

CLEAN AIR ACT ADVISORY COMMITTEE
Doubletree Hotel – Crystal City
300 Army Navy Drive
Arlington, VA
September 18, 2008

Opening Remarks

Rob Brenner, EPA, welcomed the Clean Air Act Advisory Committee (CAAAC) and Bob Myers, EPA.

Mr. Myers stated that there are several options for addressing the July 11, 2008 DC Circuit Court decision to vacate the Clean Air Interstate Rule (CAIR), 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.

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.

The Greenhouse gas (GHG) Advanced Notice of Proposed Rulemaking (ANPR) was published in July 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.

At the end of last year the Appropriations Committee 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. The Agency is now asking some very basic questions that are not addressed in the legislation.

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 working assiduously on the final rule for the radiation standard for the Yucca repository. EPA established a more stringent daily standard for PM 2.5 when they revised the standard in 2006, and EPA is hoping to finalize its proposed boundaries for the new daily PM standards in December 2008. 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.

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, Clean Air Mercury Rule (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. With regard to supplemental analyses, EPA is looking into its options.

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, and 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 EPA has looked at the degree of reliance that SIPs have on CAIR. EPA is assessing the options and providing technical assistance to the legislative effort, and 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, but they are trying to meet the schedule.

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. 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 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. 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.

Steve Hartsfield, National Tribal Air Association (NTAA), asked about dates/deadlines for Yucca Mountain. Mr. Meyers stated that setting the radiation standards is probably the end of their responsibilities under the Nuclear Waste Policy Act.

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, and EPA will take these comments fully into consideration.

CAIR Update

Rob Brenner, EPA, introduced Brian Mclean, EPA, and Bill Harnett, EPA. Mr. Mclean first provided an overview of the Clean Air Interstate Rule (CAIR). The Clean Air Interstate Rule (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.

On July 11, 2008, EPA received the CAIR court decision; the Court decided to vacate the entire rule. 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. 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. 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 to 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. 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. 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.

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. Mr. Harnett added that most SIPs are not in for PM_{2.5}.

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. Both Senate and House are producing proposals to reinstate CAIR. The third option is regulatory, which could follow the legal or legislative path.

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. 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.

Chris Hessler, AJW Inc., said that technology has evolved and that technology should be brought into conversations moving forward. Mr. Mclean responded that this would be revisited.

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? Can they find an out of the box solution to lead to the reductions needed while sorting out the legalities? Mr. Mclean agreed, and mentioned that the legal aspects are being focused on now.

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

Bob Wyman, Latham and Watkins, mentioned the discussion held at the subcommittee level. 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.

Jeff Holmstead, Bracewell & Giuliani, said that in the last few years, we 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 an institutional expertise in how these programs are intended to work. 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.

Eugene Trisko, Attorney at Law, 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 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 added that according to the charter, CAAAC can make recommendations to EPA.

Mr. Brenner said that maybe they could have some individual discussions on the Committee before a decision is made.

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 our 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). The Agency does not have many tools to get the old legacy sources, and 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, gave 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 sources 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.

The Workgroup first identified from the group’s common experience what legacy source programs had success with retirement, and identified those that did not work. They then developed recommendations for dealing with legacy sources to be used by 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. 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 health 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 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.

There was discussion on funding method mechanisms, including healthcare system cost savings; funding mechanisms through climate change legislation; and supplemental environmental programs (SEPs), pollution taxes, and other methods.

Mr. Henneke talked about next steps. 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. Getting legacy units out of inventory is not going very well. 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.

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 when looking at healthcare system costs, they have been talking about the costs of pollution to health. They have the studies on the benefits of pollution reductions. 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 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. Ms. Nolen said that healthcare is chronically under-funded, so this idea is a non starter. Mr. Henneke said 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.

Bob Wyman, Latham & Watkins LLC, addressed 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. They should prioritize this kind of GHG reduction.

Elaine Mowinski-Barron, Sierra Medical Center, asked if the work group discussed trends with fleet systems in Mexico and Canada. Ms. Wood said that was covered as part of the green contracts idea and having it be a federal program.

Don Clay, Koch Industries Inc., suggested that they do a pilot demonstration to show how it works and competes against other EPA programs.

Mr. Brenner asked Mr. Henneke to explain how they should 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. 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 three to five 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.

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. 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.

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

There was consensus among the members to go forward and talk to the new leadership at EPA about the report. Mr. Childers said they would update the CAAAC on this issue through subsequent email.

Bill Harnett, EPA, 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 CO₂ is already a regulated pollutant. This decision

could come at any time. They could find out that CO₂ 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. 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, and they are hopeful for more funding next year.

Mr. Guy said that they also had a presentation on RFS2, which is the requirement that requires renewable fuels by 2022. There is an ANPR expected this fall. They also had a presentation on the GHG ANPR. Finally, they had a presentation from car makers 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.

Mr. Brenner stated that the presentations would be posted online.

Vision and Goal Work Group Report Out

Ursula Kramer, Pima County Department of Environmental Quality, stated that she and Dan Johnson, WESTAR, are the co-chairs of the Performance Measurement Workgroup.

Ms. Kramer reviewed the CAAAC vision and goals project objectives: (1) to develop a concise “working” project to engage the incoming Administration and to guide the CAAAC, and (2) to 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 conference calls, and developed the Draft Goals-Recommendations-Observations Mapping Matrix.

Ms. Kramer next presented the Vision and Goal statements that were built from the 2000 Vision statement. 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 includes communication and public education which 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 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, 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.

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 after fleshing out the statements and incorporating more specific key focus points. The Workgroup wants to update work products completed under other Workgroups to fit them under the goals, and create a basic framework so that the new Administration can tweak the document if necessary. The final draft recommendations will be completed for the January 2009 CAAAC meeting. The Workgroup would also like to develop annual action items for each goal.

Mr. Johnson stated that the Workgroup hopes the document will help to identify great recommendations and understand why some of them were not implemented. 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.

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).

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.

The CAAAC next revisited the Clean Air Interstate (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.

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 CO₂. Mr. Becker stated that this recommendation is with respect to CAIR in addressing Electric Generating Units (EGUs).

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).”

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 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. 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. 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. 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.

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.

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. The timing is not ideal, but the CAAAC does not have the luxury of waiting.

Bob Wyman, Latham and Watkins, stated that 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.

John Campbell, Caterpillar, stated that from an industry perspective, certainty is important and Caterpillar would support the resolution to ensure that they have certainty.

Tom Stricker asked who the CAAAC is speaking for in this scenario - the CAAAC or 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.

Valerie Ughetta, Alliance of Automobile Manufacturers, stated that she 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.

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.

After discussing and incorporation CAAAC member edits to the resolution, 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.”

Mobile Source GHG Technologies

Greenhouse Gases and Light-duty Vehicles

Mr. Brenner 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 (GHGs) 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 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.).

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. 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 CO₂ reduction for \$260-700, depending on the engine. Cylinder deactivation has a similar level of CO₂ 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. CO₂ 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 CO₂ 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 CO₂ for \$500-\$600.

Mr. Haugen next 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. There are significant GHG reductions and vehicle efficiency improvements available without depending on hybrid technologies. Performance and vehicle attributes can be preserved.

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 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 to 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. 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 CO₂ emissions avoided to date.

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. 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.

Bob 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 use formulas.

Steve Hartsfield, National Tribal Air Association (NTAA), asked about where tribes should go in terms of new technologies and new vehicles. Mr. Stricker responded that plug-in vehicles are being driven by energy security rather than CO₂ or environmental issue.

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

Margo Oge, EPA, added that EPA is continuing to look at these technologies and that the engine and power source must be considered as system.

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 first provided 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.

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 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.

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.

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, prevention of significant deterioration (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. 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 GHGs as hazardous air pollutants (HAPs).

He then explained the PSD implications. If EPA were to move toward NSPS for GHGs, the biggest challenge would be in permitting. Regulating GHGs 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.

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.

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

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 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. 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

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 Kassal	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