

December 10, 2003

Lloyd Eagan, President  
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Program Administrators  
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Cory Chadwick, President  
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Control Officials  
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Dear Ms. Eagan and Mr. Chadwick:

Thank you for your letter of October 2, 2003, regarding the Environmental Protection Agency's (EPAs) allocation of \$10 million in FY 2004, State and Tribal Assistance Grant (STAG) funds for air toxics monitoring efforts. I was quite concerned when Bill Becker had alerted me to this issue and have since met with my staff to learn the facts of the situation. Fortunately, your annual meeting in San Francisco, California, also afforded me the opportunity to discuss this issue directly with Bill Becker, Dick Valentinetti, and Dennis McLerran. As a result of those discussions, I believe that we have a better understanding of the issue and have a path forward that will be acceptable to all.

As you may recall, soon after Congress provided additional funding in FY 2000, to establish an air toxics monitoring network, you and we created the Air Toxics Steering Committee. As a result of the Steering Committee's recommendations, a pilot monitoring program was initiated and an intensive data analysis effort of historical and pilot program data was undertaken to assist in the longer-term design of the air toxics monitoring program.

In FY-2003, we received \$3 million to establish an air toxics monitoring network. These funds were provided under the authority of Section 103 which does not require the States to provide matching funds. The Air Toxics Steering Committee met to discuss this initiative and how it might fit in the overall strategy developed 2 years ago. Subsequently, for FY-2004, EPA will receive an additional \$7 million to augment the toxics network. Regrettably, you are correct that we did not consult with you prior to the decision to add these additional funds to the Section 103 account. We made that decision because the \$7 million was a follow-on and because the continued use of Section 103 meant that no matching State funds would be required. However, the plans for the use and administration of the additional \$7 million were discussed in meetings of the joint Air Toxics Steering Committee.

In the enclosure to this letter, my staff has provided detail on the background, rationale, objectives, and strategy underlying the air toxics monitoring program in response to several of

your questions. Air toxics monitoring is a challenge which demands continued communication to implement this important program. Additionally, the States and local agencies have considerable flexibility in addressing their specific air toxics monitoring objectives through \$6.5 million in Section 105 resources allocated specifically for air toxics monitoring activities.

To assist agencies in community assessment proposal preparation, we will provide a draft edition of the air toxics monitoring strategy in December 2004, which outlines more clearly the strategy for implementing the air toxics monitoring network. Recognizing that this will create the need for additional communication and may impact agency proposals, we have extended the deadline for the community assessment project proposals to March 31, 2004. The existing Air Toxics Monitoring Strategy Committee, with State and local agency representation, will participate in the review and development of this document.

Following our discussions at your San Francisco meeting, I am confident that together we can work through these issues. I want to assure you that we will continue to seek your involvement and your recommendations on all aspects of this program and to the extent possible we will incorporate them into the design and implementation of the network.

Please contact Dr. Richard Scheffe (919-541-4650) regarding issues related to the air monitoring program.

Again, thank you for your letter. I appreciate the opportunity to be of service and trust the information provided is helpful.

Sincerely,

Stephen D. Page  
Director  
Office of Air Quality Planning  
and Standards

Enclosure

cc: Rob Brenner, OAR  
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## Enclosure

### **Background and Rationale Underlying the Air Toxics Monitoring Program**

**Background.** Congress, in considering our FY 2000 appropriations, directed the Environmental Protection Agency (EPA) “to develop a comprehensive plan to guide the Agency’s efforts in establishing a monitoring program for air toxics.” In support of that directive, an additional \$3 million in STAG funds was provided. Starting with this initial funding base of \$3 million, EPA, along with its State and local partners, formed the Air Toxics Steering Committee. As a result of the Steering Committee’s recommendations, a pilot monitoring program was initiated and an intensive data analysis effort of historical and pilot program data was undertaken to assist in the longer-term design of the air toxics monitoring program. The results of those efforts, combined with knowledge gained from the 1996 National Air Toxics Assessment (NATA) analyses, lead the Air Toxics Steering Committee to look towards a multi-purpose air toxics monitoring program. The Steering Committee recognized two important features inherent in the air toxics program. First, the more nationally pervasive air toxics exposure problems were associated largely with mobile source emissions, resulting in a relatively modest 22-site National Air Toxic Trends Sites (NATTS) network. Second, the diversity of potential air toxics problems, combined with NATA findings clearly suggested that attention be given to local or community scales to best address a wide spectrum of potential air toxics concerns.

As part of the President’s FY 2004 budget request, an additional \$7 million in STAG funds was requested to continue our efforts to better characterize air toxics. Again, the Air Toxics Steering Committee was charged with how best to utilize these additional funds in furthering the air toxics monitoring network. To complement the 22 NATTS sites, the Steering Committee recommended the development of community assessment projects, recognizing the need to move toward more insightful local/urban scale studies. Subsequently, the Steering Committee recommended a strategy enabling agencies to collect more spatially resolved data to better characterize urban pollutant gradients and removing the restrictions for adhering to a strict set of measured NATTS parameters so that focus can be directed to those pollutants of greatest concern to local areas.

In order to implement a community assessments strategy and provide funding to such efforts, we, in accordance with the Agency’s Grant Competition Policy, are soliciting proposals to address community air toxics assessments. Based on available funding, it is hoped that community-scale monitoring projects in ten or more cities will be funded. We view the community monitoring assessments as a flexible complement to the NATTS, which should stimulate practical and creative approaches from local agencies, States, and Tribes, and reflect EPA’s willingness to listen to the concerns of agencies and not follow a “one size fits all” approach. We included tribes, as well as State and locals, in our solicitation because our Grants policy requires that all eligible entities be given an opportunity to apply.

The current level of STAG funds specifically available for air toxics monitoring activities in FY 2004 totals \$16.5 million. Of this total, \$6.5 million is available as Section 105 matching funds. The remaining \$10 million, comprised of the \$3 million originally added by Congress in

FY 2000 and \$7 million added in FY 2004 is available under Section 103 grant authority. By utilizing these funds under Section 103, the total burden on State and local agencies is substantially reduced as matching State and local agency resources are not required.

A specific Air Toxics Steering Committee with representatives from States, local agencies, and the EPA (OAR, ORD, and Regional Offices) remains in place to review status and effectiveness of the program and make recommendations to EPA regarding program design. The EPA is developing an air toxics implementation plan which will provide more depth regarding the objectives and longer-term strategy for this program with a draft to be available in late December 2003.

**Program Goal and Objectives:** The goal of the air toxics monitoring program is to support reduction of public exposure to hazardous air pollutants (HAPs). Monitoring data provides a critically important role by characterizing HAP's concentrations which support very basic monitoring objectives, including:

1. Understanding HAPs air quality issues at a national level, including: identifying problem areas, identifying HAPs of primary concern and establishing a baseline for measuring progress of HAPs mitigation strategies.
2. Understanding HAPs air quality issues at a local level, including: identifying local ambient gradients, identifying HAPs of local concern, characterizing impacts from local sources, and helping to support local mitigation strategies.
3. Providing observational data to evaluate air modeling systems used for estimating national and local exposures, as well as for planning emission mitigation strategies.

Many of these objectives, as well as our initial strategy, are embodied in the air toxics monitoring concept paper (<http://www.epa.gov/science1/fiscal00.htm> - EPA-SAB-EC-00-015 Review of Draft Air Toxics Monitoring Strategy Concept Paper, August 2000) which was reviewed and endorsed by the EPA's Scientific Advisory Board (SAB).

**Rationale Underlying Community Assessment Monitoring Studies:** Knowledge of a forthcoming additional \$7M in FY 2004, Section 103 air toxics monitoring catalyzed the Steering Committee to develop a local/flexible component to complement the NATTS. The emphasis on the subject community assessment projects recognizes the need to move toward more insightful local/urban scale studies and a desire to link formally with a series of emerging community assessment programs, a key component of EPA's air toxics strategy. Indeed, the very diversity of air toxics problems associated with local and community scales presented no clear single approach to monitoring, and the committee struggled with defining a collective well defined vision for utilizing the added resources. The resulting guidance for community monitoring assessments is based on a combination of knowledge gleaned from the pilot city studies, the NATA assessment, as well as the committee's collective understanding of monitoring gaps.

Recent results from the pilot city studies clearly showed the existence of spatial gradients that are not characterized by a single NATTS site and significant variations in pollutant concentrations across cities. Based on the pilot data analysis results in the spring of 2003, Battelle Laboratories (under contract to LADCO) recommended an approach that would establish assessment studies of 1 or 2 years duration in 10 or more cities per year, with rotation to other cities over time to characterize a wide spectrum of communities across the Nation. Such studies would attempt to characterize concentration gradients within cities by, for example, placing four or five sites representing the neighborhood, industrial, mobile, and commercial or special industry contributions (such as an airport or large facility).

The committee largely agreed with this approach, although several concerns remained regarding specificity of objectives and implications for equipment and project continuation after expiration of grant resources. The committee also recognized the need to leverage other programs, such as PM<sub>2.5</sub>, to address diesel particulate matter, support the evaluation of air quality models, and most importantly, link effectively with ongoing and planned air toxics emission strategies - residual risk, MACT, mobile source rules, and community assessments. Much of the committee's discussions concerned method issues, such as the limited availability of continuous technologies and need to improve methods for important pollutants of concern, such as acrolein and arsenic. Concerns also were expressed regarding a historical tendency to grant "grandfather" status to monitoring efforts resulting in resources being applied well after an initial period of high value.

Subsequently, the committee devised a strategy for the additional \$7M that largely complements the NATTS by enabling agencies to collect more spatially resolved data to better characterize urban pollutant gradients and removes the restrictions for adhering to a strict set of measured NATTS parameters so that focus can be directed to those pollutants of greatest concern to local areas. The objectives of the community monitoring assessment studies embody the objectives stated above and include:

1. Producing baseline air quality characterizations that can be tested in the future to measure progress of the emission mitigation strategies;
2. Supporting the evaluation of air quality models that, in turn, are utilized to produce risk assessment and exposure analyses for communities;
3. Accommodating technologies that will advance our ability to characterize and manage air toxics.

In addition, the community monitoring assessment participants are encouraged to leverage other programs recognizing the efficiencies gleaned from taking an integrated approach in addressing air toxics, PM, and ozone. Examples of such program linkage include toxicity associated with diesel particulate matter and wood smoke and various volatile organic compounds that simultaneously act as ozone precursors and HAP's. The concept of rotating these studies every year or two to new localities circumnavigates the "grand fathering" issue and

forces us to continually assess where the most valued applications reside, a principle evolved from developing the national air monitoring strategy.

**Resource Issues, Competition Requirement, and Regional Office Participation:**

While there are procedural rules requiring a competitive proposal process, such an approach has the advantage of soliciting the best ideas from State and local agencies and Tribes and reflects EPA's willingness to listen to the concerns of agencies and not follow a "one size fits all" approach. We view the community monitoring assessments as a flexible complement to the NATTS, which should stimulate practical and creative approaches from local agencies, States, and Tribes. As part of the "National" program, we have the responsibility of ensuring that the aggregate of community monitoring projects cover a spectrum of important issues and are relevant to judging effectiveness our air toxics programs. Part of this responsibility will result in a distribution of community assessment resources that considers the distribution of toxics problems nationally based on the NATA results.

By establishing this program under Section 103 grant authority, the total burden on State and local agencies is reduced as matching State and local agency resources are not a required element. We agree with your point that EPA Regional Offices are well positioned to address the development of these community assessment studies. The Regions are well represented by EPA lead Regions for air toxics and air monitoring, and are charged with ensuring representation across all Regions. The Air Toxics Steering Committee also agreed in principle that funds should be allocated for quality assurance efforts.

The Agency recognizes that there are unique problems that simply do not fit into a "National" program. Accordingly, State and local agencies have nearly unlimited flexibility under the existing \$6.5M in Section 105 grants that are allocated for air toxics monitoring. On balance, there exists a very reasonable distribution of resources that address needs associated with national consistency (NATTS), community/urban scale assessments, and a plethora of local issues.

**Strategy Summary:** Given this chronological background on the evolution of the network and associated rationale, a summary description of the air toxics monitoring strategy includes the following elements:

**Section 103 Grants (\$10M annually)**

1. Continuation of a limited number of National Air Toxics Trends Sites (NATTS). The NATTS are intended to provide a long-term record of priority HAP's across representative areas of the country and reflect the most prescriptive part of the program to maximize consistency. The NATTS also are catalyzing the new multi-pollutant NCORE Level 2 sites that emerged as a key design feature of the national monitoring strategy. These 22 NATTS are (and will be) located at existing PM<sub>2.5</sub> speciation sites which, in some cases, are located at PAMS sites. In effect, the NATTS are initiating a national movement towards well-integrated multiple pollutant monitoring systems. The parameter list for the NATTS include priority HAP's associated with mobile sources (benzene; formaldehyde; acetaldehyde; 1,3 butadiene), diesel particulate matter (light absorbing carbon),

and metals, such as hexavalent chromium and arsenic emitted from a variety of sources.

2. A rotating series of community monitoring assessment studies that provide agencies the ability to address local scale problems and complement the NATTS by providing more detailed spatial coverage of cities, as well as the ability to target pollutants and sources not covered under the NATTS list. As findings from these community assessments evolve, decisions will need to be made regarding those areas requiring longer term monitoring based on the level of concentrations and the need to adequately measure emissions mitigation progress.
3. A quality assurance program that includes local agency and national EPA participation.
4. Provisions for continued analysis and interpretation of results to assess the design and effectiveness of the air toxics monitoring program and drive information based change in approaches.

#### Section 105 Grants (\$6.5M annually)

1. A completely flexible component for agencies to address specific local scale problems of concern. These resources can be used for targeted sources, environmental justice issues, special studies, or to complement the national components covered under the Section 103 grants.

A specific Air Toxics Steering Committee with representatives from States, local agencies, and EPA (OAR, ORD, and Regional Offices) remains in place to review status and effectiveness of the program and make recommendations to EPA regarding program design. The EPA is developing an air toxics monitoring strategy which will provide more depth regarding the objectives and longer-term strategy for this program with a draft to be available for STAPPA review in December 2003.

The outstanding issues that require attention include development of an efficient post community assessment strategy to optimize resources such that they address the more serious areas of concern and provide the measurable progress capability.