches generated interest in some communities.

South Carolina was one state able to use an existing network for communication that the state had begun developing for more than a year before the schools project was announced. Staff from the South Carolina Department of Health and Environmental Control (DHEC) have been kind enough to discuss how those networks were developed for a different environmental project, and how that helped them when one of their schools was selected for air toxics monitoring. We have summarized that discussion, and, with DHEC's permission, will make it available to communities planning monitoring projects.

**NEJAC Recommendation #4:**

**EPA should promote the school air toxics monitoring website as a model for other parts of the Agency to make data available to the public in a timely and accessible fashion. Although there are issues with how EPA interpreted the monitoring data, the website's major features (maps and links to school-specific data, links to data on pollutants, and data posted continuously throughout the monitoring project) provide an excellent example of one way the Agency should be communicating with the public.**

EPA agrees that the School Air Toxics Monitoring project's website was a success and appreciates the NEJAC's assistance in improving it. OAQPS has contacted EPA's Web Council, which is the Agency's governing body that sets policies for EPA's websites. OAQPS intends to brief the Council about the positive features of the website and the positive responses it has earned. This provides an opportunity to promote the website to each office within EPA, because each EPA Assistant Administrator provides two representatives to the Council. Within OAR, we will also build on the positive features of this site in other monitoring efforts.

**II. COORDINATION AMONG GOVERNMENT AGENCIES AND NGOS**

**NEJAC Recommendation #5:**

**EPA should establish Federal Interagency Coordination. Under Title V - Section 504 of the Toxic Substances Control Act (amended 2007), EPA is directed to seek the advice of the U.S. Department of Education and HHS about developing and issuing federal guidelines about school siting and wider environmental health programs to improve school environments. During the Clinton Administration, under Federal Executive Order 13045 (*Protection of Children From Environmental Health Risks and Safety Risks*), EPA and**

**HHS/CDC co-chaired an Interagency Task Force on Environmental Health Risks and Safety Risks to Children, which convened a Work Group on Schools. These two mechanisms, the Executive Order and an Interagency Task Force, could again be effective tools for this Administration and EPA to promote and ensure interagency coordination and effective national strategies that aggressively “protect children where they live, learn and play.”**

EPA agrees with the importance of establishing a mechanism through which a range of general and project specific information can be easily shared across federal departments and agencies. Executive Order 13045 created a President's Task Force on Environmental Health Risks and Safety Risks to Children which was sunset in 2005. In recognition of the need to enhance interagency communication and collaboration on environmental health and safety risks to children, EPA and HHS have reconvened a working group of federal departments and agencies with responsibility for addressing these issues.

With respect to the voluntary guidelines for the siting of school facilities required under Section 502 of the Energy Independence and Security Act of 2007, EPA has been closely coordinating with both the Department of Education and CDC from the inception of work on the guidelines. The draft guidelines are being developed by a cross-agency work group with interagency participation from the Department of Education and CDC's Agency for Toxic Substances and Disease Registry (ATSDR) and Division of Adolescent and School Health. EPA also established a School Siting Task Group under the Children's Health Protection Advisory Committee to seek input on the development of a public review draft. OAR, through its Office of Radiation and Indoor Air, is an active participant in this Task Group. A NEJAC liaison representative was a participant on the School Siting Task Group. The CHPAC committee transmitted its report to EPA in April and we are now integrating those recommendations into the development of a public review draft that will be released in fall 2010. The report from the CHPAC and the SSTG as well as Administrator Jackson's reply, are available at [http://yosemite.epa.gov/ochp/ochpweb.nsf/content/CHPAC\\_Comments.htm](http://yosemite.epa.gov/ochp/ochpweb.nsf/content/CHPAC_Comments.htm).

**NEJAC Recommendation #6:**

**EPA should provide findings from its school air toxics monitoring program to the EPA's Child Health Protection Advisory Committee (CHPAC) School Siting Task Group. Given that the Agency is developing a new federal guideline for the siting of schools, monitoring data being gathered under the School Air Toxics Monitoring Program should inform the recommendations formulated by the CHPAC about key lessons learned. EPA should also allow the CHPAC to review the Agency's final school air toxics monitoring data and findings, and share the CHPAC's recommendations with the NEJAC.**

While the School Siting Task Group of the Children's Health Protection Advisory Committee has completed work under its charge, EPA intends to keep the CHPAC and members of the Task Group apprised of the results of the SAT monitoring project as the school siting guidelines progress toward a public review draft in fall 2010. EPA will share its final data and findings with the CHPAC when the air monitoring report is completed and at that time make a determination,

in consultation with the CHPAC, about whether convening a new group or reconvening the School Siting Task Group is appropriate.

**NEJAC Recommendation #7:**

**EPA should form collaborative partnerships with external stakeholders and ensure appropriate funding for such interactions. Potential partners include NGOs and community partners. Coordination with other decision makers would allow EPA to advocate in partnership with them on efforts to advance its commitment to achieving environmental justice and protecting all children.**

We agree. As part of the revised criteria for the Community-Scale Air Toxics Monitoring grants, we are placing specific emphasis on community involvement and engagement. State and local agencies submitting proposals for consideration from community-scale grants will need to show how they plan to use partnerships and involvement of external stakeholders in their project. These criteria will have significant weight in the selection process.

**NEJAC Recommendation #8:**

**EPA should coordinate with other agencies involved in environmental health. The Agency should request that CDC, NIOSH, and PEHSUs assist EPA by conducting model child “health hazard evaluations” of schools where air toxics have been found at high levels. This would help EPA develop and issue mandated federal guidelines about how these agencies can work with state health agencies for on-site school assessments, as directed in Title V of TSCA (EPA collaborates with federally funded pediatric environmental health specialty centers to assist in on-site school environmental investigations). As noted earlier, EPA efforts must take into account the special vulnerability of children in low-income and minority communities to exposures from contaminants, hazardous substances, and pollutant emissions. It should be noted that while EPA and the public health system generally do not have the authority to enter schools, NIOSH may enter a workplace where hazards are thought to be present. Prevalence of school children’s illnesses, absences, disabilities, behavior problems, and relative achievement on standardized tests are of interest in this research, as well as occupational illnesses among school personnel.**

EPA agrees with the importance of ongoing interactions with other federal agencies or extension units engaged in environmental health activities, such as the pediatric environmental health special units (PEHSUs). OAQPS currently engages in such interactions both via ongoing joint projects, contacts related to new projects, and informal, periodic, staff-to-staff discussions. For example, OAQPS has ongoing contact with CDC and ATSDR staff on interpretation of health information associated with major air pollutants such as particulate matter and ozone (e.g., activity guidelines and outdoor air quality). In the school air toxics initiative, OAQPS has consulted with the PEHSU network on several occasions regarding communicating information about the monitoring and why the Agency was monitoring at particular schools, and benefited from their input to presentations for the Web as well as outreach materials used with schools.

EPA also recognizes the importance of considering the potential vulnerability of children from various backgrounds to different air pollutants and the potential for exposures to last well beyond



childhood years. In evaluating monitoring results from this project, EPA has considered the potential for exposure to any detected pollutants to last through childhood and beyond. Where outdoor air pollutant concentrations at a school are found to be elevated, EPA is considering follow up steps appropriate to the type of pollutant, potential sources and likely exposures.

TSCA Title V, Section 504 requires EPA to publish voluntary guidelines for use by States in developing and implementing an environmental health program for schools. While EPA is currently scoping the approach it will take to these guidelines, we agree that close coordination and consultation with other federal agencies, states, NGOs, the PEHSUs and many other groups will be essential. Certainly the health agencies' role is a critical one and as we continue to scope the guidelines, EPA will consider how best to engage these stakeholders in the guidelines development process. EPA was involved in the development of the National Occupational Research Agenda (NORA) and has worked closely with NIOSH and its Health Hazard Evaluation Program in the past and incorporated the NIOSH Safe School Inspection Program checklists into tools like EPA's Healthy School Environments Assessment Tool (HealthySEAT). While NIOSH's authority focuses on occupational exposures, we agree that their expertise would be a valuable addition to the discussion about school environmental health issues.

### **III. PROJECT SCOPE AND METHODS**

#### **NEJAC Recommendation #9:**

**EPA should expand the scope of its air toxics monitoring program at schools. The Agency should include indoor air monitoring of key pollutants at schools where elevated levels of air toxics have been measured. Given that EPA has not necessarily established child-safe levels for exposure to all pollutants (in commercial, industrial, and agricultural use), the Agency should ensure that it is using most current science for all child air toxics exposures and expand its research agenda to investigate more thoroughly the issue of differential harm from toxic exposures for children, including children with asthma and those receiving special education services. Undertaking this avenue of research will add to EPA's credibility, accountability, and effectiveness.**

In general, EPA agrees that efforts to better understand the total exposure of people to contaminants in the places where they spend significant amounts of time, both indoors and out, are important. Indoor air exposures were not included in the initial air toxics monitoring plan, because the focus of the initiative was on determining if air toxic levels were elevated at the schools because of outdoor sources. While monitoring indoor air pollutants in schools is a complex undertaking, we agree that complementing the results of the outdoor air toxics monitoring effort with indoor data would add to the growing research base on indoor exposures in schools.

There are some challenges to monitoring and interpreting indoor air toxics data in schools including a lack of uniform standards against which to compare the results of the monitoring, gaps in translational research and field tested protocols, time and geographical considerations, the impact of monitoring activities on the learning environment, and costs.



Depending on the final results of the school air toxics monitoring study and the levels of contaminants found, EPA will determine whether additional monitoring is appropriate at the schools. If EPA determines that additional monitoring is appropriate, EPA will give consideration to whether indoor monitoring is appropriate at that school.

We also recognize the importance of ensuring that the potential sensitivity of those that might be exposed is considered while evaluating monitoring results from this project. For example, in the analysis of data on chemical concentrations at each school, rather than limiting our consideration to the potential for exposure only during some 6-12 school years, we are using an approach that considers the potential for exposure to the measured concentrations to occur over a full lifetime. Our screening-level approach in this project is based on the Agency's current risk assessment guidance and precedents, which recognize the need to account for potential differences in sensitivity or susceptibility of different groups (e.g., asthmatics) or life stages/ages (e.g., young children or the elderly) to a particular pollutant's effects, such that the resulting analysis addresses considerations relevant for these potentially sensitive groups as well as the broader population.

**NEJAC Recommendation #10**

**EPA should include Tribal schools or communities within Indian country in future school air toxics monitoring projects. EPA should increase its efforts to assess air quality in schools in Indian country and work with Tribal governments and staff to expand their capacity to develop air quality monitoring programs and effective mitigation measures.**

In selecting the initial 63 schools for monitoring, EPA relied on emissions data and models of potential risk at different locations across the country. Because of the limited information available on tribal schools and emissions, most tribal schools could not be considered for the school air toxics monitoring project. However, EPA believes it is possible that air toxics problems could exist in Indian country. To address this concern, EPA identified two tribal schools with sufficient data to initiate the tribal monitoring effort. After completing monitoring at these two schools, EPA established a work group of tribal environmental professionals to design a more comprehensive effort to conduct monitoring around tribal schools. In addition, based on interest expressed at the NEJAC meeting, a Native American representative was added to that workgroup.

EPA agrees that tribes need to be included in future air toxics monitoring projects, and the Agency has passed the monitors used at the two schools included in the initial project on to the Tribal Air Monitoring Support (TAMS) Center to support activities in Indian country as appropriate. A tribal working group of environmental professionals and representatives of the TAMS steering committee will determine the protocol for further deployment of monitors. EPA will work with the Regional Tribal Operations Committees and the National Tribal Operations Committee to reach out to tribes to determine interest in participating in the school monitoring effort. We will also work with the Bureau of Indian Education or National Congress of American Indians to reach tribes that don't have strong environmental programs and don't participate in Tribal Operations Committees. Monitors will be rotated to new locations as the equipment becomes available. Decisions on the length of time for the monitoring will be

determined by the TAMS steering committee. If air quality problems are found, EPA will consult with the tribe to determine appropriate actions, such as targeted enforcement, permit or regulatory action, or other community initiatives.

**NEJAC Recommendation #11:**

**EPA should include demographic data of the communities around the selected schools in its final report for Phase 1 of the School Air Toxics Monitoring Initiative. Future evaluations should determine the extent that air toxic risks fall disproportionately on schools that have large numbers of poor and minority students or are located in poor and/or minority neighborhoods. As it moves forward on Phase 2, EPA should consider environmental justice factors (such as race, income, and number of students receiving free and reduced price lunch) as part of its criteria for selecting schools for the study.**

EPA will include demographic data for the communities selected in the School Air Toxics Monitoring Initiative in the final report. EPA also agrees that it is important that environmental justice communities benefit from new monitoring efforts. EPA's Administrator directed EPA staff to specifically look at a number of schools in EJ areas as it developed the list of schools to be monitored as part of the SAT. While not the primary focus of the schools project, environmental justice was considered as one of the criteria in determining the list of schools to be monitored. For future community-based monitoring efforts, EPA will include environmental justice factors in its criteria for the CSATAM project and welcomes the NEJAC's advice on developing these criteria.

**IV. DATA ANALYSIS, INTERPRETATION, AND CONCLUSIONS**

**NEJAC Recommendation #12:**

**EPA should identify areas of uncertainty about the data and analytical results. The Agency should acknowledge issues that may impact air monitoring results, such as the effect of monitoring in the summer (e.g., lower traffic, higher heat) and the length of monitoring. Another area of uncertainty is the impact of activities in or around schools that may result in compounding exposure to air toxics (e.g., school renovation projects, pesticide applications). EPA should also acknowledge the uncertainty associated with evaluating children's exposures, given that children have developing lungs and breathe more air per pound of body weight than adults and therefore may be more vulnerable to adverse effects of air toxics than adults, and given that child-safe health standards have not necessarily been adopted for the Agency's use in evaluating its air monitoring data.**

EPA agrees with the importance of considering areas of uncertainty associated with the ambient monitoring data generated by the Schools Air Toxics Monitoring Initiative as well as in our analyses of the monitoring results. For example, several aspects of the data collection period receive particular attention in our review of the data collected at each school. These include the level of activity of the suspected source(s), meteorological conditions and their similarity to those prevailing over the longer-term. Where this information indicates that circumstances during sample collection do not reflect the usual conditions in this area, additional monitoring to

capture those conditions is recommended. We are committed to considering these areas of uncertainty and limitations of our sample design (e.g., seasonal variability, confounding emission activities, reduced industrial activities, etc.) and their implications with respect to consideration of potential long-term health risks in the individual school reports and in any consolidated reports on the overall initiative.

Whenever data are available to indicate that children are more susceptible to specific pollutants than adults, those data are always factored into the analysis. When data are inadequate to understand the effects of a specific pollutant on sensitive subpopulations -- which for some pollutants may include children -- the Agency's risk assessment methods ensure that resulting assessments address the possibility that such subpopulations might be more sensitive.

**NEJAC Recommendation #13:**

**EPA should develop and communicate detailed and comprehensive protocols pertinent to future phases of this program. Such protocols should address the data collection methods, data management and analysis standards, and criteria for interpreting the findings and setting response actions.**

EPA has protocols in place for the upcoming community-based air toxics monitoring program. The technical protocols for ambient air toxics sampling and analysis, as well as data management and reporting, are well documented in the National Air Toxics Trends Station (NATTS) Technical Assistance Document (TAD) which is available at <http://www.epa.gov/ttn/amtic/airtox.html>. EPA agrees that these protocols need to be communicated clearly. The NATTS TAD, and relevant quality assurance references, will be clearly cited in the request for health proposals under the future community-based air toxics monitoring program. Regarding air toxics data analysis, EPA has several tools and references which are available on our air toxics monitoring website (<http://www.epa.gov/ttn/amtic/toxdat.html>) and also on our exposure and risk assessment website (e.g., our Air Toxics Risk Assessment Library at [http://www.epa.gov/ttn/fera/risk\\_atra\\_main.html](http://www.epa.gov/ttn/fera/risk_atra_main.html)). We also developed documents specifically for the schools project. These documents, which are available on our website, describe monitoring and sample analysis protocols, as well as the use of health effects information in evaluating the sample results. As needed, such documents will also be used, or modified for use in any future phases.

**NEJAC Recommendation #14**

**EPA should provide caveats and disclaimers to its findings, interpretations, and conclusions as appropriate. In presenting its findings to the public, EPA should acknowledge that neither the NEJAC nor its Work Group(s) have reviewed or endorsed the Agency's interpretations of data. EPA should also note the uncertainties described earlier, as appropriate, on this project's website. In addition, the Agency should acknowledge the implications of the monitoring results on the >100,000 schools in the United States that are not currently being monitored.**

In presenting our findings on the EPA website, we intended to present EPA's analysis and our interpretation of our analyses. Our analyses have been conducted consistent with Agency risk assessment methods and guidance which have received external scientific peer review, and our conclusions are consistent with programmatic policies. We fully understand that others may draw different conclusions from these results as to appropriate next steps in specific situations. However, the EPA website is clearly conveying EPA findings and conclusions. With regard to the role of NEJAC and its workgroup in this project, in public presentations of the project, we have been careful to clarify that their role was with regard to communication materials and did not concern technical or policy analysis.

EPA acknowledges that there are uncertainties associated with the ambient monitoring data generated by the Schools Air Toxics Monitoring Initiative as well as in our analyses of the monitoring results. We are committed to describing the uncertainties and the limitations of our analysis in our individual school reports and in any consolidated reports on the overall initiative. These reports will be posted to the school air toxics website.

Finally, EPA recognizes that sampling at 65 schools across the country does not fully represent air quality conditions at every school in the country, and it was not our intent to create such a sample. In selecting schools for this initiative, we looked for a cross-section of environment types, focusing on schools near large industrial facilities or groups of smaller sources, those impacted by mobile sources and some in EJ areas. One should not imply any correlation between any of these 65 schools and any individual schools among the 100,000 plus schools in the country. Air toxics are primarily very local in nature and are specific to that community and inferences to other schools should not be made from the results of these specific analyses.

**NEJAC Recommendation #15**

**EPA should evaluate cumulative exposures in its school air toxics monitoring model. Future sampling protocols should assess, if not measure, the many other air toxics that communities and schools are exposed to beyond the pollutants of concern screened for in this project.**

EPA agrees that consideration of cumulative multi-pollutant impacts is crucial to the assessing public health risks from air toxics. Accordingly, in analyzing monitoring results for each school, we have included such a consideration. More broadly, EPA has developed numerous analytical approaches and has conducted numerous assessments that focus on the estimation of cumulative exposures and risks. Among these are the risk assessments that are performed in support of our residual risk rulemaking efforts and the recurring National Air Toxics Assessments, or NATA. The 2005 NATA is scheduled to be released later this year. To ensure that we were investigating the situation at schools where cumulative risks may have been of concern, we considered estimates of cumulative risks from the 2002 NATA in targeting locations and pollutants for the Schools Air Toxics Monitoring Initiative. As such, within the limitations of the data developed by the program, EPA is addressing cumulative air toxics impacts in the individual school reports.

**NEJAC Recommendation #16**

**EPA should clarify NEJAC’s role in evaluating any and/or all of the protocols mentioned above. Methods should be developed to resolve disputes between NEJAC (or its work groups) and EPA regarding the interpretation of the efficacy of these protocols and/or their implementation so that the integrity of individuals serving on the NEJAC and its Work Group(s) are not compromised.**

EPA agrees that in order to have less confusion and frustration in the future that roles and charges of the workgroup and EPA staff need to be clearer. We also agree that increased involvement from staff more experienced with working with FACAs would help address disputes earlier on in the process.

**V. POTENTIAL MITIGATION MEASURES TO REDUCE EXPOSURE TO AIR TOXICS AT SCHOOLS**

**NEJAC Recommendation #17**

**EPA should fully employ the strength of its regulatory clout as needed to mitigate pollution sources around schools. Where that is not feasible and where school children who must attend school are clearly in harm’s way, EPA should consult with the U.S. Department of Education about offering alternative educational placements for children. EPA should also encourage the use of supplemental environmental projects (SEP) as a potential response. SEPs, which are environmentally-beneficial projects that a polluter is not otherwise legally required to perform but agrees to undertake in settlement of an enforcement action, may be appropriate for use in enforcement actions or where elevated levels of air toxics are found. The Agency should engage affected communities in decisions related to using SEPs as a mitigation option in their communities.**

If a significant concern were to become apparent through the school air toxics program or other program activities, EPA would work closely with all appropriate local, state, tribal and federal authorities, including the Department of Education, to quickly find effective solutions.

EPA agrees that SEPs should be explored in the context of enforcement actions that may be taken in response to air quality issues at the monitored schools.

As EPA determines the appropriate response to air pollution sources around monitored schools, it will consider both regulatory and non-regulatory responses. State air agencies often have jurisdiction or the lead in compliance and enforcement activities and adopting source-specific regulations, so it will require joint efforts in some cases. EPA works collaboratively with state and local air and health agencies. However, if the problem is addressable by a federal regulatory response, it will be part of the Agency’s comprehensive air toxics strategy, which calls on EPA to employ all facets of our toxics program in a comprehensive way. An element of this strategy is the development of multi-pollutant, sector-based approaches to regulating air toxics. Within the purview of the regulatory landscape, this approach can provide opportunities for additional emission reductions in areas with identified significant air quality issues. This approach will also

allow EPA to prioritize workload based on opportunities to achieve meaningful environmental benefits.

In the National Academy of Science's 2004 report, "Air Quality Management in the United States," the National Research Council (NRC) recommended to EPA that standard setting, planning and control strategy development be based on integrated assessments that consider multiple pollutants and those integrated assessments be conducted in a comprehensive and coordinated manner. With these recommendations, EPA began to move toward establishing multi-pollutant and sector-based approaches to managing emissions and air quality. These sector-based approaches essentially expand technical analyses on emission reduction benefits and dis-benefits of particular technologies, and consider interactions of rules that regulate sources within facilities. The benefit of multi-pollutant and sector-based analyses and approaches include the ability to consider and address risks or hazards posed by emissions from entire facilities, as well as to identify optimum strategies, considering feasibility, costs, and benefits across all pollutant types – criteria, toxics and others -- while streamlining administrative and compliance complexities and reducing conflicting and redundant requirements.

**NEJAC Recommendation #18**

**EPA should actively engage schools and other community members in decisions about how to mitigate identified air quality problems. A full range of options, including permit modification or revocation, should be on the table.**

EPA has encouraged our state and local partners to make active engagement with schools and communities an important part of the school air toxics monitoring program. EPA's role has largely been to develop and disseminate data and information to the public and our regulatory partners. When our analysis is complete for each of the schools, the results are discussed with the schools and communities. It should be noted that in early outreach to some schools, we received feedback that the schools were not interested in discussing the results with EPA. We do not believe this to be the case in all schools. We provide the public with a technical report of findings, analysis of results, next steps, and a final report of the entire project documenting the areas where additional actions may be required. For each school, EPA will determine whether we think that additional monitoring is needed to better characterize any short- or long-term exposures to the community.

EPA fully supports involving schools and community members in decisions about mitigating identified air quality problems. EPA anticipates that state and local air agencies will take the lead in mitigation efforts, because they generally are the permitting agencies for the stationary sources that impact ambient air quality around schools and are generally responsible for implementing mobile source and air toxics programs. Where needed, we encourage state and local agencies to seek emissions reductions through pollution prevent efforts, source-specific regulations, compliance assurance or enforcement activities, revisions to state implementation plans, and permit decisions. EPA will look to federal enforcement, where appropriate, federal regulatory action, where appropriate and possible, and state and local agency efforts to provide mitigation responses.

## VI. CONCLUSION

As part of the “next steps” for EPA’s School Air Toxics Monitoring Program, the following recommendation is offered:

### NEJAC Recommendation #19

**EPA should seek the advice of the NEJAC (or its work group as delegated) about designing and implementing the next phase of the school air toxics monitoring project. The Agency should engage the NEJAC in more than just community outreach and communications issues related to this program. For all the aforementioned reasons, we believe that EPA’s “Charge” to the NEJAC needs to be revised and expanded to incorporate areas other than effective communications strategies for engaging with the public about EPA’s School Air Toxics Monitoring project.**

EPA appreciates the work of the School Air Toxics Monitoring Work Group throughout the school air toxics monitoring initiative. The advice provided by the Work Group on effective community outreach and communications strategies will prove valuable beyond the scope of this individual project. EPA agrees that NEJAC should be involved in providing input into the development of the criteria for the Community-Scale Air Toxics Ambient Monitoring (CSATM) grants and also to provide comments on the Schools Air Toxics project final report. EPA will re-engage with the current working group to get its input on these tasks.