OAR Box 1504

Prepped by Ollie Stewart

Document Number:

53) XVII-K

Docket Number:

A-94-34

A-94-34
XVII K

Clean Air Act Advisory Committee Meeting
Portland Marriott Downtown, Portland, Oregon
April 27, 1999
Meeting Summary

Opening Remarks

Mr. Rob Brenner, Acting Deputy Assistant Administrator for Air and Radiation, welcomed the attendees and introduced four new members (Mr. Ralph Marquez, Dr. Shelly Herne, Mr. Chuck Collett and Dr. Miriam Lev-On) to the Advisory Committee. He thanked the City of Portland and the Oregon Department of Environmental Quality (Oregon DEQ) for a tour of the city. He also thanked Portland General Electric and Intel Corporation for co-sponsoring the reception held on the previous day.

Mr. Brenner said that 25 years ago there was a concern in Portland about preservation of the river valley, urban sprawl and air quality. He noted that the citizens and officials of Portland showed vision in implementing various initiatives for urban development and air quality together. He said it should be examined whether success of Portland can be replicated in other urban areas.

Mr. Brenner said that the Clinton administration and the EPA are addressing the issues associated with urban growth such as economic development and air quality, by initiating various programs. He briefly described the following programs and proposals aimed at addressing these issues.

- Better America Bonds - This is a $700 million proposed program over five years. Under this program cities, states and tribes can issue bonds for some $10 billion. The investors get tax credits in lieu of interest and bond issuers repay principle over time. Bonds can be used to buy land for open space preservation, redevelop brownfields owned by states or local governments, protect water quality by buying land as buffer strips to filter contaminants.

- Lands Legacy Initiative - This proposed program would be run by the Department of Interior. Under this program, a billion dollars would be set aside for protecting cultural and natural treasures and preservation of local green space.

- Clean Air Partnership Fund - The President's FY 2000 budget proposes a new $200 million fund for developing private and governmental partnerships to demonstrate new air pollution reductions.

- SIP Land Use Policy Developments - This is an EPA program under which the States can receive credits for air pollution plans which incorporate beneficial land use measures, such as open space preservation.

- Brownfields Pilots Projects - EPA coordinates with other agencies to evaluate air quality benefits of redeveloping brownfield sites.

➢ Transportation Efficiency Act (TEA 21)- Portions of this U.S. DOT authorization addresses the relationship between transportation and the community. It is likely to have significant impact on land use and development patterns over the years.

Urban Air Quality Program in Portland

Committee members discussed various features of the urban air quality program in Portland and ways in which the success in Portland can be replicated in other parts of the country. Highlights of the issues discussed and comments offered by the committee members are provided below.

- Mr. Pat Raher of Hogan & Hartson observed that consensus between businesses, community and government was the key to Portland's success. He further commented that-

  ➢ Unless there is a consensus building process, it will be difficult to get the same results in other places; and

  ➢ Perhaps the EPA should ask the State and local agencies to build consensus with the stakeholders for implementing such programs.

- Ms. Lynn Terry of Californian Air Resources Board said that the EPA's focus should be towards supporting innovative measures and away from traditional federal regulatory backstops, in order to encourage participation of the State and local agencies.

- Mr. John Seitz of EPA made the following observations on the urban air quality program in Portland.

  ➢ Absence of the federal government from the development process in Portland is unique;

  ➢ The incentives in making the program work were more than environmental protection;

  ➢ EPA should help facilitate such programs; and

  ➢ Success of the program in Portland was achieved over a period of time.

- Mr. Greg Green of Oregon DEQ said that relationships of the State and local regulatory agencies with EPA's Region 10 contributed to the success in Portland.

- Mr. Bill Henneke of Clean Air Action Corporation complimented the Oregon DEQ and the City

of Portland for the first rate urban planning and clean air action programs.

- Ms. Gay MacGregor of EPA said that policy options (such as land use as a air quality control strategy and using conformity process to account for land use changes) are being developed which would allow accounting of air quality credits. She also mentioned that because of conformity a lot of areas appear to be willing to confront the issue of urban growth and sprawl.

- Mr. Eric Swenson of PSE & G said that visibility of issues is important to make the urban air programs work. He also said that vested group of parties should be created to address these issues.

- Mr. Bill Rosenberg of E3 Ventures said that for innovative changes to occur some risks need to be taken. He further commented that risk of trying innovative changes is modest and that people need to be rewarded for taking risk.

- Mr. Bob Wyman of Latham & Watkins said that benefits of implementing creative strategies are difficult to anticipate and quantify and that all strategies may not be successful in every location. He expressed concern that some in EPA may want certainty of success of the urban air quality programs, in the absence of which they may be inclined to use regulatory backstops. Mr. Wyman said that such an approach would be counterproductive to implementation of innovative measures. Mr. Brenner said that the right incentives need to be created for making programs successful. He acknowledged that there are different opinions within EPA on the use of backstops, and said that there is a sincere push to resolve them.

- Mr. Alex Johnson of Delta Institute said that innovative ideas are essential and that consensus of the entire range of stakeholders should be a part of the programs for them to be successful.

- Mr. Stephen Gerritson of Washington Sierra Club said that unlike most other cities, Portland has a metro council consisting of elected members which plays an important role in making changes and improvements to the city. He made the following observations regarding development of new urban air program initiatives.

  - ➢ Air quality is perhaps not the primary factor;

  - ➢ Creation of alternatives is necessary if new initiatives are to work; and

  - ➢ New programs should address the issue of displacement of low-income housing.

- Mr. Langdon Marsh of Oregon DEQ thanked Portland General Electric and Intel Corporation for

co-sponsoring the reception. He commended the Clean Air Act Advisory Committee for fostering and validating innovative approaches to air quality planning and management. Mr. Marsh provided the following comments on some of the features of Portland's urban air quality program and how success of Portland can be replicated elsewhere in the country.

- The air quality plan for the metropolitan Portland area focuses on quality of life issues over the next 40 to 50 years;
- Oregon DEQ wants the air quality program for the area to remain integrated with urban and regional planning.
- The new car sharing program in Portland could be an important way of reducing vehicle miles traveled, improving traffic congestion and reducing air emissions;
- Some of the non-localized factors which contribute to Portland's success, such as education and working with local manufacturers on voluntary emission reduction projects can be replicated in other parts of the country;
- A partnership of the State, local regulatory officials and EPA's regional staff is an important element of Portland's success;
- Various programs (including voluntary agreements) implemented in Portland have some back-stops. In Oregon, programs are reviewed to identify activities or options that were not included originally in their plans to achieve accountability, prior to triggering backstops.
- In addition to cleaner air as an objective, other important factors are required for the community to become a partner in implementing an urban air program.

MTBE in Gasoline

Mr. Robert O'Keefe of Health Effects Institute presented the work of the MTBE-Blue Ribbon Panel. Highlights of his presentation titled "Assessing Oxygenates in Gasoline" are presented below.

- Reformulated gasoline has been successful in improving air quality and oxygenates have played a part in the success. However, there have been growing concerns about contaminated water. The real challenge is to minimize water problems while maximizing air quality.
- Recognizing the importance of the issue, Ms. Carol Browner, the EPA Administrator, appointed

a Blue Ribbon Panel ("Panel") consisting of key public and private leaders in the fields of air, water, fuels, health and environment and federal officials.

- The panel will conduct its activities in two phases. The purpose of the first phase is to understand the air quality benefits, surface and ground water quality challenges, the health effects and the implications for fuel supply and price. The purpose of second phase is to identify and recommend specific alternatives that: maintain or exceed the air quality benefits while minimizing/preventing water contamination, health risk, and disruptions to fuel supply or price. The panel will perform its function using existing studies, analysis and evidence.

- There are sizable air quality benefits of reformulated gasoline such as reductions in VOCs and toxics and CO. A 1997 federal review shows that the wintertime oxyfuel program has yielded 10% reduction in CO emissions in non-attainment areas.

- From the perspective of the States, the wintertime oxyfuels program provided some benefits in early years, however, the benefits were now overtaken by the fleet turnover and most areas no longer exceed CO standard.

- Two main concerns regarding water quality are - (1) MTBE moves faster and bio-degrades less in groundwater than other gasoline components (this concern illustrated by contamination study in Maine), and (2) there are growing reports of public and private wells, and surface waters being contaminated with MTBE. Water concerns are driven primarily by taste, odor and lost use of limited water resource.

- In general, MTBE is less toxic than other gasoline constituents. It is an animal carcinogen, but its human carcinogenicty is uncertain

- Nationally MTBE is the primary oxygenate used in gasoline. Ethanol is also used in some areas, but has been limited by supply. Key questions regarding the fuel supply are:

  - ➢ Can non-oxygenated fuels attain air benefits of oxygenated fuels?

  - ➢ Can ethanol issues be overcome?

  - ➢ If a transition to non-oxygenates is needed, how much time is necessary to minimize cost, and disruption?

  - ➢ What is the future of the wintertime oxyfuel program?

- Options being considered by the Panel are:
  - ➢ Leave RFG program as is, with greater emphasis on prevention measures;
  - ➢ Provide California or nationwide flexibility on Oxygenates mandate;
  - ➢ Provide flexibility to the States and phase out use of MTBE; and
  - ➢ Develop other fuels.
- Panel's goal is to recommend the preferred option(s) to the Administrator by July 1999.

Following Mr. O'Keefe's presentation, committee members discussed various aspects of the work conducted by the Panel and other issues of concern regarding MTBE.

- Mr. Steve Owens of Muchmore & Wallwork asked whether there is any evidence that MTBE remains uncombusted and gets into water supply through deposition. Mr. O'Keefe said that the U.S. Geological Survey (USGS) was expected to present their comprehensive nation-wide analysis of this issue to the Panel on April 29-30, 1999. Mr. Jason Grumet of NESCAUM said that there is compelling evidence of deposition footprint. He also said that to NESCAUM's knowledge there is no evidence that airborne deposition can result in a cumulative impact that would result in a health threat.
- Dr. Shelly Hearne of The Pew Environmental Health Commission asked whether the Panel would provide recommendations that address the issue of fuel additives which have not been adequately tested prior to their being introduced into the fuel supply. Mr. O'Keefe said that due to time constraint these effects would not be studied in the near term.
- Mr. Johnson said that there is a significantly high pass rate through the inspection and maintenance program with reformulated gasoline, which provides a real benefit to communities using older cars. Mr. Johnson expressed concerns about growing corn to provide fuel for automobiles. He said that the EPA should exercise its authority under Title 2 to address issues such as deposition of PAHs into the Great Lakes ecosystem.
- Mr. Bill Donohue of Sun Oil Company expressed concern about the compact time-frame for getting into compliance with a host of regulatory initiatives such as MTBE, NAAQS, and diesel standards. He said that there are practical difficulties such as obtaining permits and getting contractors to get things done. Mr. Donohue made the following comments regarding the MTBE initiative.

- ➢ The tank program should be enforced; and
- ➢ Should MTBE be phased out, serious consideration should be given to the oxygenate mandate, in terms of the physical ability to supply oxygenate in the absence of MTBE

- Mr. Henneke said that based on his experience some of the useful information is not available in the national studies and that the quality of the published information was probably not good. He added that fuel composition issues, both technical (such as volatility) and economic, are complex and may not be adequately represented in the studies published.

- Mr. Grumet said that one of the difficult issues facing the Panel is evaluating risk impacts of one (i.e., MTBE) of the forty compounds present in gasoline.

Air Toxics Monitoring

Mr. Larry Feldcamp of Baker & Botts and Mr. Seitz made presentations on the best way to conduct monitoring of urban air toxics by efficiently using the available resources. Mr. Seitz's addressed the following issues in his presentation.

- Air toxics need to be monitored in order to:
  - ➢ Evaluate public exposure and environmental concerns;
  - ➢ Establish a baseline for toxics characterization;
  - ➢ Track trends in ambient air toxics;
  - ➢ Assess effectiveness of emission reductions;
  - ➢ Assess performance of the models;
  - ➢ Evaluate toxics emissions inventories; and
  - ➢ Demonstrate achievement of toxics GPRA goals

- Currently there are 40 PAMS sites located across the U.S., primarily in the urbanized areas. These PAMS collect 8 HAP-VOCs. Additionally, EPA is in the process of putting up 300 PM2.5

speciation sites, which will collect 10 out of 11 HAP metals.

- State data varies from one year to another. From 1992 to 1996, 14 monitors operated continually. From 1987 to 1996, 7 monitors operated continually. More monitors should operate on a continuous basis.

- There are several issues with the current monitoring. They include:

  - ➢ Neither Federal nor State networks cover the whole country or monitor all the chemicals necessary;

  - ➢ Pollutants measured vary by site;

  - ➢ Measurement methods vary;

  - ➢ Sites often move from year to year; and

  - ➢ Site locations criteria may differ.

- Currently and historically toxics monitoring focused on State/local issues and needs. These are important and should continue. Additionally, a consistent "national" network is needed to address Regional/National scale issues and trends, vis a vis NATA, ASPEN modeling, and 112(k) integrated urban air toxics strategy.

- Resources should be focused optimally by engaging partners to:

  - ➢ Upgrade existing Federal/State sites where appropriate;

  - ➢ Target urban population-oriented sites;

  - ➢ Develop a common "core" list of compounds;

  - ➢ Implement a phased approach to expand the number of sites and compounds to fill data gaps; and

  - ➢ Explore possibility of public/private partnership.

- Current activities to reach consensus are:

- EPA headquarters is coordinating with Regions and States to finalize the "concept paper" for guidance on "core" list of compounds to be monitored, monitoring methods, and siting criteria;

- Air toxics monitoring workshop will be conducted in June, 1999. The workshop will include discussion of public/private partnerships;

- Sharing data among EPA, States, and public; and

- Integrating air toxics monitoring into overall monitoring strategy.

Mr. Feldcamp made a presentation on air monitoring in Houston-Galveston area. The key areas he addressed were : Private Air Monitoring Networks, Personal Exposure Monitoring and Air Toxics Monitoring Workshop. Highlights of Mr. Feldcamp's presentation are provided below.

Private Air Monitoring Networks:

- There are 4 private air monitoring networks in Texas (Texas City-Lamarque Regional Monitoring Network, Southeast Texas Regional Planning Committee, Golden Crescent Regional Monitoring Network; and Houston Regional Monitoring).

- Houston Regional Monitoring Corporation (HRM) is a voluntary technical organization. It has 18 years of experience in monitoring criteria pollutants and 11 years of experience in monitoring ambient air toxics in the Houston-Galveston area.

- HRM's purpose is to :

  - Support permitting efforts;

  - Measure impacts of VOC-SARA compounds on air quality; NAAQS; and PSD increments; and

  - Develop a better understanding of air quality in Houston.

- In order to achieve the benefits of the data collection, there is a need to provide the air monitoring data collected by the private networks to environmental agencies and the public. An inherent problem with the publicly available data is that it will be available also to companies not supporting the network. Companies participating in the network will lose an incentive to fund the program, when non-supporting companies benefit from the monitored data at no cost.

- The agency should consider incentives such as Supplemental Environmental Project (SEP) credit for emission fees to promote private monitoring networks. Private networks can offer benefits to EPA.

Personal Exposure Monitoring

- National Urban Air Toxics Research Center (NUATRC) was established as a public/private research partnership to sponsor research on the effects of air toxics on human health. The program provides data and information on individual personal exposures to VOC, aldehydes and PM 2.5 metals.

- NUARTC has fostered development of new, reliable, cost-effective means of assessing personal exposure.

- NUARTC's current research projects include: *National Health and Nutrition Examination Survey* for studying health issues in the U.S. population and *Impact of Outdoor Air on Indoor and Personal Exposures*.

Air Toxics Monitoring Workshop

- Monitoring workshop will be conducted June 2-3, 1999 in Research Triangle Park

- The workshop will be aimed at developing an effective national air toxics strategy

After Mr. Feldcamp's presentation committee members raised the following points.

- Dr. Herne said that there is a need to include bio-monitoring as part of EPA's ambient monitoring program. Mr. Brenner said that Dr. Hearne's recommendation is consistent with other scientific recommendations he has received and that bio-monitoring can be useful in focusing efforts on toxics of concern, specific to areas.

- Dr. Elaine Mowinski Barron of Binational Joint Advisory Committee, Del Norte said that EPA should study long and short term health effects of urban air toxics, especially in the impoverished areas.

- Mr. Tim Mohin of Intel Corporation asked how the ambient air monitoring program of air toxics will take into account acute effects and how the collected data will be used from a regulatory perspective. Mr. Seitz said that it is difficult to establish a network that will encompass every

issue. He said that the upcoming workshop on air toxics monitoring will focus on developing criteria such as pollutants to be monitored, and site selection. He added that, depending on the results of the monitoring efforts and use of other techniques such as models and bio-monitoring, ways to reduce levels of specific HAPs may need to be addressed.

- Mr. Owens said that cooperation with the universities would yield benefits. Mr. Feldcamp said that universities and other interested stakeholders are encouraged to attend the workshop on air toxics monitoring in North Carolina.

- Mr. Owens also sought clarification on Congressman Waxman's comment that air quality in California was worse that what the EPA claimed it to be. Mr. Brenner said that Congressman Waxman released monitored data for Southern California, which showed that when risks associated with different toxics are accumulated, the risk of contracting cancer was estimated to be one in ten thousand. He added that this risk level was portrayed as being higher than EPA's goal of one in a million. Mr. Brenner explained that EPA's goal is to protect people by keeping the risk level below at least one in ten thousand and that EPA attempts to accomplish lower risk levels of one in a million, whenever possible. He said that levels seen in California are close to the limits of the acceptable risk levels and EPA wants to reduce the air toxics concentration to lower the current risk levels.

- Mr. Wyman made the following observations.

  - ➢ Use of available medical tools was a good idea.

  - ➢ The incentives, such as providing credits on supplemental environmental projects, will find a lot of public support

  - ➢ Trade-offs need to be evaluated in prioritizing transportation strategies

- Mr. Bill Becker of STAPPA/ALAPCO said that it was necessary to look at monitoring networks in a holistic fashion. He further said that STAPPA/ALAPCO would like to work with the EPA for developing comprehensive and integrated monitoring strategies. Mr. Seitz said that EPA is very much interested in working with States on this issue.

- Mr. Grumet said that the States in the northeast enthusiastically support the approach presented by Mr. Feldcamp and Mr. Seitz. He expressed NESCAUM's interest in participating in the development of the monitoring strategy. He also underscored the need to build public confidence in toxics monitoring.

- Dr. Jane Delagado of National Coalition of Hispanic Health and Human Services Organizations provided the following observations regarding the air toxics program..

  - ➢ Real life experiences (case studies) should be used to evaluate ways to minimize future air toxic releases;
  - ➢ If the health risk data is unavailable it should not be termed as uncertain.
  - ➢ Air toxics studies should be more inclusive of health communities.
  - ➢ Funds should be appropriated for data analysis

- Mr. John Paul of Regional Air Pollution Control Agency made the following comments regarding air monitoring and his experience in the Dayton, Ohio area.

  - ➢ The Dayton area would be interested in conducting long term monitoring and being part of the network;
  - ➢ Snapshot monitoring in the Dayton area was done in the past in cooperation with the local universities;
  - ➢ Good emission inventories are needed in the Dayton area;
  - ➢ Perhaps a sub-group of the CAA advisory committee should volunteer in the bio-monitoring program. This would help the committee focus not only on the monitoring methods but also the problem of exposure to air toxics itself.

- Dr. Michel Gelobter of Rutgers University said that information on the ambient levels of criteria pollutants and air toxics should be provided to the communities.

- Mr. Brenner supported the idea of communicating the emission profiles and try to address their concerns in a meaningful way. He reminded the committee members of a workshop on Air Toxics Monitoring to be held on June 2-3, 1999 in Research Triangle park, NC.

Economic Incentives and Environmental Justice

Mr. Seitz and Dr. Gelobter presented highlights of a joint meeting held between the Clean Air Act Advisory committee and Environmental Justice Advisory Committee on April 15, 1999 on issues regarding economic incentive programs which can be designed to help meet the air quality goals and

address environmental justice concerns.

Mr. Seitz's discussed the background and principles of the Economic Incentives Program (EIP). He also presented some of the reactions to the EIP guidance document from the meeting held in April. Key points of Mr. Seitz's presentation are provided below.

- Purpose of the EIP is to allow innovation, require emissions reductions, and provide flexibility in a cost-effective way.

- EPA established three interrelating principles in developing a framework for the EIP. These principles are:

  - ➢ Review and evaluate impact of emissions trading. Emissions trading programs are integral to the air quality program. However, trading can also move HAPs from one area to another;

  - ➢ Prevention or mitigation of negative impacts resulting from trading; and

  - ➢ Public involvement in the design, implementation and evaluation of the EIP

- Environmental justice community offered the following comments on EPA's guidance document to State and local agencies on EIP.

  - ➢ The document left out discussion on equity at the expense of efficiency

  - ➢ The document did not discuss the benefits of the EIP to environmental hotspots.

  - ➢ The document did not adequately address the role of meaningful public involvement in the program.

Highlights of Mr. Gelobter's presentation and the comments offered by the committee are presented below.

- Dr. Gelobter made the following observations regarding the meeting held in April and the Economic Incentives Program (EIP) document.

  - ➢ A major theme that emerged for NEJAC at this meeting was the appearance of environmental justice in the EIP document as a principle.

- Both equity and efficiency should be part of emissions trading program.
- A sense of entitlement or right to pollute that comes with economic incentives is a matter of concern.
- Potential for concentrating emissions in communities that are already overburdened needs to be addressed adequately in the EIP.
- Mobile source emissions trading issues need to be addressed in the EIP.
- The current draft EIP does not help the community's ability to participate. There are several public participation issues that were addressed in the April meeting, which need to be discussed further.
- Technical enforceability and data transparency in trading should be addressed in the EIP.
- In the meeting a lot of concern was expressed by the industry, environmental justice community and non-profit sector groups about the viability of EIP as it exists. These concerns were related to equity of the program, its ability to derail or sidetrack SIP attainment and the tone and complexity of EIP guidance.
- Follow-up on issues identified in the meeting is needed.

• Mr. Henneke said that ideas of environmental justice perhaps need to be explained in different documents for different audiences. He also said that discussion of emissions trading and cumulative risk is beneficial because they help in bringing underlying issues out in the open.

• Dr. Mowinski Barron made the following observations for improving air quality in the environmental zones.

- Emissions trading is a good idea;
- Education on environmental issues at the grass-root level and making communities aware of health impacts of air toxics is critical; and
- Efforts should be made to improve air quality in the environmental zones. Since each of the zones would have a different set of issues, criteria specific to the zones should be addressed in designing air quality improvement programs.

- Mr. Grumet said that emissions trading is a useful tool for redistribution of risk, one which needs to be used properly so that a disproportionate risk is not borne by low-income communities. He also said that emissions trading should be used to improve upon the status-quo. He added that it is therefore necessary, to make EPA's intent and assumptions explicit in the EIP document.

- Mr. Wyman said that based on the meeting held in April, he was not optimistic about the prospects of consensus on important policy areas. He said that there was an opportunity to address some very important issues and made the following suggestions.

  - EPA should quickly identify the technologies that it knows in advance will help reduce pollutants of concern;

  - EPA can pre-approve emissions trades. Challenges in the future will be financing some of the environmentally good ideas, such retrofitting heavy duty truck engines and emissions trading offers a good approach to address these issues in a win-win fashion.

  - There is a need to identify concrete opportunities to facilitate trades that are known to reduce exposure in the inner cities.

- Mr. Brenner said that the EPA will develop responses to various concerns raised in the meeting held in April and revise the EIP document. He gave the following examples of concepts EPA was considering in revising the EIP.

  - Varying trading ratios depending on the ambient air quality of areas;

  - Limiting trades of high-risk toxics;

  - Requiring programs to demonstrate rapid progress in meeting attainment goals; and

  - Giving communities a stake in emissions trading

- Dr. Bill Goldsmith of Cornell University said that all requests for programs should be evaluated in terms of inequities, not only those introduced by them but also those not addressed by the opportunity the program provides.

- Dr. Delagado said that environmental justice was everyone's responsibility.

Clean Air Excellence Awards Program

Mr. Wyman made a presentation on the excellence awards program designed by the CAAAC to recognize, honor and encourage outstanding and innovative clean air projects. He also sought an approval from the CAAAC to launch the program. He explained various aspects of the program including, award categories, selection criteria, decision process, timetable and marketing strategy. Key elements of Mr. Wyman's presentation are provided below.

- Nature of the award will be recognition

- Eligibility for the award will be broad-based. Public and private organizations as well as individuals will be eligible for the award.

- Award Categories: There will be five award categories - clean air technology, community development/redevelopment, education/outreach, regulatory/policy innovations, and transportation efficiency innovations.

- Award Criteria - General: - Project should reduce emissions, demonstrate innovations, show significant achievement and/or advances the state of art in its category, provide a role model for others, and show sustainable/continuing outcome.

- Bonus Criteria: In addition to the general criteria , following bonus criteria will be used in award selection process - project should have positive effect on other environmental media, demonstrate effective collaboration and partnerships, and effectively measure project outcome.

- Specific criteria for selection in each of the award categories are as follows.

  Clean Air Technology Category- Award Criteria: The technology should be commercially viable (should be at the prototype stage or beyond), have potential for wider application and be cost-effective relative to other technologies.

  Community Development/Redevelopment Category- Award Criteria; Project should be at least in the design stage, provide increased access to employment centers, services, amenities by means other than private vehicles, effectively address energy and land use efficiency.

  Education/Outreach Category - Award Criteria: Project should be completed or substantially underway, increase public awareness, improve access to information and reach a wide audience.

  Regulatory Policy/Innovations Category- Award Criteria: State and local policies and programs that encourage actions beyond compliance, provide flexibility to regulated community and

ensure stakeholder and public involvement

Transportation Efficiency Category-Award Criteria: Project should be completed or substantially underway, increase available transportation options, improve travel convenience and reduces travel time and costs.

- The award selection will be a competitive process. EPA staff will conduct initial screening of applications with assistance from a pool of experts, followed by a review of the projects by the CAAAC awards team. Recommendations will be presented to the full CAAAC for review and approval. Awards will be issued only upon approval of the Assistant Administrator.

- Various avenues of marketing the awards program will be explored including, federal register notice, web page, brochures, trade publications, media coverage, and collaboration with strategic partners.

- The goal of the program will be to begin the awards process by June 15, 1999, applications will be due by August 31, 1999. EPA staff will complete screening by October 31, 1999 and the winners will be announced by December 15, 1999.

- The awards program will be evaluated over the next three years to assess quality and breadth of projects, marketing effectiveness and participant feedback, and to examine if the program needs any specific structural changes.

Several committee members endorsed the awards program and provided suggestions for making it better.

- Dr. Hearne said that going above and beyond regulations should be considered a criteria for awards selection.

- Mr. Mohin suggested that a category be created for individual outstanding achievement in air pollution control.

- Mr. Gerritson said that in order to avoid any potential embarrassment resulting from awarding an organization that has not met its clean air act obligations, its past records should be checked. Dr. Hearne also said that perception should be an important consideration in selecting the candidates. Mr. Wyman said that while perception issues are important, expecting perfection from applicants may not be practical.

- Mr. Gerritson further suggested that awarding a project instead of an organization might be a better option. Mr. Greene said that sustainable and continuing outcome is an important award

selection criterion and it should not be overlooked if projects were chosen as award candidates.

- Mr. Brenner commented that EPA-OECA awards screening criteria could be used in selecting the winning candidate.

- Mr. Wyman supported the idea of creating an award category for outstanding personal achievements. He also requested committee members to suggest names of experts for reviewing award proposals.

- Mr. Paul Rasmussen of EPA said that public outreach will be an important element for the success of this program. He solicited ideas from the committee members on making the outreach successful.

NSR/Operating Permit Subcommittee Report

Mr. Seitz said that the New Source Review/Permitting subcommittee did not conduct a meeting since February 1999. He made a brief presentation on the status of various activities pertaining to NSR and permitting. Key elements of his presentation are provided below.

New Source Review (NSR)-

- ➢ EPA is on track for finalizing NSR reform rule by end of 1999;

- ➢ Various NSR stakeholder groups are discussing issues and consensus approaches with each other;

- ➢ EPA has not met any stakeholder group since February. EPA will meet the stakeholders in May; and

- ➢ EPA is in the process of issuing guidance to the States on how to deal with transitional NSR.. The guidance document will be issued this summer for review and comment and finalized by March 2000.

Operating Permit Program -

- ➢ EPA is expecting to re-propose the operating permit program and issue a notice of availability in October 1999. EPA is hoping to finalize the rule by October 2000;

- ➢ The re-proposal will include new ideas from various comments on the rule;

- EPA is working on a trial basis with some companies and State agencies on permit revision process; and

- EPA is engaged in dialogues with various States regarding policy issues and clarifications regarding obstacles in issuing the permits.

Energy, Land Use, Transportation and Air Quality Subcommittee Report

Ms. Gay MacGregor presented a report of the subcommittee for Energy, Land Use, Transportation and Air Quality. Key elements of her presentation are provided below.

- Three EPA publications regarding land use and transportation came out last month. The first publication is a book regarding the voluntary mobile source program. This book will be useful for those trying to put the program together. The second book is regarding benefits of selecting TCM program. This book is the most suitable for technical analysts. The third book provides information on the new developments at the TRAQ center.

- There will be a workshop on the voluntary measures in Dallas on June 24-25, 1999. Quantification methodologies will be discussed at the workshop. In the first week in May 1999, the Sustainable America Town Meeting co-chaired by Administrator Browner would be held.

- Clive Rock's presentation to the subcommittee on transportation and growth management in Vancouver, Canada was very informative.

Partnership of New Generation of Vehicles - Challenges, Accomplishments and Plans of the 4SDI Team

Mr. Karl Hellman of EPA made a presentation on the progress of Partnership of the New Generation of Vehicles (PNGV) program. This program is a joint effort of the federal government and automobile industry to reinvent the automobile and increase the competitiveness of the domestic auto industry. In his presentation, Mr. Hellman addressed various challenges, accomplishments and plans of the 4 Stroke Cycle Diesel Injection (4SDI) Team, which is one of eight teams supporting PNGV. Highlights of Mr. Hellman's presentation are provided below.

- The 4SDI engine is selected as one of two leading power plant candidates for PNGV; the fuel cell is the other. Some of the challenges faced by the 4SDI Team are as follows -

- The Compression Ignition Direct Injection (CIDI) engine has high efficiency. Maintaining high efficiency while attaining low emissions is the overreaching challenge.
- High after-treatment efficiencies are needed for both NOx and PM.
- If the conventional CIDI engine is a high risk proposition -
  - Are there approaches that could be investigated in parallel as backup?
  - Will non-trivial fuel changes be needed?
  - Stretch after-treatment technologies?

- Accomplishments of the 4SDI Team are as follows -
  - Started advanced fuel injection effort.
  - Engine power per liter targets have been shown to be attainable.
  - Engine Noise, Vibration and Harshness (NVH) can approach gasoline fueled engine levels.
  - Links between national laboratories and catalyst suppliers are enhanced.
  - Fuel changes that might lead to reduced PM are being tested.
  - Fundamental Exhaust Gas Recirculation (EGR) distribution efforts are initiated.
  - Combined fuels and after-treatment system testing efforts are initiated.
  - Advanced combustion diagnostics engines are operational.
  - Outreach to heavy duty diesel industry is increased.
  - Combustion diagnostic efforts for Homogeneous Charge Compression Ignition (HCCI) are underway.
  - New fuel injection system for dimethyl ether is being tested.

- Testing of natural gas-based diesel fuel efforts are underway.
- More plasma after-treatment studies are being conducted.
- Renewable alcohol combustion studies were conducted. Preliminary single cylinder research with renewable alcohol engine results show very low levels of PM and NOx emissions.

- 4SDI Team plans to-
  - Complete Phase II fuel testing and begin fuel/after-treatment testing
  - Initiate contract efforts with subsystem suppliers
  - Complete the advanced fuel injection study and single cylinder engine testing
  - Obtain interim results from combustion and EGR work
  - Continue to refine and improve base engine performance parameters against targeted goals
  - Develop and test advanced NO_x after-treatment devices
  - Consider partnering with others studying advanced diesel fuels
  - Increase efforts to make these engines affordable
- 4SDI Team also plans to conduct the following parallel/back-up programs.
  - Complete multi-cylinder engine testing of the dimethyl ether fuel injection system.
  - Initiate new Spark Ignition Direct Injection (SIDI) efforts and expand others.
  - Evaluate advanced combustion concepts, previously developed for alcohols, using gasoline.
  - Increase Coordination with heavy-duty Industry.

- ➢ Expand the HCCI efforts.
- ➢ Evaluate hardware that is needed for plasma approach.
- ➢ Evaluate novel particulate trap technology.
- ➢ Consider reductants for NOx after-treatment systems that are not diesel fuel.
- ➢ Possibly study infrastructure issues with SCR implementation.

Following Mr. Hellman's presentation various CAAAC members asked him clarifying questions and offered various comments.

- Mr. Johnson asked what the air quality (particularly air toxics) gains are from the new technology. Mr. Hellman said that a lot of the toxics were in the particulate form, and therefore, the technology used to control particulate matter will also control air toxics. Additionally the system used for NOx control will also oxidize some of the air toxics.
- Mr. Johnson further asked what the air quality priorities were for this engine development. Mr. Hellman said that successful development of the engine would be to meet the Tier 2 regulatory requirements. Mr. Brenner suggested that the other air toxic emissions from the new technology should also be identified.
- Dr. Miriam Lev-On of ARCO said that ammonia slip stream resulting from an application of SCR technology on mobile sources can cause a secondary formation of fine particulate matter. She asked whether EPA looked at such aspects in its analysis. Mr. Hellman said that SCR, like some other technologies did present implementation challenges.
- Mr. Rosenberg asked why SCR technology cannot be solved by using electronics. Mr. Hellman said that much of the research on catalysts for SCR technology is completed. However, problems such as ammonia slip stream and handling of urea/ammonia remain.
- Mr. O'Keefe commented that health effects should be considered in conjunction with cutting edge engineering developments.
- Mr. Henneke complimented the PNGV team for new emphasis on emissions control.

Closing Remarks

Mr. Brenner thanked the committee members for their participation. He also thanked ICF for facilitating the meeting. Meeting adjourned at 3:30pm.

List of Attendees

Name (Last, First)	Affiliation
Auberle, William	Northern Arizona University
Becker, William	STAPPA/ALAPCO
Bradley, Michael	M. J. Bradley and Associates
Brenner, Rob	EPA/OAR
Brown, Kelly	Ford Motor Company
Clay, Don	Koch Industries, Inc.
Collett, Chuck	National Association of Home Builders
Delgado, Jane	National Coalition of Hispanic Health and Human Services Organizations
Donohue, William	Sun Company, Inc.
Earl, Anthony	Center for Clean air Policy
Feldcamp, Larry	Becker & Botts
Gelobter, Michel	Rutgers University
Gerritson, Stephen	Washington Sierra Club
Goldsmith, William	Cornell University
Green, Gregory	Oregon Department of Environmental Quality
Grumet, Jason	NESCAUM
Harris, John	BP-AMACO
Hellman, Karl	EPA/OMS

Name (Last, First)	Affiliation
Hearne, Shelly	The Pew Environmental Health Commission
Henneke, Ben	Clean Air Action Corporation
Johnson, G. Alex	Delta Institute
Johnson, Timothy	Corning Incorporated
Jonker, Peter	Sempra Energy
Keithley, Carter	Health Products Association
Lev-On, Miriam	Atlantic Richfield Company
MacGregor, Gay	EPA/OMS
MacGregor, Gay	EPA/OMS
Marsh, Langdon	Oregon Department of Environmental Quality
Marquez, Ralph	Texas Natural Resource Conservation Commission
Mittelholzer, Michael	National Association of Home Builders
Mohin, Tim	Intel Corporation
Monroy, Rita	COSSMHO
Muffat, Jeffry	3M Corporation
Mowinski Barron, Elaine	Binational Joint Advisory Committee, Del Norte
Nishida, Jane	Maryland Department of Environment
O'Keefe, Robert	Health Effects Institute
Owens, Steve	Muchmore & Wallwork
Patton, Vickie	Environmental Defense Fund - Denver
Paul, John	Regional Air Pollution Control Agency - Dayton, Ohio

Name (Last, First)	Affiliation
Raher, Patrick	Hogan & Hartson
Rasmussen, Paul	EPA/OAR
Rosenberg, William	E3 Ventures, Inc.
Seitz, John	EPA/OAQPS
Stram, Bruce	Enron Corporation
Swenson, Eric	PSE&G
Terry, Lynn	California Air Resources Board
Trueman, Ursula	Utah Department of Environmental Quality
Williams, Herb	TNRCC
Wyman, Robert	Latham & Watkins