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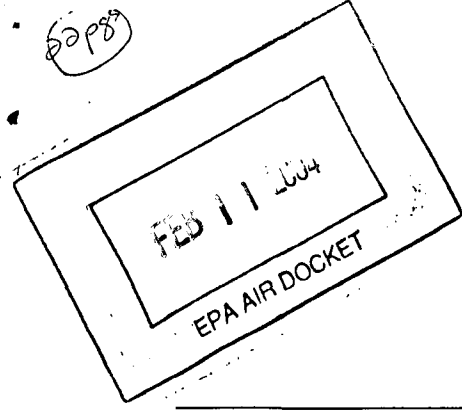
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XXIX



# CLEAN AIR ACT ADVISORY COMMITTEE

OCTOBER 13, 1999  
GEORGETOWN UNIVERSITY CONFERENCE CENTER  
WASHINGTON, D.C.

## AGENDA

- ◆ Presentation and Discussion of the Office of Air and Radiation's (OAR's) Fiscal Year (FY) 2000 Budget – Rob Brenner, Acting Deputy Assistant Administrator and Jerry Kurtzweg, Director, OPMO
- ◆ Opening Comments and Announcements (including a Discussion of the One-Hour Revocation Issue) – Bob Perciasepe, Assistant Administrator, OAR
- ◆ Subcommittee Reports
  - Subcommittee on Linking Energy, Land Use, Transportation, and Air Quality – Bob Wyman and Gay MacGregor, Co-Chairs
  - Subcommittee on Economic Incentives and Regulatory Innovation – Ben Henneke, Co-Chair
  - Subcommittee on Permits/NSR/Toxics – Bill Harnet, Co-Chair
- ◆ Presentation and Discussion of Phase II Reform – Margo Oge, Director, OMS and Debbie Wood, OMS
- ◆ Presentation and Discussion of Voluntary Measures for SIP Credits – John Seitz, Director, OAQPS and Jack Edwardson, OAQPS
- ◆ Presentation and Discussion of Greenhouse Gas Reduction and Energy Conservation Programs – Kathleen Hogan, Director, Climate Protection Division, OAP
- ◆ Open Committee Discussion

### PRESENTATION AND DISCUSSION OF THE OFFICE OF AIR AND RADIATION'S (OAR'S) FISCAL YEAR (FY) 2000 BUDGET – Rob Brenner, Acting Deputy Assistant Administrator and Jerry Kurtzweg, Director, OPMO

Rob Brenner introduced the discussion on the EPA budget. The Senate and conference committees have recently completed action on the budget, and the congressional staff is currently drafting the bill's remaining language. Although the President is expected to sign the bill, a final decision has not been made at this time.

Jerry Kurtzweg, Director of EPA's Office of Program Management Operation, has managed EPA's budget process for a number of years and gave a brief introduction of the budget process, FY 2000 allocations, and the impact the budget is expected to have on EPA's programs and processes. Through October 21, 1999, EPA is operating under a continuing resolution. Because the budget is out of conference and will probably be signed by the President, the Agency is not anticipating any breaks in funding. The bill's general outlines are known, but some of the details are still being worked out. Mr. Kurtzweg briefly talked

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about the President's initial budget request, the changes made by the House and Senate, and the implications of these changes for the FY 2000 budget.

The President's budget request for EPA totaled \$7.2 billion for FY2000, a decrease from the FY1999 budget of \$7.6 billion. EPA's budget is divided into four sections: state and tribal assistance grants (STAG), operating programs, Superfund, and buildings and facilities. The major changes in the FY2000 budget were in the STAG account and in operating programs.

- The STAG account amounts to 40 percent of EPA's budget. Decreases were primarily in the Office of Water in one of the state revolving funds. The air portion of the STAG budget increased, but the Clean Air Partnership Fund (CAFP) was not funded.
- The operating programs portion of the budget, which pays employees, funds contractors, etc., realized an approximate increase of \$200 million.
- The Superfund and buildings and facilities budgets stayed about the same as under FY1999.

The budget request reflects the spending caps that were set in 1997 for all agencies and programs. Using these funding caps, Congress establishes limits on the amount of money each appropriations subcommittee has to allocate. Unfortunately, the subcommittee's agency allocations rarely match the President's funding requests. Additionally, there are often differences between the requests and allocations of the House and Senate. There is still the threat of an across-the-board funding cut.

Mr. Kurtzweg presented a chart that illustrated EPA's appropriations compared to those for the other agencies in EPA's subcommittee. The President requested increases for the budgets of two of the agencies in EPA's subcommittee, which created tension in terms of EPA's budget request. Mr. Kurtzweg then presented two charts that illustrated the changes between OAR's FY1999 and FY2000 budget requests. The President's FY2000 request for OAR totaled \$879 million, which accounts for approximately 15 percent of EPA's budget. This request represented a \$296 million increase from the FY1999 budget, with increases targeted at a few specific programs – CAFP, Climate Change Technology Initiative, and the Montreal Protocol Fund.

Additionally, Mr. Kurtzweg presented a chart illustrating the monies allocated by Congress under the conference bill. Overall, the conference bill exceeds the President's request by \$385 million. However, this increase is concentrated in the water account, specifically the Clean Water State Revolving Fund. The Conference made some major changes in the funding allocations; for example, their bill includes \$470 million for 314 earmark projects that were not included in the President's requests. Funding for these projects comes at the expense of some of EPA's regular programs; the earmarks for the air program are relatively small. The conference bill also included a general reduction of \$142 million in EPA's operating programs, with the EPA Administrator determining precisely where the cuts will be taken. In the end, EPA's clean air program will probably have a lower budget in FY2000 than in FY1999.

Mr. Kurtzweg also presented a chart illustrating the programs for which EPA asked for funding but did not receive any allocations. The Agency will not know exactly where cuts will be taken until the operating plan is completed. In addition to funding reductions, other provisions in the report that accompanies the bill will affect how EPA does business (the Agency should receive a copy of the draft report later this week). These provisions are expected to include requirements for:

- Developing a plan for air toxics monitoring and letting the National Academy of Science (NAS) review the plan;
- Asking EPA do additional analysis of the Tier 2 rules;
- Maintaining links between 126 petitions and actions on the NO<sub>x</sub> SIP Call;
- Having NAS review implementation of the CAA; and

- Providing assistance for regional and state agencies to combat regional haze.

Mr. Brenner added that one of the big disappointments for EPA is the lack of funding for the CAPF, as the program had tremendous support from state and local groups. There was a budget provision for part of the CAPF in the House, but the Senate did not approve this provision for primarily political reasons. Overall, the Agency is disappointed that there is currently no funding for this program; however, they will probably include it in their budget request for FY2001.

Mr. Kurtzweg added that part of what makes the budget painful is that many operational costs have increased, including a salary increase of approximately 4.5 percent for all employees in FY2000. Additionally, some new programs received funding in the budget allocation, which means that money will have to be cut from existing programs to cover these costs. In all, the Agency will need to make some difficult decisions, and funding cuts will be inevitable in some areas.

Questions and Comments

Bill Becker, STAPPA/ALAPCO, commented that he was disappointed about the zeroing-out of the CAPF. He also noted that someone from EPA's administration had mentioned that there may be an outside chance that monies could be found for the Fund, despite the fact that none are allocated in the budget. Mr. Becker then asked about what steps EPA is taking to identify other potential funding sources. Mr. Brenner replied that he has not heard of any such activities and, given the workings of the budget process, he does not know if this is even possible.

Bob Perciasepe stated that if some appropriation bills do not make it through the budget process in a timely fashion, EPA could have the opportunity to take care of programs that are currently not funded; however, given the current circumstances, this is not an option. EPA is very disappointed with the lack of funding and will try to determine how to secure monies for the CAPF and other programs in the FY2001 budget.

Carter Keithley, Hearth Products Association, asked if the funding for the Western Regional Air Partnerships (WRAP) was part of the CAPF or if this program received any funding. Mr. Kurtzweg replied that he does not have all of the budget details at this time, but as he understands it, there should be approximately \$1 million for the WRAP.

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**OPENING COMMENTS AND ANNOUNCEMENTS (INCLUDING A DISCUSSION OF THE ONE-HOUR REVOCATION ISSUE) – Bob Perciasepe, Assistant Administrator, OAR**

After the Committee members introduced themselves, Mr. Perciasepe made a number of personnel announcements and described the organizational changes in EPA's Office of Mobile Sources (OMS). In an effort to streamline processes and expand the Office's focus to include topics other than technology-based programs, EPA is trying to integrate OMS' work with other, broader transportation and climate issues. As part of this initiative, Greg Green, a former member of the CAAAC, recently accepted a position as the head of Certification and Compliance in OMS' Ann Arbor office. Marilyn Zaw-Mon joined OMS as the director of Transportation and Regional Programs. These two individuals both have extensive experience working at the state and local levels. Chet France will become Director of the Assessment and Standards Division, and Jane Armstrong will work on standards, organization, and international issues. Gay MacGregor will become a senior policy advisor in OMS with a concentration on climate-related issues. She will continue to co-chair the Linking Energy, Transportation, and Land Use Subcommittee

Mr. Perciasepe then talked about EPA's recent work and how it relates to the broader ozone policies,

particularly the 8-hour standard. He said that before the recent activity in the D.C. Circuit Court, EPA had been implementing long-range ozone plans throughout the United States, completing work on the 1-hour standard in some areas and moving forward with the planning and implementation of the broader, 8-hour standard in others. EPA's opinion is that, regardless of the decision of the D.C. Circuit Court, the science behind these standards is not going to change. Therefore, EPA is currently working on a number of national processes, programs, and control strategies necessary to solve some of problems associated with the 1-hour standard and establish a foundation for the future implementation of the 8-hour standard.

**Regional Reductions in NO<sub>x</sub>.** In relation to regional reductions in NO<sub>x</sub>, EPA wants to finish work on the eight previous Section 126 petitions and get started working on four recent petitions the Agency has received. This work covers a substantial amount of sources included in the NO<sub>x</sub> SIP Call.

**1-Hour vs. 8-Hour Standards.** Some individuals have asked if EPA plans to reinstate the 1-hour standard in those areas where it has been revoked – currently, there are approximately 3,000 counties with no ozone standard. EPA is in the process of reviewing the air quality status of these areas, identifying the implications of reinstating the 1-hour standard, and determining if this action would help or hinder EPA in achieving its long-term air quality goals. The Agency does not want to spend too much time on the 1-hour standard because they are hoping to work towards the 8-hour standard in the future. Recent analysis shows that 53 areas across 114 counties would probably be required to take some action, such as implementing maintenance plans or looking at new sources, if the 1-hour standard were reinstated. Additionally, 11 non-attainment areas in 15 states have been identified as having severe and serious non-attainment classifications under the 1-hour standard, and EPA is hoping to approve or disapprove SIPs for these areas by the spring of next year.

**Particulates.** The time frame to which EPA is committed for particulates is still far away, and some of the legal issues may be resolved before the end of this period is reached. The Agency wants to continue to do background work to get monitoring systems in place for when the legal issues are resolved. The Agency needs to continue to work on emissions factors and other ground work so particulate plans are effective. The regional nature of particulates is important, and EPA has been working with states to set up regional forums, such as the WRAP, to address these issues.

**TEA-21 Legislation.** Under the TEA-21 Legislation, EPA has a statutory requirement to make non-attainment designations for the 8-hour standard in July 2000. However, many legal and technical issues must be addressed before these designations can be made, such as where to draw the geographic lines between attainment and non-attainment areas. Although the D.C. Circuit Court said that EPA cannot implement the 8-hour standard, it is unclear how the Agency is expected to reconcile issues with conformity.

**Tier-2 Tail Pipe Emission Standards and Low-Sulfur Gasoline.** These standards, which are still undergoing review, will set baseline emission performance for a good part of the transportation sector for the next 20 years and will be an important foundation for the future planning work EPA has been discussing. The Agency has reviewed comments, set up sessions with the automobile and refining industries to discuss the standards, and is hoping to bring the issues to a close in the latter part of November or early December. The standards are scheduled to go final by late December.

**Heavy-Duty Rules.** In 1997, EPA published regulations for heavy-duty emission standards for 2004 and committed to evaluate the technical ability to meet these standards in 1999. EPA put out a proposal on the 1999 review of these standards and determined that they are technically feasible. The Agency's proposal also included provisions for gasoline vehicles to conform with California state regulations and passenger vehicles that are creeping into the heavy-duty weight class. The rule's preamble includes a discussion on next steps, including how fuels, engines, and technology can be used together to achieve

cleaner air. The goal is to publish the proposed rule and the next generation of emission performance standards for heavy-duty diesel and other diesel engines in early 2000.

**Conclusion.** Activities such as regional reductions in NO<sub>x</sub> in boilers and long term performance standards for mobile sources are essential to complete work on the 1-hour standard and to form the necessary foundation for the 8-hour standard. Attention at the state and local levels is focused on meeting the existing 1-hour standards, especially in those areas with the greatest exceedances, by implementing programs, measures, and mechanisms to maintain current levels of air quality and continue to move forward to reach the 1-hour standard.

Questions and Comments

Rob Brenner stated that the CAAAC embodies a great deal of experience related to the CAA and helps EPA determine how to achieve their goals. He solicited comments from Committee members on how to deal with the range of issues presented by Bob Perciasepe.

Steve Gerritson, Sierra Club, asked if the funding reductions will delay the implementation of the MACT standards and also how they will tie into the Urban Air Toxics (UAT) program. He commented that the UAT program is a critical component of EPA's air quality work that is already behind schedule, and wanted reassurance that EPA will not delay the program. Jerry Kurtzweg stated that it is unclear what impact funding reductions will have on specific programs, but noted that they will probably result in the delay of some programs.

Mr. Brenner added that EPA has been trying to start moving on UAT issues, even while the Agency has been working on the MACT standards. They recognize the UAT problems and the importance of conducting monitoring, modeling, and setting priorities. The Agency has not lost momentum on the UAT program, although a large chunk of the funding is focused on developing the final set of MACT standards and, overall, less money is available. Determining how the funding will be spent for these two programs will be controversial. John Seitz, Director, OAQPS, agreed with Mr. Brenner's statement and added that EPA is planning on meeting with the environmental community to determine innovative ways to work on the MACT standards without neglecting the urban strategy, especially considering that urban areas are where the most pronounced differences in air quality can be made.

Bill Auberle, Northern Arizona University, asked if the earmark funds for NAS are "business as usual" or if they represent a programmatic shift. Jerry Kurtzweg replied that the NAS earmark fund was not an issue that came up in either the House or the Senate, but is included in the final budget. Rob Brenner added that there is a trend across agencies to have NAS participate in scientific analyses when controversial issues are involved.

Bill Becker followed-up on Steve Gerritson's earlier comment concerning the UAT program. He hopes that EPA does not treat the air toxics program as a zero-sum game and sacrifice the MACT standard because the UAT program needs more money. He added that it is unacceptable for the federal government not to meet its technology requirements and leave the implementation of the MACT standards up to states and local governments. Before development of the MACT is postponed, he suggested that EPA look for other funding sources. Mr. Brenner replied that there are statutory limitations to using money for purposes other than where it is allocated by Congress. The key is to find less costly ways to complete the work such as partnerships with states that have expertise in this area, working cooperatively with industry groups, or looking for innovative, cost-effective strategies to achieve these goals.

Herbert Williams, Texas Natural Resource Conservation Commission, urged EPA to consider creative ways to address the problems in areas where the 1-hour standard is revoked. Texas has a number of

areas that are currently on the Clean Cities list, but these areas probably would not be on the list if the 1-hour standard were reinstated. However, many of these areas have implemented voluntary activities to try and prepare for the 8-hour standard. He suggested that EPA consider any work communities are doing to try and achieve future standards when reevaluating their attainment status under the 1-hour standard.

Mr. Perciasepe said that there are three types of affected areas: those that are currently non-attainment areas and need to continue to implement a maintenance plan (specific to an area); those that are attainment areas; and those that were attainment areas and have fallen back into non-attainment. EPA has to go through the process of identifying these areas as either attainment or non-attainment for the 8-hour standard. Any work that is done to achieve attainment status at this time would be folded into the work towards the 8-hour standard.

Bill Donahue, Sun Company, Inc., briefly spoke about the Tier 2 permitting issues associated with refineries. He stated that after the rule comes into effect later this year, refineries will essentially have three years to get permits and make changes to process units. The industry estimates that there are about 100 refineries that will have to make significant changes. In his experience, it will probably takes refineries about 12-14 months to get the necessary permits to produce the gasoline to comply with the new rule. He encouraged EPA to focus on this issue.

Bill Harnet, EPA OAQPS, has been working in cooperation with a number of the refining industries to ensure that refineries can meet the compliance timelines associated with this rule. He stated that a consultant is focusing on the environmental justice (EJ) concerns that can come up in permitting process. EPA has been looking at what can be done to ensure that refineries can get permits in a timely manner. Additionally, the Agency discussed the process with state agencies, industry representatives, and the EJ community to ensure it will work and to determine if any changes need to be made. Mr. Harnet also addressed what EPA needs to do to get the rule into final form and ensure that industries do not run into any problems once the rule is implemented. EPA has learned from California's experience with similar programs and is working to ensure that the high-sulfur fuels are not available when the new automobiles are available. They are also trying to address scheduling issues in the context of the entire Tier 2 Rule and the activities companies will have to undertake to be in compliance. A number of states have made getting the necessary permits out a high priority.

Mr. Perciasepe stated that EPA will try to streamline the regulatory requirements under any scenario, although EPA hopes to complete the rule by the end of 1999. EPA is trying to build more confidence into the banking and trading program, and this would give refineries six years to complete the necessary retrofits. The other factor relates to the approximately 100 refineries and 13 small business refineries (on a separate schedule) that will have to undergo retrofits. EPA received a proposal from the WRAP to clarify the definition of small refineries because as it is currently worded, it could include an additional 10 establishments. EPA may also reduce the number of refineries required to complete their retrofits in the prescribed time frame.

On the subject of EJ, Mr. Brenner stated that the National EJ Advisory Committee (NEJAC) is scheduled to meet at the end of November to discuss siting and permitting issues in the context of EJ.

Bill Rosenberg, E3 Ventures, stated that Congress is debating on electrical restructuring material, and there is significant support for an environmental title addressing NO<sub>x</sub>, particulates, mercury, and CO<sub>2</sub> (although there is also significant opposition). In light of the fact that the administration's initiative for ozone and particulate standards was frustrated, he asked whether EPA is considering participating more aggressively in the environmental title discussions associated with electricity restructuring.

Mr. Perciasepe replied that EPA has had some discussions, but no decision has been made as to whether the Agency will or will not participate. There are a number of bills on the Hill that look at regional cap and trade programs related to large boilers and electrical generating units. At some point EPA is going to have to do something on a legislative front. However, EPA has not exhausted all of its options on trying to facilitate an industry-wide commitment to a long-range vision of a multi-pollutant strategy that gives electrical generators the certainty they need over a long period of time and delivers the appropriate regional and local end controls. The electricity generating industry is moving into a more business-like atmosphere and, therefore, they will need to know not only their assets but also their liabilities, which are easily accessible.

Richard Wilson, National Environmental Strategies, responded to an earlier comment made by Herb Williams on re-establishing the 1-hour standard. He encouraged EPA to think about the amount of work communities will do to avoid the stigma of being designated as a non-attainment area. If the Agency decides to re-implement the 1-hour standard, he suggests thinking about an implementation approach that postpones non-attainment designations, assuming a community performs the necessary activities to improve air quality. This would probably create more innovative programs in a community.

Jane Nishida, Maryland Department of the Environment, urged EPA to discuss environmental titles with regards to electrical restructuring. She stated that there are both state and national discussions on electrical restructuring and that there is a great deal of uncertainty, particularly in the northeastern states, about the impact of electrical restructuring on the SIP Call.

Mike Kenney, California Air Resources Board, added an example of an experience in California. The State has a number of electrical generating plants that are being considered for permits. Although the California Air Resources Board is working with EPA Region 9 on these permits, there is somewhat of a disconnect related to permitting of these plants that will need to be resolved at the national level. He echoed the comments of other CAAAC members that EPA needs to get involved in these issues promptly.

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**SUBCOMMITTEE REPORTS**

***Subcommittee on Permits/NSR/Toxics – Bill Harnet, Co-Chair***

Bill Harnet gave a brief update on the status of the new source reform package, and explained that the Subcommittee has been meeting with a range of different stakeholders on the three different pieces of the reform package:

- Main reform package - affects everyone in system; trying to determine if it can be adjusted.
- Plant-wide applicability limits – affects those that make more frequent changes in facilities and want more flexibility.
- Sector-based approach – allows broader, longer term certainties for industries (in particular the electrical utilities) to give them more flexibility over time in NSR.

The Subcommittee has held discussions with industry, state, local, and environmental groups and is getting follow-up letters back from these parties. They are planning to update Bob Perciasepe on the status of all pieces of the reform package, identifying those sections that are ready to move forward now, and those that need more work. The Subcommittee has had positive discussions on this topic and has made progress. The main question now is whether more meetings are needed. At the Subcommittee meeting, it was determined that some benefits may be realized from a large-level stakeholder meeting with all the parties in attendance in a roundtable format.



The Subcommittee also discussed the federal program on toxics, including issues concerning residual risk. The 1990 CAA amendments required that maximum controls be put in place first and, afterwards, set risk-based standards at the federal level for the source categories. The Subcommittee discussed the fact that we are getting to the point where the first residual risk standards are going to be required out in the coming years, and the policy associated with the analysis and results is going to set another direction for EPA (as they are required to do a residual risk standard for each MACT category). Because of the D.C. Circuit Court Case, the CAA does incorporate a framework for carcinogens, but it has not dealt with the ample margin of safety as it relates to non-carcinogens. Therefore, there will be significant issues related to how EPA sets a policy for non-carcinogens and residual risk factors.

In addition, issues were raised at the Subcommittee meeting on how EPA will deal with the co-location of a source within a source category, background concentrations, and other factors. These issues have not been resolved to date, but EPA will be looking at all of these issues as they try to develop the residual risk standards. Although EPA is beginning to work on these issues, the Subcommittee meeting acted as a "heads up" for many people to get them thinking about the residual risk program that is going to be coming back.

***Subcommittee on Linking Energy, Land Use, Transportation, and Air Quality – Bob Wyman and Gay MacGregor, Co-Chairs***

Bob Wyman, Latham and Watkins, gave a brief summary on the status of the Clean Air Excellence Awards Program. Both EPA and ICF Consulting have done a tremendous amount of work on the program over the past six months. The one administrative roadblock impeding the Program's process should be resolved in the near future, and he hopes to be able to announce the launching of the program at the next CAAAC meeting.

The Subcommittee held an interesting discussion, led by Jonathan Levine from the University of Michigan, on encouraging the development of transit and mixed-use communities to make work and non-work destinations more accessible. Mr. Levine identified and evaluated relevant issues and tried to determine how the planning process could be used to encourage this type of development. His main argument was that these types of communities would result from the demand for transportation under a free market system, but local planning committees do not want high-density environments and therefore impede this type of development. He identified a number of scenarios under which this "new urbanism" has continually been denied not because there is a lack of demand, but because current residents do not want to live in high-density neighborhoods. His recommendation for resolving this dilemma was educating local planning organizations on the benefits of mixed-use communities.

Gay MacGregor, EPA-OMS, gave an update on the Quantification Workgroup's recent activities. The Workgroup has developed a commuter model to estimate the benefits of commuter choice options in terms of reductions in VMT and other mechanisms. The tool should facilitate the implementation of commuter choice programs. The Workgroup also developed a policy options document, posted on EPA's website, that describes how quantified benefits can be put towards the SIP. The Workgroup is trying to determine how the benefits from different land use strategies can be estimated and is studying the methods used by various cities that have quantified land use strategies.

Ann Margaret Esnard, Cornell University, gave a presentation on the applications of GIS to land use, transportation, air quality. Ms. MacGregor noted that EPA is thinking about establishing regional resource centers with other agencies. These centers will provide a suite of tools for communities to use for land use and transportation planning purposes.

Finally, the subcommittee is interested in getting new members involved in their work – if anyone is interested, he or she should contact Bob Wyman, Gay MacGregor, or Paul Rasmussen.

***Subcommittee on Economic Incentives and Regulatory Innovation – Ben Henneke, Co-Chair***

The Subcommittee's discussion focused on EPA's recently released Economic Incentives Program (EIP) draft guidance. The Agency's goal is to produce a document that is useful and beneficial for state officials, although Ben Henneke, Clean Air Action, stated that sections of the guidance are complex and confusing. He encouraged the committee members to read the guidance, discuss any concerns, and consider submitting public comment to EPA, where appropriate.

The Subcommittee also briefly discussed a set of issues pertaining to stationary source voluntary measures. This represents the second wave of measures to come out of work done by OMS, and the Subcommittee believes that the benefits realized as a result of voluntary actions should be counted towards a community's SIP credits, even though the actions are not required by law.

Additionally, the Subcommittee discussed diesel fuel and retrofit programs, specifically related to area source and on-road diesel contributions to an area's air quality problems. There are currently a number of exciting voluntary and mandatory programs in place under which cutting-edge technology is being applied, and regulators are obtaining real world experience related to these issues.

Steve Gerritson presented a short paper on ensuring environmentally friendly growth. The paper proposed examining the relationships between economic development and air quality, with a focus on the need for an adequate supply of offset credits and the regulatory framework that would allow these credits to be used. Additionally, the paper proposed to examine some of the major problems associated with current policies and develop recommendations for changes.

The Subcommittee has also been working with the Enforcement Committee of NEJAC on issues related to the EIP. At the upcoming December NEJAC meeting, the committee will be looking at a resolution passed by the Enforcement Committee that tries to restrict trading, irrespective of its impact on a community. When the CAAAC Economic Incentives Subcommittee met with the NEJAC Enforcement Committee, the workgroup decided that the ultimate goal of the program is to foster positive outcomes. If the result of a trade will be positive (i.e., improved air quality) then it should go ahead, but if it would harm air quality, then it should not be implemented. Unfortunately, this sentiment does not appear to have been passed on to the Committee. EPA and the CAAAC hope to continue to address this issue in the future.

Rob Brenner stated that the EIP is focused on providing opportunities for areas to experience new growth based on the offsets they receive. One example of this is the diesel retrofits. The CAAAC Subcommittee members are interested in pursuing the issue of diesel retrofits to provide offsets for new power generating plants.

Bill Goldsmith, Cornell University, stated that this Subcommittee's focus is on the benefits of trading programs. However, he noted that it is important to remember that a lot of people in community organizations influencing NEJAC are focused on a different set of criteria. Although market-based programs remove many issues from public input, they depend on non-market resources that are often lost when a community concedes to a market. An obvious benefit of trading is that it redistributes air quality benefits; however, organizations are also wary that it could lead to reduced air quality in some communities.

Mr. Henneke replied that work was done in a joint workgroup between the CAAAC and NEJAC. The CAAAC added text and clarifications to the document that were a direct result of these meetings to address NEJAC's concerns. However, it seems like these agreements did not get translated from the workgroup to the full subcommittee.

Dave Hawkins, NRDC, followed up on Bill Goldsmith's comment. He participated in the joint NEJAC-CAAAC workgroup and follow-up meetings. Contrary to Mr. Henneke's finding, he did not think that the two committees came out of meetings in agreement on the trading issue. There are substantive EJ issues in the draft materials, and the EIP does not clearly articulate that projects with adverse air quality effects would not be implemented. The guidance's language includes many "should consider" phrases instead of "must not." In his opinion, there was not a miscommunication between the two committees, but rather a failure to join on the issue.

Jane Delgado, National Coalition of Hispanic, Health & Human Services Organization, stated that regardless of the process, what is important is that you trust that the people you are dealing with truly care about your issues. People generally think of NEJAC as a burden, but EJ issues cannot simply be set aside. She stressed that trust is essential, and questioned whether the EJ community can trust industry and the environmental community to do the right thing for the health and welfare of all individuals. Mr. Brenner agreed that this is an important point. One of the big problems between the two committees has been a lack of trust, which has resulted in a great deal of miscommunication and/or poor communication.

Elaine Mowinski Barron, Joint Advisory Committee Paso Del Norte Air Quality, added that states have no way of enforcing reductions in air toxics, and that communities with high urban toxics think that an EIP will just dump more toxics on them. She stressed that EPA needs to develop a flexible plan that would ensure that no new sources are developed in areas that currently have poor air quality.

Mr. Brenner stated that EPA received a request from the NEJAC Enforcement Committee to extend the comment period on the EIP for an additional three weeks so that the full NEJAC can have a chance to review and comment after their November meeting. EPA is going to try extend the period.

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**PRESENTATION AND DISCUSSION OF PHASE II REFORM – MARGO OGE, DIRECTOR, OMS AND DEBBIE WOOD, OMS**

Bob Perciasepe briefly introduced Debbie Wood, OMS, who then began her presentation on the Phase II reformulated gasoline (RFG), which takes effect in January 2000. Ms. Wood stated that RFG has been highly successful in reducing smog-forming and toxic pollutants. Every year since the program's inception in 1995, air quality benefits from RFG have exceeded the requirements. The American Lung Association (ALA) of metropolitan Chicago found that RFG has been the single most important program for improving air quality in Chicago.

In 1997, the Mobile Source Technical Review Subcommittee formed a Phase II RFG Workgroup and implementation schedule, the goal of which was a smooth roll-out of Phase II of the program. The Workgroup is chaired John Cornback, Kentucky Air Director, and Debbie Wood, OMS. The Workgroup has approximately 40 stakeholders and, overall, has been extremely cooperative and productive.

The Workgroup has been focused on testing and outreach activities. Related to testing, the Workgroup recommended that EPA do a Phase II fleet testing program prior to its introduction to identify any performance problems. These tests should fill in the gaps in existing data. For example, the California Air Resources Board (CARB) generated a great deal of data related to the introduction of their clean burning gasoline program in 1996. The CARB fleet test included over 1,400 vehicles over a six-month time period at a cost of \$1.6 million. The Workgroup concluded that the CARB data applied to the federal Phase II program because the specifications for the California fuel are stricter than the federal standards. The gaps were identified as cold weather testing, shoulder season testing, and testing with ethanol.

The Workgroup selected three cities they believed to be representative of the RFG program: Boston (ethanol, March – July 1998), Chicago (ethanol, March – July 1998), and Houston (June – August 1998).

Funding for fuel was provided by the American Petroleum Institute (API), Oxygenated Fuels Association, American Methanol Institute, and EPA. The fleet included 374 vehicles ranging in model year from 1973 to 1999, 202 of which were test vehicles and 172 comprising the control population. The test fleet drove over 1 million miles with Phase II RFG, and no performance problems were found with starting, running, idling, and acceleration power. (Six fuel pump problems did occur, but none of these was related to RFG.)

In addition to vehicles, the Arlington County, Virginia, fleet of lawn and garden equipment were tested as small engines from September through November using summer fuel. EPA also worked with Mercury Marine to test 2-stroke marine engines in Wisconsin with summer fuel in November, and worked with Harley Davidson to test RFG performance in motorcycles during on-road tests in Milwaukee from October through November using summer fuel. Under all three scenarios, no problems or differences in performance were reported.

EPA hired South West Research Institute (SWRI) to test the fuel economy of Phase II RFG when compared to Phase I. Twelve vehicles were run on a fixed 50-mile urban/suburban route, and no statistical differences in fuel economy between the two types of RFG were found. This result is what was expected because the amount of oxygen found in Phase II is the same as Phase I.

EPA prepared a report of the performance testing results that was reviewed extensively by the Workgroup and adopted unanimously; the report will be available on EPA's website. The report's conclusion is that no difference in performance or fuel economy is expected when Phase II RFG replaces Phase I for vehicles, small engines, marine engines, or motorcycles

Related to outreach, the Workgroup also recommended that EPA conduct focus groups comprised of 12 randomly selected men and women who drive and purchase gasoline. In 1997, EPA was interested in learning what people knew about the RFG program and where they had gathered this information. San Francisco was selected for a focus group because a local TV station was running stories about California's clean burning gasoline program. EPA found that no more than a couple of people knew they were using RFG. Those who knew they were using RFG had negative opinions (which were caused primarily by the media), but no one had experienced any negative side effects from RFG. Once they were told that they were using RFG, the participants were supportive of programs.

The primary message EPA came away with from the 1997 focus groups was not to "spring" this program on people – individuals will want to know about changes such as RFG ahead of time. Also, people wanted to know where this effort fits with the other efforts to improve air quality. Finally, EPA found that the best vehicle to get the word out was on the radio during commuting hours. Some individuals may also get information from the DMV, oil companies (e.g., flyers included in gas company credit card statements), or EPA brochures.

The second set of focus groups tested messages, and EPA determined that health-related messages have the greatest impacts. For example, "RFG is an essential step to cleaning the air we breath," makes people think in terms of health benefits for children and the elderly. The focus groups' second favorite was illustrated by a statistical message on local air quality benefits. For example, "the RFG program significantly reduces smog-forming pollutants in Virginia by 8,000 tons annually, equivalent to removing the smog-forming emissions from over 800,000 vehicles." The focus groups also showed that vehicle performance was more important to men than women. EPA's findings have been incorporated into the outreach materials (including a brochure and worksheet) that have been prepared and reviewed by the Workgroup and are currently going through EPA's product review process.

The Workgroup met on October 12, 1999, to discuss the launching of the Phase II program. Although the program is not required until 1/1/2000, most of the fuel in RFG areas is already in compliance with Phase II. The Workgroup is recommending that EPA submit a press advisory and press kits to RFG II areas before Thanksgiving to describe the local air quality benefits of the program.

Ms. Wood also briefly discussed the activities EPA is implementing in response to the Blue Ribbon Panel recommendations to limit MTBE use. EPA is working on a proposed rule that would provide more flexibility to refiners by making the use of ethanol more cost effective. One idea is following up on a recommendation of NAS that ozone reductions are coming from CO<sub>2</sub> reductions in the RFG program that are not recognized. By taking these benefits into account, it may be possible to make using ethanol more cost effective in the summer. EPA is also considering eliminating the per gallon oxygen requirement in the RFG gasoline program. EPA cannot change the 2 percent annual average requirement, but the Agency can eliminate the minimal per gallon requirement to allow refiners to vary the level of oxygen in fuel throughout the year. Phase II RFG will reduce smog-forming pollutants in RFG II areas by over 100,000 tons per year, which is equivalent to removing the smog-forming emissions from over 16 million vehicles.

### Questions and Comments

Elaine Mowinski Barron asked where the RFG gasoline for the test sites came from. She also stressed the importance of looking at those areas of the United States that are hotter, specifically if ethanol is going to be used in the gasoline. She also asked if the refineries' rush for permitting will negatively affect the air quality in communities, specifically in relation to NO<sub>x</sub> emissions.

Ms. Wood replied that the fuel for the test case was made in Texas. She also stated that there is going to be a big push for refiners to get permits, although RFG II is primarily a blending of fuels at the refinery or terminal. Therefore, if ethanol is used in RFG II, refineries and terminals would need to build some additional tankage to blend these fuels. She also noted that low-sulfur gasoline will require construction of new plants over the next decade, which could lead to increases in emissions. Bob Hermanson added that if the non-attainment areas increase, and thus the RFG areas increase, the use of ethanol will increase and production of gasoline at refineries will actually decrease.

Rita Moreno, sitting in for Jane Delgado, asked if any members of the focus groups represented minority populations. She added that the method identified for disseminating information on RFG might not be the best source for getting the word out to the Hispanic and other communities. She asked if outreach programs are going to be conducted in different languages to target minority communities. Ms. Wood replied that, to date, EPA has not thought about conducting outreach activities in foreign languages; however, she thought it was an excellent idea and stated that EPA could easily have the information translated.

Bill Rosenberg stated that Phase II RFG is called CARB II gasoline in California and was wondering if EPA would consider renaming RFG something like "EPA II Gasoline." People know that EPA does the testing on miles/gallon on cars, which has created a believable consumer acceptance. Therefore, if the gasoline were renamed to include "EPA" in the title, EPA could build off of this positive name recognition. Ms. Wood replied that EPA tested different names for the gasoline in the focus groups, but RFG consistently came out as people's first or second choice for a name.

John Paul, RAPCA, stated that toxics are also important and asked about the benefits of Phase II related to toxics. Ms. Wood replied that Phase II RFG requires a 22 percent reduction in toxics; however, many of the cities are exceeding these toxic reduction requirements. One of the issues discussed with the MTBE Blue Ribbon Panel was how EPA could maintain these excess benefits without the use of oxygen in the long run. In general, EPA expects RFG Phase II to outperform the statutory requirements for toxics reduction, although changes in compliance modeling might result in lower levels of reductions.

Alex Johnson, Delta Institute, stated that in Milwaukee, having companies like Mercury Marine and Harley Davidson endorsed RFG II was very helpful, and it would have been wonderful to have had their support at the beginning of the project. He asked if EPA has identified any groups that are expected to be opposed to RFG and what has been done to counter their negative position. Ms. Wood stated that no firms or organizations have been identified who are opposed to the fuel in general. Mr. Johnson added that one of the outreach opportunities associated with this program would be going to inner-city groups that translate environmental and other materials into foreign languages. He stated that EPA needs to do a better job in these communities of communicating the real benefits of the program and building support before the program is implemented.

Tony DeLucia, American Lung Association, stated that groups like the ALA could be helpful in disseminating information related to RFG Phase II, and offered to speak to Ms. Wood after the meeting about coordinating information and possibly posting links or data on ALA's webpage.

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**PRESENTATION AND DISCUSSION OF VOLUNTARY MEASURES FOR SIP CREDITS – JOHN SEITZ, DIRECTOR, OAQPS AND JACK EDWARDSON, OAQPS**

Rob Brenner began the discussion by providing background information on the development of the stationary source voluntary measures (VM) policy. He then introduced Jack Edwardson, EPA-OAQPS.

Mr. Edwardson began by stating that the stationary source VM policy is a follow on to the mobile source VM policy. Many non-attainment areas are finding it increasingly difficult to achieve sufficient emissions reductions. This program is another attempt to help these areas utilize voluntary, innovative approaches to achieve emission reductions. Specifically, the program would provide SIP credits to states for voluntary measures taken in relation to stationary sources, in addition to those for voluntary mobile measures.

***What are EPA's goals for the stationary source VM policy?***

- Encourage innovation
- Provide additional tools for emission reduction
- Reach out to untapped sources of reductions
- Help achieve attainment.

The policy is based on the mobile source VM policy that was issued on October 24, 1997, under EPA OMS. The program provides a framework of policy decisions related to mobile source VM and was set up in a non-prescriptive manner. Over the long run, EPA is considering consolidating the mobile source and stationary source programs into a single program, and would like input from the CAAAC as to whether this makes sense.

***Basics of the policy.***

1. Used where measures are not enforceable against the source and emission reductions are currently not required. Additionally, EPA must be able to assure companies that are willing to voluntarily apply emissions reductions to SIP attainment that these activities will not be made mandatory in the future.
2. Emission reductions can be continuous, seasonal, or episodic. Section 123 of the CAA makes it difficult to give SIP credit for voluntary, episodic emission reductions from stationary sources. Are

voluntary episodic reduction programs, such as Ozone Action Days, important to have in a voluntary measures program?

3. Policy must be consistent with other requirements of the CAA, SIP attainment, and rate of progress requirements.
4. Emission reductions must be quantifiable, surplus, enforceable, and permanent. EPA must be able to quantify the reductions in order to provide SIP credits. What types of protocols could the Agency develop that would be able to quantify generic and specific emission reductions?

**Surplus** – The credits must be surplus. Therefore, they cannot be used for trading or banking. The program is geared at getting companies to give the state the emissions credit to apply against the SIP. If a company is using emissions credits for trading, they cannot be applied against the SIP.

**Enforceable** – Credits must be evaluated over time to ensure that the estimated number of credits are actually being achieved. If, over time, EPA determines that companies are not achieving their stated emission reductions, the state would be required to make up the difference.

**Permanent** – The voluntary program must be in place for the entire season.

5. A de minimis cap on the amount of credits that can be applied to the SIP must be determined. Currently, the cap for the mobile source VM policy is set at three percent, and many of the states that have utilized this program have not come close to this level. However, if additional retrofit technologies are implemented, the emission reduction levels could reach this cap. EPA has indicated that, after programs have developed a consistent track record, the cap could be raised in the future. EPA is planning to use experiences from other programs to develop a cap for stationary sources.

#### ***What should the policy cover?***

The policy is likely to cover all criteria pollutants, with ozone and particulate matter being the most prevalent. Specifically, the policy will apply to:

- Stationary sources.
- Area sources.
- Retail establishments. (For example, Wal-Mart would agree not to sell high VOC paint in the summer.)
- Agricultural sources, including burning and blowing dust or dirt. (However, the USDA has a number of incentive-based programs that may be more appropriate to deal with these types of sources.)
- Land use/brownfield development.

#### ***Special Challenges***

EPA has identified a number of special challenges that stand in the way of developing a stationary source VM policy:

- Section 123 of the CAA acts as a roadblock for crediting episodic emission reductions from stationary sources.

- How should EPA develop a reasonable de minimis level for the stationary source VM policy? This is highly dependent on the definition of what is considered voluntary – can emission reductions from uncontrolled sources be considered voluntary? Also, the cap will depend on whether EPA targets the program at consumers, area sources, big industry, or retail establishments.
- How should EPA handle sources that exceed the de minimis level?

Mr. Edwardson stated that EPA is hoping to get a broad draft of the policy out by the end of the year and is expecting to fill in many of the details as the Agency receives feedback. Specifically, he asked the CAAAC members:

- How should EPA communicate and market the program?
- Whom should EPA identify as potential participants?
- Should the program be marketed in conjunction with the EIP, assuming the Agency can get both programs out at the same time?
- What can the Agency do to improve both the mobile source and the proposed stationary source VM policies?

#### Questions and Comments

John Paul stated that this is the type of program that appeals to individuals at the local level as opposed to the state level, and suggested targeting metropolitan planning organizations (MPOs) and other local-level organizations. Mr. Brenner replied that the Agency is expecting to kick-off the program with a set of voluntary measures at the local level that would ultimately feed up into the SIP.

Bill Auberle added that there are compelling reasons for the agriculture sector to be a prime target for this program and urged EPA not to write them off based on the fact that USDA and other agencies have programs that target this same audience. For example, very few of these other programs target burning, which could result in applicable emission reductions under the proposed stationary source VM policy.

Jane Nishida stated that EPA should definitely pursue episodic measures, especially for those states that have been designated as non-attainment areas. The ability to use voluntary, episodic reductions from stationary sources would help them reach their attainment goals. She also asked how brownfields and changes in land use apply to this program. John Seitz replied that by quantifying in-growth instead of out-growth, areas will realize reductions in VMT and other transportation-related activities. Additionally, areas that would have been used for growth outside of metropolitan areas can be designated as greenways (i.e., no development areas), and localities can quantify the benefits realized from limiting urban sprawl. Gay MacGregor added that EPA has a number of pilot programs that are looking at the redevelopment of brownfields, how these activities will benefit air quality, and how to quantify these land use measures.

Peter Jonker, Sempra Energy, stated that it would not be smart for companies operating in an area with tight regulations to voluntarily make emission reductions without getting credit for them. At some point, the firms will need these credits and will want to sell them. He indicated that he does not expect many stationary sources to be willing to participate in this program. He also suggested that EPA target the program toward local governments as well as the retail and consumer sectors.

Bill Rosenberg suggested that tying the program to energy conservation would be a great way to motivate people to take action. He explained how system benefit funding is being established by states in conjunction with electrical restructuring. For example, in New Jersey a financing program has been established in the amount of \$1 billion for energy conservation and renewable investment (which will be largely dedicated to individual homeowners). Many billions of dollars are likely to be available across the country to replace old energy conservation programs, and if states take advantage of these funds, EPA



will have a good way of obtaining benefit estimates. Mr. Rosenberg also suggested that the flexibility being allowed for the de minimis amount also ought to be available in the trading systems, as this will provide incentives for people to undertake innovative actions without having to worry about quantification issues or being accountable for reductions that are not realized. EPA should strive to encourage good faith efforts that are innovative.

Bob Perciasepe responded that one of the things EPA included in the NO<sub>x</sub> SIP call was the ability to meet some percentage of the reductions required to achieve the NO<sub>x</sub> budget through demand-side approaches, such as energy conservation. This stimulated much discussion between state energy offices and state air offices. Based on this discussion, he concluded that there needs to be some element of risk management in the policy along with a clear signal for innovative activity to take place.

Ben Henneke encouraged EPA to make the program more general than the mobile source VM policy, because this will help EPA avoid all the arguments that have cropped up concerning the EIP. EPA can afford to be more general because the Agency will still get to see the SIPs during the approval process, and will be able to see whether credited actions are working.

Alex Johnson commented that the environmental community is wary of using credits from episodic control measures in SIPs. However, the environmental community is very interested in using voluntary measures to generate credits that are incorporated into SIPs, provided that the program includes the right elements (such as memoranda of understanding). Environmental groups in the Chicago area have identified a number of voluntary measures that could be done by municipalities, the service sector, unregulated businesses, developers, and homeowners that total roughly 125 tons/day of VOC reductions. Examples of real VOC reductions include municipalities changing purchase agreements for asphalt, working with small businesses that use coal cleaning/degreasing, and changing landscaping practices in major park districts. In addition, substantial energy savings could be achieved through full implementation of existing state and federal programs. Mr. Johnson also suggested that EPA needs to provide direction to states about how they can use the policy. States should be required to qualify for the program, and should only be allowed to use voluntary measures after they have exhausted other measures they are supposed to implement (e.g., I/M).

Ben Cooper, Printing Industries of America, noted that the printing industry has 52,000 facilities, most of which have fewer than 20 employees. He explained that most of these companies will never see a permit, and thus the issue becomes how to get to smaller, area sources. Small sources can be addressed by either getting their cooperation or enforcing against them. However, political problems tend to arise when enforcing against small (area) sources because they are small businesses. Mr. Cooper noted that PIA has experience with a number of programs run through state technical assistance providers that have achieved real reductions, and also noted that these programs are withering because there is nothing to measure them against. When Mr. Cooper first posed the concept of a stationary source VM policy, he was thinking of a way for EPA to measure the success of efforts by smaller, area sources. He stated that the policy will not work everywhere, but suggested that EPA lay out the policy, find out where it might work, and have states present plans for getting credit under the policy. By providing outreach to small businesses, EPA will be able to turn these businesses into allies rather than opponents, and will be able to achieve emission reductions and build goodwill.

Alex Johnson noted that the Great Printers Program in Wisconsin and Illinois has achieved real, predictable emission reductions. Based on this experience, he stressed that businesses can achieve emission reductions in production by educating their consumers about the products they buy.

**PRESENTATION AND DISCUSSION OF GREENHOUSE GAS REDUCTION AND ENERGY CONSERVATION PROGRAMS – KATHLEEN HOGAN, DIRECTOR, CLIMATE PROTECTION DIVISION, OAP**

Rob Brenner briefly discussed some background information on EPA's greenhouse gas (GHG) reduction and energy conservation efforts, and then introduced Kathleen Hogan, OAP.

Ms. Hogan began the presentation by noting that EPA is now at a point to report on its voluntary programs for GHG reduction and energy conservation, most of which were put into place in 1991 and 1992. EPA has both results to report as well as information on models and approaches that have been particularly successful. The underlying premise of EPA's voluntary programs is that there are cost-effective investments in technologies that make financial sense from a rate-of-return perspective, but there are also barriers that limit peoples' investment in these technologies. The administration has been committed (through the Climate Change Action Plan, CCTI, and tax incentives) to building on past successes and also stimulating investment in technology now that is going to help address global climate change.

The problem with energy usage in the U.S. is that most homes and buildings could be significantly (30%) more energy efficient through cost-effective investments in technology. This inefficiency adds up to over \$200 billion in waste from now until 2010, as well as needless environmental pollution from NO<sub>x</sub>, CO<sub>2</sub>, and SO<sub>2</sub>. Ms. Hogan indicated that if we can implement today's high-efficiency technology over the next 10 years and double the rate of technological improvement in the economy, we can get 50 to 60 percent of what we would need to close the gap in the growth of expected GHG emissions through 2010, with positive effects on the economy. The key question now is how to bring about the necessary changes in technology.

Ms. Hogan then presented a graph showing the capital stock turnover in the U.S. in three key sectors – buildings/homes (including all commercial, institutional, and industrial buildings), transportation, and industry. She indicated that 60 percent of "business as usual" GHG emissions in 2010 will come from products and equipment that we have yet to purchase. Therefore, a substantial opportunity exists to help buyers choose more energy efficient technology. The data behind these figures come from a combination of studies, including EIA projections, DOE work (the five-lab study), and an independent study EPA has done with the Tellus Institute.

Ms. Hogan indicated that the technology we need is currently available, but stressed that we must start implementing it right away in order to obtain significant benefits by 2010. She then provided an example of a washing machine. If a consumer buys a standard efficiency washing machine, he or she is committing the U.S. to an additional 13,000 pounds of CO<sub>2</sub> over the lifetime of the machine, which equates to more pollution than the average car emits in one year. On the other hand, purchasing an Energy Star washing machine will reduce carbon emissions and will save the consumer more than \$1,000 over the life of the machine.

EPA has been actively working to encourage technology turnover through the Energy Star program. This program currently covers over 25 product areas across 1,200 manufacturers, and has been promoted by a number of retailers and utilities. In addition, the program has had a sizable impact in the buildings sector, with over 4,000 participants (including 1,500 small businesses) and coverage of 13 percent of U.S. building square footage. The program currently is on pace to save \$6.5 billion over the life of the investments already made and has \$10 billion in potential energy cost savings in the pipeline. Through 2010, the program could save commercial and industrial buildings over \$100 billion and could reduce carbon-equivalent emissions by 300 million metric tons.

Ms. Hogan stated that the key to implementing new technologies in buildings is to go about it using a "systems approach." To help with this process, EPA has developed a rating tool for buildings to rate their performance on energy efficiency after it has been upgraded. If a building rates 75 (out of 100) or better,

EPA will give the entire building an Energy Star label. The ratings program has been in place since June and has generated much interest. EPA has already been working with office buildings and will soon expand the program to schools, retail, food service, healthcare, and lodging. Eventually, the rating tool will be available for roughly 60 percent of the U.S. building square footage. The tool will also provide a marketable benchmark for buildings, just as the miles per gallon rating does for cars.

Ms. Hogan next focused on EPA programs that go beyond CO<sub>2</sub> reductions. EPA's methane programs have been in place since 1993 and have covered each of the major methane-producing industries, including natural gas, coal mining, landfill management, and livestock management. Based on these programs and the landfill rule, methane emissions in the U.S. will be stabilized by 2010 relative to 1990. EPA has also had success with programs for reducing high GWP gases such as HFCs, PFCs, and SF<sub>6</sub>. EPA has been working with a number of industries (including aluminum, HFC-22 products, semiconductor, magnesium, and power supply) to achieve these successes, and the Agency expects emissions to stabilize by 2010.

EPA has also made progress in achieving global climate benefits. The Agency has forged international Energy Star agreements with Japan, Australia, and New Zealand, and is close to an agreement with the EU. EPA's programs related to semiconductors have led to the first and only global, cross-industry GHG reduction goal. Another global effort involves a partnership for looking at "green cars" (i.e., cars with air conditioners that emit fewer HFCs).

Ms. Hogan provided summary information on the cost effectiveness of EPA's voluntary programs. Total investments in energy efficient technologies have amounted to \$4 billion. Total energy bill savings over the lifetime of these technologies is expected to be \$18 billion, and total GHG reductions over the next decade are expected to be more than 150 million metric tons of carbon-equivalent. This amounts to \$15 in investment, \$75 in savings, and more than 2 tons of CO<sub>2</sub> saved for every dollar spent.

To summarize, Ms. Hogan presented a slide on what EPA's programs are doing now and what they can do in the future. EPA already has substantial emission reductions locked in through 2010 based on the investments that have been made through 1998. EPA also has numerous commitments in place that will yield further reductions throughout the next decade.

#### Questions and Comments

Paul Locke, The Pew Environmental Health Commission, asked how EPA-OAP is working with other EPA offices and with federal and state agencies on issues related to the indoor environment. Ms. Hogan responded that OAP is coordinating very closely with other groups, and noted that to achieve the Energy Star label, a building must also meet certain standards for indoor air quality.

Miriam Lev-On, ARCO, asked what percentage of the Kyoto commitments (if the treaty were ratified) could be met through EPA's programs assuming full funding. Ms. Hogan responded that EPA believes we can get close to the 40 to 50 percent mark. She also indicated that the continuation of the DOE five-lab study (the Clean Energy Future Study) will be released soon and will be available for comment in November 1999.

Jason Grumet, NESCAUM, asked how much effort is required to rate a building under the certification and rating program. Ms. Hogan explained that the rating requires five key pieces of information (climate, occupancy, usage, etc.). Also, the rating tool is web-based and is out there for anyone to use. If a person sends EPA an application for a building label, EPA scrutinizes this information before awarding a label.

Michael Bradley, M.J. Bradley Associates, Inc., commented that there has been increasing interest in voluntary measures outside of Washington, and noted that it would be good to bring that momentum back to Washington. He then asked whether anyone has attempted to connect the early action reduction benefits that are being talked about on the Hill to EPA's programs directly. Ms. Hogan responded that people have talked about this, but was not sure whether any actual calculations have been performed. Mr. Bradley also asked whether EPA has ever tried to inventory state actions as part of these efforts. Ms. Hogan stated that EPA has tried but has not been overly successful. Bob Perciasepe added that EPA is currently trying to realign and reorganize the Agency in order to have a more coordinated approach to dealing with businesses, states, and local governments on climate change and other issues.

Bill Goldsmith commented that he is suspicious of some of EPA's long-run projections, and asked whether the Agency considered developing the projections with statistical confidence levels. Ms. Hogan responded that confidence levels and alternative scenarios have not been investigated. EPA's main intention has been to identify what can be done to affect emissions. The Agency has taken EIA's projections and tried to identify how behavior can be altered in order to bring the projections down. Mr. Perciasepe added that EPA has participated in some of DOE's studies in the utility area, and noted that EIA's analyses are very robust.

Bill Becker commented that STAPPA/ALAPCO is publishing a report that provides a menu of actions that states, localities, industry, and the federal government can take to reduce air pollution and GHG emissions. STAPPA/ALAPCO will make copies available to CAAAC members, and is hoping to work collectively with the CAAAC to pursue some of these options. STAPPA/ALAPCO has also developed a model that will enable cities throughout the world to model these actions.

Robert O'Keefe asked about the general state of the federal government's compliance with Energy Star. Ms. Hogan responded that the President signed an executive order on building energy efficiency that sets a GHG target for federal buildings and outlines a variety of tools for helping to meet this target. The executive order calls for the government to procure Energy Star products where they exist and to get as many buildings as possible labeled by Energy Star by 2002.

Eric Svenson, PSE&G, commented that if given good information (e.g., on the benefits of Energy Star), many consumers and businesses will choose to make the right decisions. Mr. Svenson noted that the State of New Jersey is currently trying to figure out what type of information should be provided to energy consumers to help them make informed choices based on costs and environmental concerns. He then distributed PSE&G's environmental disclosure brochure discussing the environmental characteristics of its products.

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#### **OPEN COMMITTEE DISCUSSION**

Rob Brenner thanked the CAAAC members for attending the meeting and for sharing their experiences with EPA and others. He encouraged the members to send information to EPA on any projects that would be useful to know about. Mr. Brenner also indicated that EPA will try to stagger the subcommittee meetings in the future so that interested parties may attend more than one meeting. The CAAAC members generally supported this proposal.

Jane Delgado stressed the need for a subcommittee on health effects so that we can raise the bar on the knowledge base we have. Mr. Brenner noted that on November 15 EPA will be releasing a study on what has resulted from the 1990 CAA amendments in terms of health effects and other benefits, and suggested that this study could be a good starting point for a larger discussion of health effects. Ms. Delgado commented that this may not be enough. Elaine Mowinski Barron also voiced support for a health-related

subcommittee, and invited the CAAAC to convene a future meeting in El Paso so it could see the collaborative efforts that have been undertaken there to address air pollution and health issues.

Bob Perciasepe noted that EPA has a health effects subcommittee under its Science Advisory Board that deals with air quality and health effects. EPA also has a CAA Science Advisory Committee that advises EPA on health-related criteria for standards. Even though the Agency already has strong advisory committees that address health effects, it may be worth investigating how these committees can link with the CAAAC. Ms. Barron commented that providing the CAAAC with information from these other committees would be helpful. Bill Goldsmith added that health effects are not typically discussed by the current subcommittees even though they should be, and noted that bringing more information about health effects to the subcommittees would help them to pay more attention to these issues.

Paul Locke endorsed the idea of looking more at health effects, and commented that it seemed like the idea has been well received and will be implemented to some extent. Mr. Brenner replied that EPA will follow-up on this issue and will look for the best way to build upon the committees that are already in place.

Bunyan Bryant, University of Michigan, also supported a bigger focus on health effects. He stressed a concern that the CAAAC often gets locked up in technology and language and does not fully understand what is happening to the people who are affected by the Committee's decisions. Based on this observation, he stressed the need for the CAAAC to move away from the abstract and to put a human face on its actions.

Jason Grumet commented first that all of the CAAAC members have intense interests in public health. Then, on the subject of subcommittee meetings, he stated that it would be useful for him (and others thinking of attending multiple subcommittee meetings) to know what projects the members of the subcommittees want to work on. Information on each subcommittee's interests in health effects issues would be particularly useful.

Alex Johnson commented that the urban air toxics program has a mandate to reduce cancer incidences by 75 percent, and noted that the Science Advisory Board is not addressing this particular issue. He also stated that another key issue that needs more attention is bio-monitoring. Mr. Perciasepe responded that it might be a good idea to have representatives from the Science Advisory Board and other committees present information at a future CAAAC meeting.

John Paul provided a brief endorsement of the new source reform process. He explained that the process has gone on for the last decade and has worked very well. Mr. Paul indicated that the process is almost completed and urged EPA and others to put in a big effort to help accomplish the goals of the reform.

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## CONCLUSION

Bob Perciasepe thanked all of the CAAAC members for their time and efforts at the meeting. The meeting was adjourned at 3:31 p.m.

**Clean Air Act Advisory Committee Meeting  
October 13, 1999  
Attendee List**

**NAME:**

**ORGANIZATION:**

Auberle, Wiliam	Northern Arizona University
Bankoff, Barbara	
Becker, S. William	Association of Local Air Pollution Control Officials
Blackwell, Charles	Native Affairs and Development Group
Bradley, Michael	M. J. Bradley Associates, Inc.
Brenner, Rob	EPA OAR
Brown, Kelly	Ford Motor Company
Bryant, Bunyon	University of Michigan
Chastain, Richard	
Clay, Don	Koch Industries, Inc.
Collett, Chuck	National Association of Home Builders
Cooper, Ben	Printing Industries of America
Cooper, Josephine	Alliance of Automobile Manufacturers
Delgado, Jane	National Coalition of Hispanic Health & Human Services Organization
DeLucia, Anthony John	American Lung Association
Donahue, William	Sun Company, Inc.
Ecklin, Robert	Corning Incorporated
Edwardson, Jack	EPA
Earl, Tony	Center of Clean Air Policy
Feldcamp, Larry	Baker & Botts, L.L.P.
Gerritson, Stephen	Washington Sierra Club
Goldsmith, William	Cornell University
Greenbaum, Daniel	Health Effects Institute
Grumet, Jason	Northeast States for Coordinated Air Use Management
Harnet, Bill	EPA OAQPS
Hatchner, Julie	
Hawkins, David	Natural Resources Defense Council
Henneke, Ben	Clean Air Action Corporation
Hermanson, Robert	BPAmoco p.i.c.
Hogan, Kathleen	EPA OAQPS
Jonker, Peter	Sempra Energy
Johnson, G. Alex	Delta Institute

Kaufmann, Robert	American Forest and Paper Association
Kenney, Mike	Air Resources Board
Keithley, Carter	Hearth Products Association
Kurtzweg, Jerry	EPA
Lev-On, Miriam	Environment, Health & Safety
Lewis, William	Morgan, Lewis & Bockius, L.L.P.
Locke, Paul	The Pew Environmental Health Commission
MacGregor, Gay	EPA OMS
Mowinski Barron, Elaine	Joint Advisory Committee Paso Del Norte Air Quality
Muffat, Jeffry	3M Corporation
Munsell, Elsie	Department of Defense
Nishida, Jane	Maryland Department of Environment
Oge, Margo	EPA
Owens, Steve	Muchmore & Wallwork
Patton, Vicki	Environmental Defense Fund - Rocky Mountain Office
Paul, John	Regional Air Pollution Control Agency
Perciasepe, Robert	EPA OAR
Pusch, Dean	Anheiser Bush, Inc.
Rasmussen, Paul	EPA OAR
Rosenberg, William	E3 Ventures, Inc.
Seitz, John	EPA OAQPS
Stram, Bruce	Enron Corporation
Svenson, Eric	PSE&G
Tyndall, William	Cinergy Corp.
Williams, Herbert	Texas Natural Resource Conservation Commission
Wilson, Richard	National Environmental Strategies
Wolynk, Edward	Engelhard Corporation
Wood, Debbie	EPA OMS
Wright, Michael	United Steelworkers of America
Wyman, Robert	Latham and Watkins