CLEAN AIR ACT ADVISORY COMMITTEE
Doubletree Hotel – Crystal City
300 Army Navy Drive
Arlington, VA
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Opening Remarks

Rob Brenner, US EPA, welcomed the Clean Air Act Advisory Committee (CAAAC). He stated that EPA would like to take advantage of the expertise and advice of the CAAAC. Mr. Brenner reviewed the agenda. He highlighted the greenhouse gas (GHG) Advanced Notice of Proposed Rulemaking (ANPR) discussion, stating that it is important to think critically about this issue to make sure that the legislation works well with the Clean Air Act (CAA). Mr. Brenner welcomed Bob Myers, US EPA.

Mr. Myers thanked Mr. Brenner. He stated that the July 11, 2008 DC Circuit Court decision to vacate the significant Clean Air Interstate Rule (CAIR) was subject to much discussion over August break. There are several options for addressing the Court decision, including appealing to the Court (deadline is September 24) and seeking a legislative fix. The Administration sent a letter to the Hill indicating support for both phases of CAIR, a legislative fix, and openness to the Environmental Council of the States' (ECOS) principles that were approved by ECOS. EPA is willing to support discussions and provide technical assistance to Congress.

The Clean Air Mercury Rule (CAMR) consisted of a two-phase program to reduce mercury reductions using Section 111 as a cap and trade authority. In early 2008, the DC Circuit Court ruled that the Agency had not followed proper delisting procedures under 112(c)(9). The Department of Justice sought a rehearing, but the Court rejected the request. The deadline to petition to the Supreme Court is October 17th.

In March 2008, the EPA Administrator sent a letter to Congress stating that EPA would publish an ANPR; the ANPR was published in July 2008. The comment period runs until November 2008. The ANPR is a long document with five separate technical support documents. It covers the essential issues that EPA faced in the EPA v. MA Supreme Court decision. It discusses mobile and stationary sources, National Ambient Air Quality Standards (NAAQS), and Maximum Achievable Control Technology (MACT) standards.

At the end of last year the Appropriations Committee (in response to the FY2008 Consolidated Appropriations Act), directed the Agency to spend $3.5 million to require GHG reporting from all sectors of the economy. The appropriations bill specified a nine month window for the proposal and 18 months for a final rule. EPA is in the ninth month. The Agency is now asking some very basic questions that are not addressed in the legislation, including:

- Who will submit reports?
- How will the data be reported?
- What will the thresholds for reporting be?
- What reporting methodologies will be used?
- How frequently will reports be submitted?

- Who will verify the data?

Mr. Meyers discussed upcoming actions at EPA. The final rule for lead NAAQS is scheduled for October 15th. As directed by the Energy Independence and Security Act of 2007, EPA is on schedule to propose the Renewable Fuels Standard (RFS) this fall. EPA is the agency that establishes radiation standards for the Yucca repository. The proposal has been out for awhile and the application was submitted for the docket at the Nuclear Regulatory Commission (NRC). EPA is working assiduously on the final rule for the radiation standard. EPA established a more stringent daily standard for PM 2.5 when they revised the standard in 2006. In July, EPA proposed the boundaries for the new daily PM standards. EPA is hoping to finalize this in December 2008; EPA is now in the public comment period. The New Source Review (NSR) rules are still pending before the Agency for this fall. There are a number of Area Source Rules under consent order for December. EPA is in the stage of proposing some of these standards for finalization for the December 15th court order.

Rich Kassel, Natural Resources Defense Council (NRDC), asked if Mr. Meyers had more detail about the pending NSR rules. Mr. Kassel stated that the 2005 rule and the 2007 supplemental rule were premised on CAIR, CAMR, and the visibility rule. Does EPA expect to rescind these open rules and propose a new rule to cover these sources? Alternatively, if EPA goes forward with the rules, will it conduct supplemental analyses to justify the continuation of the rules in light of the DC Circuit decision? If so, will there be an opportunity for notice and comment on these analyses? Mr. Meyers stated that EPA has not determined its course; however, he does not think that EPA will be reproposing this fall. With regard to supplemental analyses, EPA is looking into its options. Any action taken by EPA would comply with the requirements under the Administration Procedure Act requirements.

Bill Becker, National Association of Clean Air Agencies (NACAA), stated that it is not likely that Congress will adopt a short term fix to address CAIR. It is unlikely that EPA will be able to issue regulations in as timely a manner as states need for State Implementation Plan (SIP) demonstrations. Given that, Mr. Becker asked Mr. Meyers what he would do if he worked for a state or local air pollution control agency that is responsible under law to submit a SIP demonstration more quickly. Mr. Meyers stated that there are a few days left in Congress, and EPA has looked at the degree of reliance that SIPS have on CAIR. This is an issue that hangs over the states and localities. EPA is assessing the options and providing technical assistance to the legislative effort. The Agency will work with states and localities facing this issue to determine the best course.

Rick Bolton, Center for Toxicology and Environmental Health, LLC, asked if the Agency expects to release a GHG reporting rule proposal this September. Mr. Meyers said that EPA has not transmitted a rule to the Office of Management and Budget (OMB). They are trying to meet the schedule, but cannot predict when it will be published in the federal register.

Eugene Trisko, Attorney at Law, referred back to Mr. Becker's previous comments on states' needs for assistance in light of the Court vacating CAIR. He reviewed a letter signed by 16 states to EPA on June 11, requesting dialogue between the Agency and the states to address

multi-pollutant air quality problems in the U.S., particularly ozone, PM 2.5, and visibility impairment due to regional haze.

The letter states that the states believe that the discussions should at minimum discuss several issues, including establishing a common understanding of the reductions expected to be necessary to address ozone, PM 2.5, and visibility problems. In view of the Court's decision and the difficulties seen associated with achieving a short term legislative fix, the thought is that there could be great benefit achieved in convening a regional discussion among states and stakeholders on the possible design of a successor rule to CAIR. Mr. Trisko stated that he offers this suggestion as one who spends a lot of time working with the Ozone Transport Commission (OTC) states and the Lake Michigan Air Directors Consortium (LADCO) states. It seems appropriate to engage all the states subject to the CAIR rule to discuss an alternative to the CAIR rule. Mr. Trisko requested that in the design of this process, to the degree that the Agency is favorably disposed, to consider pursuing a multi-regional discussion, that could include within it, a stakeholder component. Mr. Trisko stated that he raises this consideration because previous multi-regional efforts led principally by the OTC and LADCO did not have sufficient procedures in place for stakeholder participation. Therefore, if EPA moves in the direction of a multi-regional effort to replace CAIR, they would welcome the opportunity to be constructive participants in this dialogue.

Mr. Meyers stated that before discussing CAIR successors, the legal options must be reviewed for the existing rule and they must be cognizant that they are entering a change in the administration. However, the discussion that Mr. Trisko suggests is appropriate. Mr. Trisko stated that from a procedural standpoint, it is always preferable to assert or request stakeholder rights in advance of the commencement of a process.

Mr. Brenner said that if EPA revisits the rule or decides upon new legislation, it will be necessary to step back and think about the best approach. It seems like they have learned a lot about streamlining processes. Mr. Brenner said he would welcome input on what they have learned from collaborative processes.

Steve Hartsfield, National Tribal Air Association (NTAA), asked about dates/deadlines for Yucca Mountain, specifically public commenting periods or procedural movements. Mr. Meyers stated that the Agency's focus is on radiation standards. Setting these standards is probably the end of their responsibilities under the Nuclear Waste Policy Act. NRC is responsible for deciding whether the applications submitted by the Department of Energy (DOE) meet the requirements of the law and radiation standards developed by the Agency.

Mr. Becker responded to Mr. Trisko's suggestions. The states do not have the luxury of waiting out a lengthy federal rulemaking for their immediate responsibilities of attainment demonstrations. However, the states and local agencies are mindful that Phase II fell short and are mindful that it is important to improve current Phase II and address forthcoming responsibilities under new SIPs. However, this requires either a short term legislative fix or states imposing source specific limits to meet their near term SIP obligations. Mr. Meyers stated that EPA understands and is trying to offer states advice. For example, EPA urged states to look

at reestablishment of the NOx budget program in the wake of uncertainty. EPA will take these comments fully into consideration.

CAIR Update

Rob Brenner, EPA, introduced Brian Mclean, EPA, and Bill Harnett, EPA. Mr. Mclean noted that the following topics would be covered in the presentation: an overview of CAIR and the court decision, the impacts and consequences of the decision, and the variety of options for action (including legal, legislative and regulatory options).

Mr. Mclean first provided an overview of Clean Air Interstate Rule (CAIR). The CAIR is essentially a strategy to reduce interstate transport of emissions contributing to National Ambient Air Quality Standards (NAAQS) for fine particles and ozone. The rule uses three separate interstate trading programs to achieve highly cost-effective emission reductions of sulfur dioxide and nitrogen oxides. The rule is not intended to be an air quality panacea, but instead a valuable aid to state-led efforts to attain the NAAQS, as well as reduce acid rain and regional haze.

EPA successfully addressed a similar ozone problem in the 1990s by developing the NO_X budget trading program under the NO_X SIP call. In that situation, beginning in 1994 it was identified that states could not design SIPs since they did not know what to consider for the transport problem. EPA did rulemaking after a consensus could not be made, resulting in an approximately 10 year process.

On July 11, 2008, EPA received the CAIR court decision, five years after promulgation. The Court decided to vacate the entire rule, which is not what most people were expecting. The consequences of the decision included a disruption and delay of industry plans for installation and operation of pollution abatement equipment, the loss of health and environmental benefits, increased administrative costs, and additional questions about future cap and trade program viability.

Mr. Mclean showed a slide on SO_2 emissions from the power sector in the short term. He explained that the chart included an estimate of the potential annual SO_2 emissions under various quick fix options in 2009-2011 for the CAIR region. He next showed a slide on the benefits relative to CAIR in the short-term (2009-2011), specifically the potential annual premature deaths for various quick fix options. He added that the Agency is concerned about the consequences for public health.

Mr. Harnett next discussed the impacts of the decision on state planning. He noted that the efforts are primarily about getting the reductions and the health impacts as quickly as possible, but that there are still a lot of regulatory issues. For instance, there is concern for attaining and maintaining NAAQs for ozone and fine particles. Of specific concern in this category are: (1) attainment demonstrations that relied on CAIR, (2) Reasonable Available Control Technology (RACT) determinations where CAIR controls were presumed to be RACT, (3) adequacy review for motor vehicle emissions budgets, and (4) maintenance plans relying on CAIR for redesignation to attainment. Regarding regional haze, there is also concern about Best Available Retrofit Technology (BART) determinations and reasonable progress plans relying on CAIR.

The court decision did not consider or affect states' obligations to eliminate significant contribution to downwind states' ozone and fine particle pollution.

Mr. McClean continued that in terms of decisions needed, they must decide how they will deal with State Implementation Plan (SIP) approvability issues. SIPs for Regional Haze should have been submitted, but now they have to determine whether they can approve them. Additionally, how do they proceed with findings of failure to submit for regional haze and PM? Finally, how do they deal with "clocks" for findings for ozone and Section 110(a)(2)(d)(i)? Since the mandate issues for CAIR will not exist, the issue of interstate transport is not resolved.

Mr. Harnett next discussed regional haze SIPs that were submitted or are on their way. There are 26 CAIR affected states that are covered under the regional haze program. Twenty of the CAIR affected states for $PM_{2.5}$ were planning to rely on CAIR to satisfy BART. Twenty-three of the CAIR subject states were planning to rely on CAIR reductions in either setting Reasonable Progress Goals, or, in cases of those states without Class I areas, in assuming emission reductions due to CAIR when analyzing impacts for Class I states. In summary of CAIR state SIP submissions, six CAIR states have final SIPs submitted, 12 CAIR states have SIPs in the public review process and all but four CAIR states are planning to submit SIPs by the end of 2008.

Next Mr. Harnett discussed PM and Ozone SIPs submitted or on the way. Mr. Harnett then discussed the SIPs already submitted or on the way for PM and ozone. For instance, there are 26 CAIR states or states impacted by CAIR states that have submitted or will be submitting 8-hour ozone and/or PM 2.5 SIPs for their nonattainment areas. There are 30 8-hour ozone SIPs due and 54 PM 2.5 area SIPs due. Each of the 26 states were planning to rely on CAIR for considerations such as determining the attainment date, determining what if any additional controls to adopt, and reliance on the modeling of CAIR in the attainment demonstration. Additionally, 16 of the 26 states were planning to rely on the presumption that CAIR=RACT for NO_X and/or SO_X for Electric Generating Units (EGUs) in the CAIR region. Mr. Harnett added that most SIPs are not in for $PM_{2.5.}$

Next Mr. Harnett showed a photo indicating linkage of upwind to downwind for $PM_{2.5}$ and linkage of upwind to downwind for ozone.

The issue remains of how to proceed with findings of failure to submit for regional haze and PM. The preliminary decision has been made to issue findings of failure to submit for late regional haze SIPs on October 3, 2008.

Regarding how we deal with clocks, there are findings for ozone that were issued in March 2008, which started a two year Federal Implementation Plan (FIP)/sanction clock. Also, we have findings for 110(a)(2)(d)(i) that were issued with CAIR FIP in 2006. For these scenarios, the FIP clock has expired.

Regarding long term issues, there is a question of the future of emissions trading and SIPs. Emission trading has been an extremely effective tool at reducing regional emission. However,

what is the role for interstate and intrastate transport? Emissions caps have also helped to address new and existing sources.

There are some other affected rules and activities. In regard to the Clean Air Act Section 126 petitions, EPA denied North Carolina's 126 petition in June 2007. Mr. Harnett also mentioned the federal implementation plan to address interstate transport for ozone and fine particle pollution in the CAIR region.

Mr. Mclean next discussed the options for action. One option is legal. The federal government is reviewing the basis for rehearing and will make a decision by September 24 regarding a request for rehearing. However, the nature and timing of court response are uncertain. Another option is legislative. The Senate had a hearing on July 29 and a roundtable on September 11. Both Senate and House are producing proposals to reinstate CAIR. Congress is in session until September 26. While the level of interest in Congress has been encouraging, there is still great uncertainty. The third option is regulatory, which could follow the legal or legislative path. EPA is assessing options to retain the reductions if Congress does not enact legislation. The regulatory response will require several years. In the absence of legislation, 126 petitions will likely increase, which is not a simple process. EPA is taking steps to prepare for its role in administering the NBP in 2009 if and when the Court issues a mandate. Mr. Mclean noted that he encourages states to examine options to ensure NBP is in place by 2009.

In conclusion, this is a serious situation with consequences across the board, such as lost human health and environmental consequences, increased burden to the state, and cost to business and industry. A resolution will likely involve all branches of government. The ultimate goal is still to reduce the impacts to health and the environment. Absent a legislative fix, restoration of benefits will take years and require significant efforts by states, EPA and industry. The outcome is uncertain.

Following the presentation, Mr. Mclean showed slides that served as an appendix. He showed several slides indicating what the Court decided, including aspects of the CAIR rule that the court upheld, as well as problems the court identified with the rule.

Following the presentation, Mr. Brenner asked if there were any questions from the group.

Charles Knauss, Bingham McCutchen LLP, asked about the scope of options. He mentioned the ozone litigation rule. On the rehearing request, there was agreement to modify the scope prior to the hearing. Is there an option with a dialogue like this for rehearing? Mr. Harnett responded that the Court itself asked this question, that there was an economic dis-benefit to bring down this rule, but that it still could not stand. Bob Myers, EPA, added that EPA is considering all of its options and is open to all legal options; everything that can be salvaged would be ideal.

Chris Hessler, AJW Inc., said that technology has evolved and that technology should be brought into conversations moving forward. For instance, control technologies ought to be incorporated. There are other technologies where investments dried up that could be useful now. There is potential for more technologies that could be helpful in addressing these issues more cost-effectively. Mr. Mclean responded that this would be revisited again, as they always want to

make sure they are up to date. For instance, the modeling they use for economic analysis is continually updated each year. Mr. Harnett added that this brings up the issue of regulatory challenges. Having to do all of the analyses again will add a lot of time to the process, which will certainly add to the tension.

Ms. Garcia said that it is difficult to predict what will happen in the future with regard to federal and state action. It would be useful to see what will happen beyond the no action option, for instance, what might states do since they are not going to wait.

Ben Henneke, Clean Air Action Corporation, noted that they started putting energy into this effort in 1994. Why should they go back to a multi-year process again, when the benefits of the sulfur reductions are orders of magnitude greater than the costs? Have they done everything possible, or, knowing that there is a new administration, should they ask what would be a different enough fix that could still stand the test of legal aspects? Most of the companies involved have internally completed the work, but finances will be different. Can they find an out of the box solution to lead to the reductions they need while they sort out the legalities? Mr. Mclean agreed, and mentioned that the legal aspects are being focused on now. Bob Wyman, Latham and Watkins, added that the goal is to keep things simple.

Bill Becker, National Association of Clean Air Agencies (NACAA), said that this is really an issue about public health. He said that this group fully understands the consequences of this decision and that this Committee is meant to do more than just discuss, but to also act. It seems that there is strong support for a legislative fix of some kind, and that is the common denominator. He suggested making a recommendation to EPA that CAAAC supports a legislative fix that at the very least codifies Phase I of CAIR for at least four years. It would not say anything about 126 petitions or fuel adjustment allowances or default of Phase II. This would provide them with some certainty to get through to the next phase. It does not seem like there is any other alternative. They need to send a message to Congress that they need to act now.

Mr. Brenner said that EPA needs to be careful due to restrictions on the executive branch lobbying Congress.

Tony DeLucia, East Tennessee State University, mentioned that they are thinking about developing an air group in the state of Tennessee. They know that a regional approach is going to be important and effective.

David Foerter, Institute of Clean Air Companies (ICAC), said that there is a lot of support for a CAIR Phase I, which is helpful to the industry, the state and EPA. Time could be better spent thinking about what the future could look like for the states and these programs. They have done a lot of installations in industry now and have done a lot of investments, so they would like to see Phase I codified and move to the next step.

Mr. Wyman mentioned the discussion held at the subcommittee level. He suggested that they move in parallel. While it would be preferential to get a quick, clean legislative fix, they need to improve contingency planning by working in parallel with the other options in responding to

SIPs with a conditional approval that would be uniform in states and would preserve the key elements of CAIR so that states can move forward.

Janet McCabe, Improving Kids Environment, said that she would support the notion of a resolution. She also said that she has been speaking with state regulators and there is a lot of concern; they are talking about moving ahead with source specific rules. The utilities have been counting on trading; if there was some way for EPA to run a trading program, then states might be able to give their companies the option of a voluntary trading program or dealing with source requirements. Also, she asked about the opposition to CAIR on the Hill.

Mr. Myers responded that the suggestions are helpful and will be explored. On the Hill, it seems that they have not been engaged in Clean Air Act legislating in 18 years, so there is some education that needs to be done. There are still some possibilities, but they really need to get to consensus and then follow through with procedure.

Mr. Harnett added that if the states adopted a trading program, EPA could probably look at the option. There is no requirement though to do so.

Jeff Holmstead, Bracewell & Giuliani, said that in the last few years, they have been in a situation in which EPA no longer has a lot of say in what the Clean Air Act (CAA) says. It has become impossible institutionally for EPA to implement the CAA since judges have their own views. For instance with the 8 hour ozone implementation rule, it did not seem like they understood how it worked. Every agency has institutional expertise in how these programs are intended to work. The CAIR vacature has undermined the confidence in trading programs and health protections. The DC Circuit destroyed $20 million in NO_X allowances. It is fundamentally different today than it has been in 25 years in terms of the DC Circuit deciding that they can decide better than the agency in what these rules mean. It will be difficult to get state regulators and industry to decide to comply with the regulation until litigation is complete for other scenarios.

Mr. Brenner said that the Courts have really pushed back. The question is if there is realm in which EPA can be shown deference, but the Courts have shown that this is limited.

Mr. Myers added that he is still hopeful and that things may turn around in the Courts.

Mr. Trisko suggested that this resolution be directed to the members of the respective members of the committees of the House and Senate to avoid any problems. He suggested the group express support for Phase I of CAIR in the simplest of terms. CAAAC should be able to adopt a resolution to transmit it to Congress.

Mr. Becker agreed that the terms should be as simple as possible. He suggested: “CAAAC recommends that EPA supports a short-term legislative fix to the Clean Air Interstate Rule (CAIR) that, among other things, codifies Phase I for at least four years.”

Mr. Brenner said that it seems like the committee should play its usual role in making its recommendations to EPA rather than going directly to Congress. Pat Childers, EPA, added that according to the charter, CAAAC can make recommendations to EPA.

Mr. Holmstead asked why this group would do anything other than support CAIR. He said that he has heard that if CAIR is codified, it could be more difficult to come up with something else. Why not just send a strong signal that more needs to be done, but CAIR needs to be supported. If you start changing anything, you open it all up to debate.

Mark MacLeod, Environmental Defense, said that Mr. Becker's suggestion is simple and possible. They need to focus on the art of the possible. This resolution reflects what is politically possible. They need to lock in what they can in terms of health protections and then work together to do more after that.

Mr. Becker said that he agreed with Mr. MacLeod but that the common denominator seems to be the proposed resolution. He said that CAIR could be considered to be far too short to even attain the 1997 standard. With the new standards, it is making it even more difficult. If you have codification of one or two phases, it is going to create a strong dynamic of reverting to Phase I or II and will make it more difficult to move further. It makes more sense to take a fresher look of what is needed, give industry that certainty, and use a more stringent program for Phase II.

Mr. Brenner said that maybe they could have some individual discussions before a decision is made. He added that Mr. Childers suggested tabling this for later on the agenda.

Mr. Knauss said that minimalism is great, and maybe they could even get this through the Hill. He noted that "Among other things" is confusing language to use in the proposal.

Mr. Becker responded that "among other things" included the protection of state rights under 126 petitions, but there are other controversial items like fuel adjustment factors. They want something that the states can support and they need to find the common denominator.

Valerie Ughetta, Alliance of Automobile Manufacturers, asked for clarification on the time frame. Mr. Becker responded that there have been multiple scenarios and that the wording is meant to be flexible to satisfy multiple parties.

Ms. Ughetta said that there are manufacturer concerns because they want stability for their electricity suppliers, but are concerned about collateral implications, so a definitive timeline would be helpful. Mr. Becker responded that if Congress acts, they will include a definitive timeline and that this is simply a recommendation from CAAAC.

Subcommittee Report Outs

Ben Henneke, Clean Air Action Corporation, said that the legacy sources issue is not as time sensitive or critical as the Clean Air Interstate Rule (CAIR). It addresses one of the most intransigent, difficult problems about air quality management they have had over the entire time he has dealt with these issues. Legacy sources and old junkers get built and put into the inventory sometimes with no controls or with crude controls. The Agency does not have many tools to get

the old legacy sources. There is a strong presumption by Americans that if it was good when you bought it, you can keep using it. Some locations have incredible problems with tools and incentives to get rid of legacy sources, so the work group worked on it.

Anna Marie Wood, EPA, said they wanted to walk through the efforts of the work group so far to give background to the issue. Please see her PowerPoint presentation as reference. As a result of the May 2008 CAAAC meeting, there was a charge to identify what EPA has done to retire legacy source and what were the common themes and criteria to these approaches. Legacy sources include both small and large sources. Legacy sources present a significant health and environmental justice concern. They also comprise a large part of the inventory. It is possible to get large health benefits when programs are successful at legacy source reductions. Several CAAAC members participated in the work group, which conducted six conference calls.

They organized their work first by identifying from the group's common experience what legacy source programs had success with retirement. They also identified those that did not work; some felt that New Source Review (NSR) did not help. They then developed recommendations for dealing with legacy sources.

The work group focused their attention on recommendations for the transition team for the new administration. They have a draft background report with recommendation details and also have a chart of the legacy source programs reviewed.

The members agreed that there are certain prudent approaches to encourage turnover:

1. Financial incentives (purchases, buybacks, tax credits)
2. Green contracts (supply chain management, port Drayage)
3. Legacy state/federal requirements

The policy recommendations in the report are in three parts:

1. New federal legacy buyback fund
2. Encourage green contracts
3. Federal legislation as a backstop

Ms. Wood said that the fund should be a minimum of $50 billion, up to $100 billion. This figure comes from a detailed analysis by EPA on what it would take to cause turnover of the legacy diesel fleet. This was estimated at $50 billion. The other aspect talked about was that since this would be public funding, they need to get as much out of it as possible. There needs to be a minimum $3 of heath care savings return on their investment. They would also encourage states to create air quality finance agencies to increase financing opportunities.

Another proven approach is encouraging green contracts and state and local regulations. The federal legacy funding would still be available even if the turnover were required by a state law. The third approach to be used would be federal legislation that would be put in place to catch all sources not turned over by other mechanisms.

They had a good discussion on the mechanisms for funding methods. If you look at the cost savings side of it, since it is a health care issue, you can look at the healthcare system cost

savings as a basis for revenue. They also looked at climate change legislation because there will likely be financing mechanisms there. They could also include supplemental environmental programs (SEPs), pollution taxes, and other methods. Those were the policy recommendations and what they thought about funding.

Mr. Henneke talked about next steps. He said that the dollar amount is probably surprising to see. But the point is that legacy fleets and industrial and mobile sources are having an enormous impact on healthcare in the US. What people do not realize is that the government already funds the majority of healthcare costs in the US, despite it being a private system. Reducing healthcare costs reduces the impact on the federal budget. This report is intended for the new administration, as we want to encourage new good things. Getting legacy units out of inventory is not going very well. They also want to make clear that green contracts and state and local regulations takes away the cost argument that some sources might have. The fund would pick up the costs for these sources.

If the CAAAC agrees on this report, they would complete the recommendation and report document that is currently in draft form. They need to fill in data from a few sources in order to get final data in the report, as well as write the recommendations sensitively. There are issues about large sources with permits that need to be treated differently, etc. Everyone is invited to help with writing and editing. They want to get this done soon in order to present it to the transition team. If it is accepted, they are going to need legislation to fund it. They need a study from EPA on how to include multi-pollutant benefits. EPA has a lot of data but they need quantification so that each state does not have to do the research themselves.

Janice Nolen, American Lung Association, asked if they meant that potentially $100 billion would be paid to this from health system cost savings. Mr. Henneke said they need to look at it from a Congressional perspective. When looking at healthcare system costs, they have all been talking about the costs of pollution to health. They have the studies on the benefits of pollution reductions. All of those come out in the economy. The reason they are doing mandatory programs is because they will reduce healthcare costs and have a benefit to the country. It is the same situation here, except that it starts with an offer of cash and works through to the end. It actually saves money in the federal budget in the long run.

Ms. Nolen said that it seemed to her that they would be proposing to Congress that they appropriate from Medicare and Medicaid to fund this program. Mr. Henneke said that if they propose legislation that lays out the costs and benefits to society, and the politician is guaranteed to spend only one third as much on healthcare, it could work. This is one solid economic argument.

Jeff Holmstead, Bracewell & Giuliani, said that economic benefit is different from reducing healthcare costs. With this proposal, CAAAC will be seen as another special interest group and they could lose credibility.

Ms. Nolen said that healthcare is chronically under-funded, so this idea is a non starter. If they are expecting other federal programs to pay for cleaning up emissions, it will not happen. They

need to look for other options, although the benefits come from premature death avoided. Suggesting taking the money from the healthcare system will not happen.

Mr. Henneke said that they are not suggesting they reach into healthcare funding and take their money away. But as they do the budget analysis, changes will occur because expenditures will decrease. The Congressional Budget Office would be doing this analysis of the cost/benefit and impact of premature death. Focusing the discussion on health benefits makes it clear what these legacy sources are costing the country. The money does not come out of Medicare or Medicaid now, but it does reduce the demand in the future. It is what they have been saying for years: we drive up costs by not cleaning up, and this will allow costs to go down.

Rich Kassel, Natural Resources Defense Council, said that these arguments illustrate how tough this will be. Cleaning up legacy fleets is important. This is a key hole in the regulatory framework. They do not have to convince anyone that it is a good idea, but they do not have a good idea of how to pay for it. There must be a nexus between the sector polluting and the sector cleaned up. The closer they are, the easier it is to connect funds. He volunteered his assistance for the group.

Bob Wyman, Latham & Watkins LLC, asked Mr. Henneke to clarify what was intended by the slide in reference to greenhouse gas (GHG) allowance auction funds as a way to pay for this. He said they talked about a similar concept. He proposed that as EPA's mandatory reporting authority that they have accounting protocols that reflect benefits in tons, and states would then be able to create credits for compliance. That is not an auction fund. States that want to jumpstart legacy turnover can do it with EPA assistance on the math, and can create early action credits in their state programs. That is the kind of GHG reduction they should prioritize. Mr. Henneke replied that there were a lot of ideas not included on the slide. He said that this prevents robbing another part of the budget. No one suggested reducing healthcare funds, and no one thought Congress would spend it, but that is the scale of what could be done.

Elaine Mowinki-Barron, Sierra Medical Center, asked if the work group discussed trends with fleet systems in Mexico and Canada. Cross-border trade is an issue for border states. Ms. Wood said that was covered as part of the green contracts idea and having it be a federal program. It also prevents the problem of people moving to states that have more lax controls.

Don Clay, Koch Industries Inc., suggested that they do a pilot demonstration to show how it works and competes against other EPA programs. If it is cheaper to get this turnover through other programs it would be cheaper overall. This might demonstrate how it works in states and counties to prove it will not be so expensive.

Mr. Brenner asked Mr. Henneke to explain how they wanted to proceed. Mr. Henneke said that the other work group was on multi-pollutant issues. The task was to compile from EPA all health benefit numbers related to pollution reduction. It is very hard to tease out the numbers used by EPA for economic analyses. For example, SO_2 numbers from small sources and utilities range from costing $20,000-$50,000 per ton in healthcare costs. SO_2 control costs are about $500-$1,000 per ton. They are missing these reductions from the Clean Air Interstate Rule (CAIR) and other sources. This is what the work group members saw: there is a lot of health damage

occurring because they are not getting turnover of legacy fleets. Although the $50 to $100 billion is a lot of money, there is 3-5 times as much value to the country for doing this work. There have been many suggestions, but right now they need to show that the problem is that big. They would work on phrasing the report better after the meeting.

Mr. Brenner summarized some previous comments, saying that there was a lot of support among the members for the concept of dealing with legacy sources and conveying how large the problem is. Money is being wasted on healthcare expenditures that could be prevented. There are many views on how to fund the program. He asked if there was support for proceeding with the report, with the understanding that there is more work to be done to frame the funding piece. They would send out the final language to the members via email. He asked whether the overall approach was supported.

Ms. Nolen asked what the money in the fund would do, and what percentage of the problem does $50 billion address. It would be helpful for the transition team to know this. Pat Childers, EPA, said that there is already a suggestion from the CAAAC mobile sources subcommittee that $50 billion is what is needed to turn over the legacy diesel fleet.

Mr. Brenner said that they were just looking for a consensus on the points previously mentioned. Was the general concept that they wanted to go forward and talk to the new leadership at EPA about this? There was consensus among the members. Mr. Childers said they would update the CAAAC on this issue through subsequent email. Mr. Brenner thanked Mr. Henneke and the subcommittee for developing this report and introduced Bill Harnett, USEPA, for the update from the Toxics, Permitting, and New Source Review Subcommittee.

Mr. Harnett said that the CAIR discussion already took place that morning, which had been a large part of the subcommittee meeting. He then discussed the multi-pollutant strategy, which also came up as part of the CAIR discussion the day before. They focused on the permitting, Title V, and New Source Review (NSR) side of the strategy. The take-home message was that they should not say that if they get into regulating GHG emissions that the system will break down. In their discussion on the advance notice of proposed rulemaking (ANPR) on GHG they suggested that there were ways to address GHGs with respect to fees. They also discussed that they are waiting on a court decision in the Deseret case, which was a power plant permit issued by EPA that has the issue of whether CO_2 is already a regulated pollutant. This decision could come at any time. They could find out that CO_2 is regulated under the Clean Air Act (CAA) and two permitting programs. The group also discussed recommendations in their subject areas on permits, toxics, and National Ambient Air Quality Standards (NAAQS) implementation for the new administration.

John Guy, EPA, gave a summary of the mobile sources technical subcommittee meeting. They had an update on the clean diesel campaign funding. The CAAAC had a presentation on this issue before. They have the request for proposal (RFP) process almost finished, and they have over 236 applications for the federal money. All 50 states are participating, and 35 are providing matching funds. Awards will start soon. They are hopeful for more funding next year. $50 million is significant, as it is six times what they had before.

Mr. Guy said that they also had a presentation on RFS2, which is the requirement that requires renewable fuels by 2022. One big component of this was the lifecycle analysis, and there was a presentation on how to protect those. There is an ANPR expected this fall. They also had a presentation on the GHG ANPR. He explained that the ANPR does not propose standards for GHG, but requests a lot of information on them, and asked whether the CAA is the right vehicle to address them. The deadline for comments is November 28 and the next administration will have to deal with them. Finally, they had a presentation from car makers about how they are doing this. It was primarily about advanced technologies like plug-in hybrids and fuel cells. There was some discussion on other improvements that could be done other than changing to a hybrid system, that still achieve significant fuel economy improvements.

Tony DeLucia, East Tennessee State University, asked if they could get copies of the presentations, and Mr. Brenner responded that they would be posted online by no later than the next Friday.

Vision and Goal Work Group Report Out

Pat Childers, US EPA, thanked all the full committee members that stayed late the previous night to discuss the visions and goals of the Clean Air Act Advisory Committee (CAAAC).

Ursula Kramer, Pima County Department of Environmental Quality, stated that she and Dan Johnson, WESTAR, are the co-chairs of the Performance Measurement Workgroup. She thanked everyone who participated in the discussions the previous night.

Ms. Kramer reviewed the project objectives on slide 2 of her presentation: (1) develop a concise "working" project to engage the incoming Administration and to guide the CAAAC, and (2) build a shared vision and goals for the national air program. The Program will build on past recommendations, identify new issues, challenges and opportunities, and reflect on different roles and responsibilities for key partners in air quality management.

Ms. Kramer next provided background to the Project. This issue was raised at the May CAAAC meeting. Since then the Workgroup has participated in several conference calls. The Workgroup deliverable to date is the Draft Goals-Recommendations-Observations Mapping Matrix.

Ms. Kramer next presented the Vision and Goal statements that were built from the 2000 Vision statement. The earlier goals were reviewed, updated, and revised to create the new goals. Goal #1, to achieve and maintain air quality that protects the public health, welfare, and environment, including from the effects of climate change, is the overarching goal. The other goal statements are ways to achieve goal #1. The key focus points for goal #1 are: regional impacts of air pollution; limitations of the Clean Air Act; communication and public education; a dynamic process to address revisions to standards; and focus on health impacts and risk reduction. The communication point is reiterated in goal #7. The CAAAC can decide whether this should be a separate goal or a key focus under goal #1.

Goal #2 is to manage for results and accountability. The key focus points are: cost effectiveness; target implementation to optimize benefits of investments; creating nimble organizations and

processes to adapt to new challenges; expansion of national and regional performance control measures; measure performance; and improved accountability mechanisms.

Goal #3 is to use appropriate tools including innovative approaches. The previous day CAAAC members discussed using innovative approaches, but not using them only because they are new and different. The CAAAC should use the tools that work and supplement them with innovative tools as appropriate. Key focus points are pursuing multi-pollutant and cross-media approaches and using incentives for voluntary and innovative transportation and land use approaches.

Goal #4 is to conduct sound research and use information effectively. Key focus points include an increased focus on susceptible sub-populations and working closely with local health agencies to increase the availability of environmental and health data.

Goal #5, enabling implementation by government partners, is a new goal. This goal has a dollar sign associated with it. Without funding, resources, and training, government partners cannot accomplish anything.

Goal #6 is to build a better and broader partnership. Ms. Kramer said to note the special relationship among co-regulators (i.e., EPA, tribal, state, and local governments). It is important to ensure that the partnership is not limited to tradition partners, but is also expanded to include public health, transportation, land use, energy, etc. It is important to recognize that the CAAAC is beginning to work more in a global environment.

Goal #7, to expand public outreach and education, is also included in goal #1. This goal is critical to the success of the whole program.

Ms. Kramer asked the CAAAC if the Workgroup is on the right track and if they are missing anything important. The Workgroup hopes that the CAAAC can take the document forward to inform the new Administration.

Ms. Kramer said that the Workgroup would like to revise some of the statements with the feedback it receives. They would also like to flesh out the statements and incorporate more specific key focus points. The Workgroup wants to update work products completed under other Workgroups to fit them under the goals. The final draft recommendations will be completed for the January 2009 CAAAC meeting. The Workgroup wants to create a basic framework so that the new Administration can tweak the document if necessary. The Workgroup would also like to develop annual action items for each goal. At the end of the year, the Workgroup can assess where it has succeeded and which areas require more attention.

Mr. Johnson stated that the CAAAC has provided great recommendations over the years. The Workgroup hopes the document will help to identify these recommendations and understand why some of them were not implemented. Mr. Johnson also reflected on some of the issues that were discussed that day – CAIR, legacy fleets, etc. The CAAAC seems to be focusing on these areas because they have a profound impact on public health and the environment. The Workgroup hopes this living document will guide these discussions.

Bill Auberle, Northern Arizona University, stated that air quality management decisions are often fundamentally harmful to other environmental resources. Additionally, water quality management and other resource management decisions are often harmful to air quality and public health. The CAAAC does not have a good mechanism for recognizing and addressing these issues and this should be included. Ms. Kramer said that this is included in goal #3 in cross-media approaches, but it needs to be fleshed out. Ms. Mowinski-Barron, Sierra Medical Center, stated that the Workgroup discussed this issue because it is important in the West and Southwest which experience groundwater contamination due to air contamination. Ms. Mowinski-Barron also suggested that EPA work very closely with its Water Division.

Tony DeLucia, East Tennessee State University, suggested that the Workgroup stay informed of an older National Academy of Sciences (NAS) study called "Who will keep the public healthy?" This study will assist the Workgroup with goal #7 (expand public outreach and education).

Janice Nolen, American Lung Association, asked if the recommendations would also be part of the goals. Should the CAAAC suggest additional recommendations or edits to the goals? Ms. Kramer stated that the Workgroup will present the fleshed out recommendations at the January meeting for the CAAAC's review, but they do not want to be so specific that the new Administration cannot adjust the goals. However, they will have more specifics for the January meetings.

Pat Childers, EPA, stated that they are going to edit the visional cross walk with the new goals. They are going to revisit the AQM Phase I and II, Title V, etc. and pull out existing CAAAC recommendations that are still pertinent and plug them into the new cross walk. They will ask EPA what has occurred on these recommendations. Between now and the next CAAAC meeting the Workgroup will draft a document with the recommendations.

Ms. Nolen stated that the CAAAC will not be able to dictate what the new Administration does, but translating the CAAAC recommendations will be helpful.

Mr. Childers said that the Workgroup will clean up the existing document based on feedback received. The Workgroup will send the new document before the January CAAAC meeting.

Rob Brenner, EPA, thanked the Performance Measurement Workgroup.

The CAAAC revisited the Clean Air Interstate Rule (CAIR) recommendation.

Bill Becker, National Association of Clean Air Agencies (NACAA), stated that he has received valuable comments on the recommendation to EPA regarding CAIR. The words "among other things" caused concern because it means different things to different people. There is also concern about the timing of "at least 4 years"; there are recommendations to remove the language.

Tom Stricker, Toyota Motor North America, stated that Toyota is still trying to determine where it stands on cap and trade. He is concerned that this recommendation may endorse the cap and trade structure under the Clean Air Act as it may apply to CO_2. Mr. Becker stated that this

recommendation is with respect to CAIR in addressing Electric Generating Units (EGUs). Mr. Stricker stated that Toyota is not opposed to supporting the fundamental recommendation if the recommendation does not prejudge or endorse a particular regulatory structure beyond NLX.

Mr. Becker stated that Mr. Trisko drafted a resolution.

Barbara Bankoff asked about the letter that went to the Hill the previous day. Mr. Becker stated that the States will not support the letter because of the fourth principle. Barbara Bankoff said that she is representing Eli Lilly but she has not been able to speak to Bernie Paul of Eli Lilly. However, she did speak with the Indiana Commissioner and Indiana will not support the first part. Mr. Becker stated that Indiana was among 2 of 22 that voted "no" to the letter. Ms. Bankoff said she will abstain. Mr. Becker said that they are not voting on the letter, but on the resolution.

Mr. Trisko presented a modification of the original draft recommendation:

"CAAAC recommends that EPA support a temporary legislative fix to codify Phase 1 of the Clean Air Interstate Rule (CAIR)."

He stated that he dropped the phrase "among other things" and the reference to "at least four years." The recommendation was placed in the form of a resolution:

Sense of the EPA Clean Air Act Advisory Committee re Temporary Legislation Restoration of CAIR

"Whereas, temporary legislation restoration of Phase I of CAIR would allow state and local clean air attainment programs to proceed without interruption, while avoiding significant public health costs and the disruption of air pollution control installations already in progress; and

Whereas, broad support exists for said temporary restoration of Phase I;

Now Therefore be it Resolved:

That the EPA Clean Air Act Advisory Committee unanimously recommends that EPA support a temporary legislative restoration of Phase I of CAIR in the 110th Congress."

Mr. Becker said he and his colleagues added "temporary" in a few instances to Mr. Trisko's draft to ensure that readers would recognize that the resolution is not the ultimate fix. A phrase citing "eco-principles" was also removed.

Charles Knauss, Bingham McCutchen LLP, stated that he believes the CAAAC will accomplish what it needs by deleting "unanimously" given that some folks are not present. Mr. Trisko stated that the drafting committee previously recommended language that stated that "the EPA CAAAC members present recommend that EPA…" Mr. Becker stated that he does not like the language

"present today." However, agrees with removing the word "unanimously." Mr. Trisko stated that he agreed with Mr. Becker.

Mr. Childers stated that supporting something is different than recommending it.

Mr. Becker asked about next steps. Mr. Childers stated that EPA will receive the resolution from the CAAAC. If the language says that the CAAAC supports the temporary legislation, then EPA is on the hook to respond to the resolution even if they do not support it. If the resolution states that the CAAAC recommends a temporary restoration, the CAAAC is saying that the Federal Advisory Committee Act (FACA) recommends it. The resolution is going to EPA, but the language changes who is on the hook.

Mr. Becker said that informing the public about the resolution is also important.

Mr. Trisko said that it is not their intent to put the Agency on the hook. The purpose of the resolution is to make clear that the CAAAC is speaking to Congress rather than recommending the Agency's position. Mr. Trisko recommended the language of the CAAAC supporting the temporary restoration of Phase I of CAIR.

Janet McCabe, Improving Kids Environment (IKE), suggested ending the resolution with "and requests the EPA to convey this resolution to Congress."

Mr. Stricker stated that he is uncomfortable supporting this resolution without conferring with Toyota. As new member, he is unclear of the difference between lobbying Congress versus making recommendations to Congress. He stated that he cannot support the resolution right now. Mr. Brenner asked Mr. Childers for guidance. Mr. Childers stated that it is not uncommon for letters from FACAs to go to the Agency. This letter will state what the CAAAC thinks as a group and Mr. Childers does not think that this is inappropriate. He stated that it is not lobbying, but stating the opinion of the CAAAC at the table.

Mr. Knauss suggested placing a period after "CAIR" in the last sentence and removing "legislative." Mr. Becker stated that this was too dramatic. Mr. Becker stated that the goal is for the CAAAC to recommend, if necessary through someone, to Congress, judgment of how the national clean program can address repercussions that Mr. Trisko laid out. Mr. Knauss stated that his purpose is to go on record saying that the CAAAC believes that CAIR should be restored at least in phase I.

Chris Hessler, AJW, Inc., stated that he has concerns about Mr. Becker's phrase "best judgment" used in the collective. Mr. Hessler believes that the CAAAC is making good progress toward a document that avoids many pitfalls that were in the first draft, but he thinks that the process is hindering a full expression of the CAAAC's best judgment. There was no advanced notice that the CAAAC would be discussing the resolution and this undermined the ability of the members to do what they needed to do to support the resolution. He stated that they are nearing something that he could support, but he would support it with reservations that there are members that are not present and others would be more thoughtfully engaged if they had had time to prepare for the discussion. Mr. Hessler stated that he applauded Mr. Becker's effort to make the CAAAC

live up to its potential, but he thinks that it could have been handled better from a procedural standpoint.

Mr. Becker stated that they discussed the resolution yesterday and took a straw vote. While there was not an expansive sample of members present, there was enough to determine if there was opposition and there was not. Mr. Becker stated that this was the reason he was encouraged to present the resolution at the full CAAAC meeting. Those that are affected for the most part will probably know their position. Mr. Becker stated that he can interpret his association's position to determine whether the position is in line with the resolution statement. The timing is not ideal, but the CAAAC does not have the luxury of waiting.

Bob Wyman, Latham and Watkins, stated that in terms of function of the CAAAC, there may be a charter that would explain this. In the 1990s there was an occasion when the CAAAC interacted explicitly with Congress on a Clean Air Act amendment. There was a subcommittee task force that held public meetings that gathered evidence to formulate recommendations that went to Congress and formed the basis of an amendment that was adopted exactly as the CAAAC recommended it. It had the advantage of being deliberative and transparent. It would be better to follow this path, but Mr. Wyman said that he is not shy about the CAAAC communicating its best judgment outside of the umbrella of EPA to external audiences such as Congress. It is important to present the resolution while recognizing that the Committee is not following the normal procedure because the issue was discussed on short notice; however, the Committee recognizes the public health and environmental stakes involved. Everyone is assembled and it would be a shame not saying something.

Rich Kassel, Natural Resources Defense Council, stated that it is necessary to say something. The notion of saying something is often more important than parsing the words. Mr. Kassel suggested deleting the word "temporary." The statement originally said "four years", was changed to "short term", and then changed to "temporary". There is not consensus on the time period so perhaps it should be omitted and left up to Congress. Ms. Nolen agreed with this suggestion.

John Campbell, Caterpillar, stated that from an industry perspective, certainty is important and industry would just assume have someone act. Caterpillar would support the resolution to ensure that they have certainty. Additionally, there are stranded assets that someone has to deal with.

Mr. Trisko agreed with the suggestion to remove "temporary." Regarding previous language that Mr. Hessler had mentioned conveying the sense that this was taken up at the meeting on a short term basis, Mr. Trisko suggested language included in the preamble saying something to the effect of the CAAAC having considered the CAIR issue at its September 18th meeting and the urgency attending Congressional action on this matter. Don Clay, Koch Industries, said he would support this.

Mark MacLeod, Environmental Defense, stated that he agreed with Mr. Trisko's language regarding the urgency of issue and the response to Mr. Hessler's concern. Mr. MacLeod stated that while removing "temporary" is an issue for Congress, he thinks this is a good idea.

Tom Stricker asked who the CAAAC is speaking for in this scenario - the CAAAC or the CAAAC member's individual interest groups? Once speaking about an issue not included in the resolution, a CAAAC member is not speaking for the CAAAC? Ben Henneke, Clean Air Action Corporation, stated that the key piece is that the CAAAC has not voted. People are always allowed to speak on the Hill on behalf of their organization to thoughts not included in the CAAAC statement. Mr. Childers stated the CAAAC would be voting. Mr. Henneke asked why they intended to use a different process. Mr. Childers stated that the voting process has been general consensus agreed with no names tied to it.

Robert O'Keefe, Health Effects Institute (HEI), stated that HEI by charter does not take or recommend policy positions, but he is happy to vote as a CAAAC member.

Mr. Brenner asked if the purpose of the vote was to see if the CAAAC has broad, but not unanimous consensus. Mr. Childers stated that he is not asking for a specific vote from each member or from their organizations, but whether the sense of the members in the room is that there is general consensus that the recommendation should be moved to EPA.

Mr. Becker stated that removing "temporary" does not mean that CAAAC is not supporting any particular length of time that Phase I remains.

Pat Childers reviewed the edited resolution.

Mr. Brenner suggested inserting a period after "110th Congress."

Valerie Ughetta, Alliance of Automobile Manufacturers, stated that she did not have consensus among her members and does not have portfolio to vote on behalf of her ten members. She thinks that if there was more time, they would support the resolution.

Dave Foerter, Institute of Clean Air Companies (ICAC), stated the Institute of Clean Air Companies would support something longer term, but they recognize that the resolution has an immediate benefit and they will support this.

Mr. Trisko reviewed the preamble language: "having considered the CAIR issue at its September 18th meeting, and the urgency attending Congressional action on this matter."

Mr. Wyman suggested the language "and given the urgency." Mr. Trisko also suggested the language "in view of."

Mr. Henneke stated that this is not the first time that a CAAAC member has had an issue about getting back to its members. Historically the CAAAC has moved things forward with consensus, and without defining consensus. There is a good reason why they have been doing this. The disadvantage of taking a vote is that the votes are recorded, even for members that need member approval. If "unanimous" was stated, it would be important to ensure that everyone agreed, but this is why the language was dropped.

Mr. Childers stated that they asked for general consensus on AQM, mobile sources, and Title V, and received general consensus in all these instances.

Ms. Mowinski-Barron stated that she was recently involved with a similar situation with a binational committee (3 states and 2 countries) about preventing Asarco from reopening in El Paso. They pushed through the recommendation because of the importance of protecting the airshed. It is time for the CAAAC to move to a more aggressive position and move things forward to benefit the general public.

Mr. Childers asked if there was general consensus to move the resolution forward. There was general consensus.

*Jeff Holmstead, Bracewell & Giuliani, was not present when the CAAAC arrived at general consensus.

The final resolution was:

Sense of the EPA Clean Air Act Advisory Committee re Legislation Restoration of CAIR Phase I

"Having considered the CAIR issue at its September 18, 2008, meeting, and given the urgency attending Congressional action on this matter; and

Whereas, legislation restoration of Phase I of CAIR would allow state and local clean air attainment programs to proceed without interruption, while avoiding significant public health costs and the disruption of air pollution control installations already in progress; and

Whereas, broad support exists for said restoration of Phase I;

Now Therefore be it Resolved:

That the EPA Clean Air Act Advisory Committee supports a legislative restoration of Phase I of CAIR in the 110th Congress."

<u>Mobile Source GHG Technologies</u>

Greenhouse Gases and Light-duty Vehicles

Rob Brenner, EPA, introduced David Haugen, EPA, and Tom Stricker, Toyota. Mr. Haugen works at the Ann Arbor Laboratory for the EPA Office of Transportation and Air Quality. His presentation was on greenhouse gases and light-duty vehicles. Mr. Haugen explained that the lab he works at researches fuel economy, fuel supply, future standards development, air quality, and advance technology development.

Mr. Haugen mentioned that National Highway Traffic Safety Administration (NHTSA) and EPA are working on greenhouse gases (GHG) and fuel economy improvements. The agencies have explored the improvements, given considerations to legislative authority and noted the constraints. He said that there are many technology options available to reduce light duty vehicle GHGs. While the tendency is to focus on the "big hitters," including hybrids and advanced diesel cleaners, there are many "small hitters" that remain available to the fleet to reduce vehicle GHGs at very affordable costs. The "small hitters" vehicle technologies available to reduce GHGs from light duty include better engine oils, transmissions, turbo charging and engine downsizing, hybrid electric vehicles and plug-ins, series hydraulic, and a variety of vehicle accessories (including reduced aerodynamic drag through design, weight reduction, etc.)

Mr. Haugen showed a chart of when some of these technologies have entered into the fleet of available vehicles for purchase today. Over the past ten years, a few of the technologies have really been making their way into light duty fleet. Multi-valve engines provide better power and have substantially penetrated the fleets. Compared to ten years ago, variable valve timing is now in 58 percent of the fleet. Cylinder deactivation was introduced by Cadillac 30 years ago, but today domestic manufacturers are incorporating it into large V-8 engines. Turbo charging is often used in the performance industry, but is now entering the market and can offer fuel efficiency improvements. Hybrids are just barely scratching the surface of new technologies.

Mr. Haugen next discussed variable valve timing systems, which allows the engine to breathe better. It results in 4-7 percent CO_2 reduction for $260-700, depending on the engine. Cylinder deactivation has a similar level of CO_2 reduction and cost. It shuts down several cylinders during low load operation. Gasoline direct injection offers better control of fuel for improved fuel economy, and less GHG emissions. CO_2 reduction is not substantial and the cost is not very high, but it enables other technologies, including the turbo charging and engine downsizing. Combined, you can get close to 10 percent GHG reduction with a fairly low cost. Turbo-charging has been introduced by imports and domestics, but it is still in its infancy in terms of its introduction. Transmission technologies are evolving out of the performance arena. Automated manual dual clutch transmission is efficient with fuel and reduces CO_2 by 6-10 percent and costs only $140 for engineering work to update the vehicle. Micro-hybrid technology shuts the engine off at idle and can save 5-10 percent CO_2 for $500-600. There are improved electrical accessories, aerodynamics and tires that can be added. A lot of manufacturers are talking about weight reduction to comply with CAFÉ, which they have been doing by using more expensive materials to reduce weight. Tires can also be made with lower rolling resistance, and you do not lose any of the safety or performance.

There are some mid-term engine technologies, some of which are not in production, and about five years away from being actively pursued in research labs.

Mr. Haugen explained that the lab used vehicle simulation to predict the additive potential of these small-hitter technologies. They selected five vehicles for simulation to be representative of a class and compiled 26 technology packages to see what GHG reductions they would achieve. The results show that some of these technology packages can demonstrate very substantial GHG reduction without significant cost. There are significant GHG reductions and vehicle efficiency

improvements available without depending on hybrid technologies. Performance and vehicle attributes can be preserved.

Historically, there has not been any incentive to reduce air conditioning, which means that there are significant opportunities for cost effective reduction using available or near term technologies.

He next showed a slide on efficiency, weight and performance. The fleet has been at a plateau in it adjusted fuel economy for 20 years, but the vehicles are getting heavier and the performance has improved. He explained the difference between CAFÉ fuel economy and EPA label of fuel economy. The former is more of a laboratory number while the latter is a real world estimate.

There are full-series hydraulic hybrids that are extremely efficient for power transmission and are particularly well-suited for pick-ups, SUVs and medium-duty trucks. It can result in 30-40 percent CO_2 reduction for $800 to $1,300.

Essentially, substantial vehicle GHG reductions remain untapped. The known and proven big hitter technologies remain available for significant further GHG reductions. A changing light duty fleet mix provides potential for much more GHG reduction (specifically – smaller size, lower weight, etc.)

Advanced Technologies at Toyota

Tom Stricker, Toyota North America, next discussed advanced technologies at Toyota. He noted that in his presentation he would cover market overview and factors, developing new technology, hybrid, plug-in hybrids and fuel cells. He said that Toyota agrees that a lot of progress will be made with small hitter technologies. He and Mr. Haugen agreed that EPA would present the "small hitters" while Toyota would present the "big hitters."

Mr. Stricker began with a chart showing the U.S. auto industry sales. The chart indicated that sales for the U.S. auto industry are down about 11 percent since last year. He also showed a chart indicating the new vehicle segment shifts. There is a change in the types of vehicles that people are purchasing. The purchase of entry and subcompact autos has increased, while purchases of large SUVs, among others, has decreased. He mentioned some short term factors associated with the shift in vehicle type purchases, and specifically pointed out that gas prices have increased. He added that in the long term, there are many things driving change in industry, including the global development of industry and technology, population growth and accelerated consumption of fossil fuels.

He added that the challenge is to balance reduction of environmental impact with meeting consumer wants, mass market appeal, and life cycle assessment. Toyota takes a multi-path approach to sustainable products, with a focus on hybrid technology since it can be applied to multiple types of systems. He noted that the presentation would focus on just a few of these technologies.

Mr. Stricker explained that product cycles are a reality. He showed a chart comparing the typical product cycle and the 4 percent CAFE scenario. In the latter scenario, you would have to achieve a 22 percent improvement after it is reintroduced to the market to meet the standard. He noted that technology takes time to penetrate into the fleet.

In terms of hybrid development, Toyota explored 80 different hybrid designs and determined that a series parallel hybrid system would be the most cost effective. He noted that there are six models of Toyota hybrids and that they are selling about 23,000 hybrids per month in the U.S. He added that the cumulative hybrid sales have grown to 1.5 million sold globally, resulting in 13.1 billion pounds of CO_2 emissions avoided to date. He summarized that the hybrid is a foundation for all fuel cell technologies.

Plug-in hybrids have multiple benefits, especially fuel diversification (energy security), potential GHG reduction, and reduced fuel cost. There are challenges with battery cost and life, packaging and need for cleaner electricity. There is a prototype – which is essentially a double-battery Prius – that has a 7 mile range with electric. There must be a balance between electric driving range, cost and consumer convenience. It will come to market in 2010 globally with commercial fleets. He noted that there is significant benefit of high volume sales.

The fuel cell for Toyota has zero tailpipe emissions, and potential for non-petroleum, diversified fuel sources and low or zero carbon fuel. The challenges though are the fuel system cost, the fuel cell stack life and the lack of infrastructure. He explained the key system components of a fuel cell. Some people are saying the fuel cells may replace hybrids. Toyota is making steady improvements, particularly dealing with operating temperature and driving range.

In conclusion, Toyota recognizes that it must adapt to multiple energy and environmental issues and regulations. Deploying technology takes time. The Hybrid is the foundation for future vehicle technologies at Toyota and Plug-In Hybrid Electric Vehicles (PHEVs) and fuel cells are evolutions. PHEVs and fuel cells show environmental and energy security and promise, but only if produced in large volumes. Durability, cost and infrastructure challenges remain for PHEVs and fuel cells. Finally, without green fuels, the environmental benefit (GHG reduction) of these technologies will be modest at best.

Mr. Wyman, Latham and Watkins, said he was curious about price elasticity and the effect of the price impact on the consumer behavior and the turnover of the vehicle. Mr. Stricker responded that there is price elasticity for vehicle purchases and they have formulas they use. He said that they are seeing a change in total volume of sales in the industry. Mr. Haugen added that the consumer would embrace technologies if the technologies would pay back to them within a period of five years, which has been dependent upon the price of fuel.

Margo Oge, EPA, added that the Agency did an economic impact analysis regarding these very questions. It may have been included as part of advanced notice.

Steve Hartsfield, National Tribal Air Association (NTAA), asked about where tribes should go in terms of new technologies and new vehicles. It seems that the plug-in vehicles are problems if the coal is still dirty and that maybe nuclear power is a better option. With plug-in vehicles, coal

consumption is going to increase and they are running out of coal. Could there be more realistic scenarios? How quickly could they charge off of solar or wind power? Mr. Stricker responded that plug-in vehicles are being driven by energy security rather than CO_2 or environmental issue. It might be better to do solar wind or power generation plugged into your wall.

Tony DeLucia, East Tennessee State University, mentioned an ad and asked if large vehicles using technology packages are getting superior mileages to imports. Mr. Stricker responded that he is not familiar with the ad and added that there are technologies for large vehicles, but they are new, and there are often big improvements at model change time and product cycle.

Mr. Campbell mentioned that there are a lot of engine improvements that they should consider, and noted though that a lot of those technologies are already in large engines. We still have aerodynamic problems with larger engines, and some of these technologies are not applicable when you get up to large engines.

Mr. Becker said that they should accept Mr. Stricker's offer to go see the prototype vehicle. The committee could benefit from exploring these things in more depth.

Mr. Brenner said that EPA has been talking a lot about the implications of some of these technologies. When you look at revenues for utility sectors, they may be able to put additional revenue towards clean up of power plants based on clean up fees.

Mr. Hessler said that economic analysis did not appear to be a part of the Advanced Notice of Proposed Rulemaking (ANPR). He wanted to know if he could get a briefing on the issue.

Ms. Oge added that EPA is continuing to look at these technologies and that the engine and power source must be considered as system. The conclusion is that the energy target of 33 MPG could have been done earlier and that now they are continuing to do work on the new technologies. She said that she would be happy to share the economic analysis briefing.

Green House Gas ANPR Update

Rob Brenner, EPA, thanked the previous presenters. He introduced Nancy Ketcham-Colwill, EPA, who organized staff across the Agency to look at how to address greenhouse gases (GHG) under the Clean Air Act (CAA) in response to the Supreme Court decision. She and her husband, Jim Ketcham-Colwill, EPA, would lay out what is in the Advanced Notice of Proposed Rulemaking (ANPR).

Ms. Ketcham-Colwill said that she and her husband had done this presentation together several times before. She would talk about the background and endangerment issues, and Mr. Ketcham-Colwill would talk about stationary sources. They would share the shorter version of the ANPR presentation today. The longer version has a lot of the key information, but is still just an excerpt. It was their job to develop the suite of information on this. In the ANPR and the supporting documents there is a lot of information on climate change science, and information on current inventories of GHG emissions and reduction technologies. It asks for ways to design regulations for GHG controls, and explains what it takes to do an economic analysis with all of the

complexities. The slides will be a reminder of the issues on the subject and will stimulate discussion.

She gave a brief summary of how they got to the ANPR. There was a petition from the International Center for Technology Assessment (ICTA) in 1999 for EPA to regulate four GHG emissions for new motor vehicles. EPA denied the petition in 2003, but in 2007 the Supreme Court ruled that GHG must be regulated under the CAA. The President then directed EPA to create regulations to reduce gasoline consumption and GHG emissions. At the end of 2007 the Energy Independence and Security Act was enacted, which increased the corporate average fuel economy (CAFÉ) standards. By early 2008, EPA had also received seven other petitions to set GHG standards for other mobile source categories. The Administrator realized that this was a large effort with significant implications and decided to do the ANPR. It was signed in July 2008 and the comment period is open until November 28, 2008.

The ANPR summarizes the available science on climate change and its effects. It explains the efforts that EPA has already taken to develop motor vehicle standards. The key part was to explore the connections between various CAA provisions and how they would apply to GHG. There is a lot of interest in regulating GHGs from motor vehicles, but this regulation could trigger preconstruction permitting under the CAA, so there are implications for many industrial sectors. The ANPR then looks at parts of the CAA that might be applied to GHGs if the relevant statutory provisions were met. For instance, what reductions might be accomplished, what technologies are available, and what issues are raised with application? The ANPR seeks comment on the seven petitions for other mobile source categories.

There are several things that the ANPR does not do. For instance, it does not impose anything or suggest the use of certain technologies. It just explores options under the CAA. Additionally, it does not make recommendations, regulate anything, commit to specific next steps, or make judgments about preferred paths.

Ms. Ketchum-Colwill next described the structure of the ANPR. It begins with a preface by the Administrator, followed by a section with other agencies' comments. There are several preamble sections and five technical support documents which provide information on the key considerations for designing regulations and legislation. There is a section that addresses overarching issues, which is useful for thinking through the implications of the regulatory design for GHGs. The key point is that GHGs are very different from traditional air pollutants because they are so long lasting.

Ms. Ketchum-Colwill next showed a slide (slide 8) with a graph of GHG emissions sources categorized by industry sector. Electricity generation and transportation account for about two thirds of all GHGs, and industry accounts for about 20 percent. GHGs are emitted all across the economy.

Other key considerations related to the ANPR include how to design effective legislation that includes the role of new technology and accounting for the link between climate change and air quality.

Ms. Ketchum-Colwill next discussed the issue of endangerment. The climate change science is relevant to the endangerment test in section 202 of the CAA. The test they are faced with is if the Administrator finds that it pollutes the air and affects public health or welfare. The Massachusetts case said that the Agency could make one of three determinations for motor vehicle GHG emissions: there is endangerment, there is not, or the science is too uncertain to make a reasonable judgment.

A few issues are raised when applying this sort of a test, and the ANPR goes into detail on these issues. For instance, when applying the endangerment test, do you look at GHGs individually, or as a group? There are important implications for how they are regulated. The other issue is whether air pollution would be reasonably expected to endanger public health, welfare, or both. The climate change effect on public health is supposed to be indirect. The ANPR takes comment on all of these issues.

Ms. Ketchum-Colwill next explained that there are several CAA interactions identified in the ANPR. One is that there is similar endangerment language in several provisions of the CAA. Each one is slightly different, but a finding of endangerment under one usually leads to a finding under another. The second this that if you take regulatory action under section 202, then the prevention of significant deterioration (PSD) permitting program would apply to GHGs.

There is a lot of good information in the mobile source section of the ANPR and the supporting documents. The CAA provides for protections from air pollutions emitted from mobile sources. The authorities are flexible for EPA in setting emissions standards for mobile sources. They have achieved significant reductions in several criteria pollutants. The ANPR shows how these authorities would work with respect to GHG, which is basically the same way it they work for criteria pollutants. The petition that is part of the GHG Supreme Court ruling covers both cars and heavy duty trucks. The ANPR looks at cars by category, and is a response to the Supreme Court decision to develop standards. The ANPR discusses several approaches, including how to coordinate with the National Highway Traffic Safety Administration's (NHSTA) CAFÉ program. There is a lot of information on technologies and a detailed analysis of specific standards. Slide 17 of the presentation contains a table that shows the analysis performed last year and updated this year using NHTSA's models. Under the CAA there are broader authorities, so the updated analysis takes the inputs out to 2020, at which point there will be better emissions reductions.

In conclusion, the ANPR sums up the analysis and provides a sense of what might be achieved at cost/payback for light duty vehicles. The message is that the assumptions might be conservative for what they can achieve.

Mr. Ketcham-Colwill next provided highlights of the stationary sources portion. These sections identify several main pathways that could be used for stationary sources regulation. They also focused on two major permitting programs, PSD and Title V.

For the NAAQS approach under sections 108-110, they identified several challenges for GHGs and implications for implementation requirements. Those would vary based on the science as a primary or secondary standard, and whether attainment distinctions would apply. Any use of

NAAQS would be a long term proposition, but is typically required for standards setting. They are looking at a decade before they would see reductions under a NAAQS system. Another observation is that NAAQS would set protection levels in the U.S., but GHG is a global pollution.

Section 111 allows EPA to set New Source Performance Standards (NSPS) for stationary sources. Where there is no NAAQS, like for GHGs, states will have to set standards for existing sources for sources that EPA controls, through a SIP-like system. When assessing authorities, would they allow EPA to tailor them to attributes to GHGs? EPA would have discretion to decide what size sources would be regulated and devise a rational set of categories. They would be required to take into account the costs and energy requirements. The ANPR seeks comment on whether EPA could allow a trading system under Section 111, as it is allowed for other sources. Would trading be appropriate within or across categories, and could a Section 111 system spur innovation if standards are tied to available technology? It also takes comment on the possibility of phased standards. Section 112 reviewed whether it would be appropriate to identify GHG as hazardous air pollutants (HAPs).

He then explained the PSD implications. If EPA were to move toward NSPS for GHG, the biggest challenge would be in permitting. Regulating GHG under almost any authority in the Act would trigger PSD, which would require BACT or other requirements. The ANPR estimates that the number of permits would go from 200-300 per year to thousands of PSD permits per year. Are there administrative or legislative solutions to this problem? The ANPR takes comment on the concept of limiting the program's applicability for setting higher major source thresholds, and also phasing in the program over time. It also talks about presumptive BACT applications by the states. The Agency wants ideas on what is most effective in addressing these issues.

The Title V permit issues are similar, though it applies to more sources. There is a similar set of issues and mechanisms limiting the scope of the program if GHGs were incorporated into Title V permits. The ANPR takes comment on this too.

Mr. Ketcham-Colwill wrapped up the presentation with an overview of the discussion in the ANPR in Title VI ozone depleting substances. He recommended reading the technical supporting document, which includes an assessment of the challenges and limitations of the current state of economic analysis of GHG policies. Economists have furthered estimates of the social costs of carbon. The document also presents the marginal benefit caused by a ton of CO_2 reduction.

Mr. Brenner then thanked Mr. and Ms. Ketcham-Colwill for their presentation and asked for questions and comments.

Brian Turner, California Air Resources Board (CARB), thanked them for the presentation and their work on the rulemaking and analysis. He said they are cautiously optimistic about the opportunities discussed, especially for programs in mobile source regulation and phasing in the standards. Mr. Brenner said that a lot of work has been going on in this area in California, and EPA has already begun discussions with CARB. Mr. Turner said that the low carbon fuel standard was outlined in a similar program, so he was pleased to go forward with these standards.

Elaine Mowinki-Barron, Sierra Medical Center, said that this presentation fits well with the vision and goals workgroup.

Mr. DeLucia asked whether there is a component within the evolving structure to look at land use and transportation design. Would that be under NAAQS? Ms. Ketcham-Colwill replied that this was in the mobile sources section. The scope of the document was ambitious. She asked whether land use also incorporated commuting issues. For that issue she referred Mr. DeLucia to the ANPR, as the answer might be in the background documents. Mr. Brenner said that the approach may depend on which provisions are used. Comments on this subject would be especially helpful as land use issues can fall through the cracks unless someone brings it up.

Mr. DeLucia commented on the connections between GHGs and climate change and energy. The types of energy being used are important, especially in light of the discussion on plug-in hybrid vehicles. Mr. Ketcham-Colwill said that the ANPR does get into the utility and power sector. Various provisions might provide authority for a cap-and-trade or other system.

Phillip Wakelyn, National Cotton Council, asked whether GHGs would be regulated under all provisions of the CAA if they are regulated under one provision. Ms. Ketcham-Colwill replied that once the Agency takes regulatory action under one provision, for purposes of the PSD program, it is a regulated pollutant under specific provisions in the Act. But that does not mean that it must be regulated under all provisions of the Act. Not all authorities of the CAA must be used. The ANPR just wanted to explore how all of the CAA authorities might be applied to GHGs. They also want to know which ones would be appropriate to pursue, and each authority has its own triggering provision. There is similar but different endangerment language. Mr. Wakelyn asked whether requiring GHGs to be regulated under New Source Performance Standards (NSPS) would affect other provisions. Ms. Ketcham-Colwill replied that it will trigger permitting if action is taken under several sections. NSPS is set up under source categories, but takes them one at a time. Standards that apply to one industry will not necessarily apply in others.

Mr. Ketcham-Colwill said that they would not regulate in all 74 possible categories. Historically, they have regulated some pollutants for some sectors and not others. They will need to present a rationale for their selections. Mr. Wakelyn asked whether Title V would have to be triggered if the source is considered major. Mr. Ketcham-Colwill replied that if the source is covered by NSPS, it would be covered by Title V under NSPS, and they would have to decide the size of sources that are subject to that, because some might already be covered. Mr. Wakelyn asked why GHGs would not be regulated in all categories if it is considered an air pollutant. Mr. Ketcham-Colwill explained that the endangerment findings might not be the same for every category. The interconnections in the ANPR show the influence of decisions between sections in the CAA. Mr. Wakelyn said that he thought they had done an excellent job explaining the ANPR.

Mr. Brenner said that the points about Title V and PSD are critical. There is a series of legal theories laid out in the ANPR for ways to manage and limit the effects of PSD and Title V if GHGs are to be regulated. It would be useful to the Agency for people to comment on them

Ms. Ketcham-Colwill said that there is the realization with the ANPR that if they get started regulating under the CAA, they need to be able to address PSD and Title V right away. There are thoughts about how they would fashion the program to be more workable for GHGs. There is some risk here, but some of the ideas have merit. The bottom line is the Agency owes the Supreme Court a response to the Massachusetts case. The ANPR is a big step forward, because they will have to reach the endangerment issue. If they make a positive finding, they will have to regulate GHGs for mobile sources and deal with PSD all at once. There are opportunities to make real reductions here.

Mr. Brenner said that the next CAAAC meeting would be in January before inauguration. Pat Childers, EPA, said that it would probably be January 7-8. They would move forward on the vision and goals in the meantime with all the recommendations for a health-based topic. The Clean Air Excellence Awards ceremony will be on Earth Day in April.

The meeting adjourned.

Clean Air Act Advisory Committee Meeting
September 18, 2008
Doubletree Hotel, Arlington, Virginia

List of Attendees

Name	Affiliation
Charles Collett	National Association of Home Builders
Jeff Muffat	3M Corporation
Richard Bolton	The Center for Toxicology and Environmental Health, LLC
Chris Hessler	AJW, Inc
Valerie Ughetta	Alliance of Automobile Manufacturers
Ben Henneke	Clean Air Action Corporation
Tim Johnson	Corning Inc.
Mark MacLeod	Environmental Defense
Tony DeLucia	East Tennessee State University
Robert Brenner	EPA
Beth Craig	EPA
Robert Meyers	EPA
Pat Childers	EPA
Ralph Marquez	ESP
Robert O'Keefe	The Health Effects Institute
Jack Goldman	Hearth, Patio & Barbecue Association
Janet McCabe	Improving Kids Environment (IKE)
David Foerter	Institute of Clean Air Companies (ICAC)
Elaine Mowinski-Barron	Sierra Medical Center
Don Clay	Koch Industries Inc.
Robert Wyman	Latham and Watkins LLP
Bill Becker	National Association of Clean Air Agencies (NACAA)
Phil Wakelyn	National Cotton Council
Stephen Hartsfield	National Tribal Air Association (NTAA)
William Auberle	Northern Arizona University
Eddie Terrill	Oklahoma Department of Environmental Quality
Anna Garcia	Ozone Transport Commission (OTC)
Ursula Kramer	Pima County Department of Environmental Quality
Jack McClure	Shell Oil Products Company
Kelley Green	Texas Cotton Ginners
Tom Stricker	Toyota Motor North America, Inc.
Eugene Trisko	Attorney at Law
Steven Lee Hensley	USA Rice Federation
Janice Nolen	American Lung Association
Rich Kassel	Natural Resources Defense Council
John Campbell	Caterpillar
Barbara Bankoff	Eli Lilly, consultant

Charles Knauss	Bingham McCutchen LLP
Bill Harnett	EPA
Nancy Ketcham-Colwill	EPA
Jim Ketcham-Colwill	EPA
Michael Ling	EPA
Anna Marie Wood	EPA
Brian McLean	EPA
Jeff Holmstead	EPA
Jeremy Kurtzweg	EPA
Margo Oge	EPA
Dora DeLean	EPA
Brian Turner	CARB
Dan Johnson	WESTAR