

Clean Air Act Advisory Committee
May 27, 2010
Almas Temple
Washington, D.C.

Opening Remarks – *Assistant Administrator Gina McCarthy*

Robert Brenner, United States Environmental Protection Agency (USEPA), welcomed and thanked everyone for coming. He turned the floor over to Assistant Administrator Gina McCarthy, USEPA.

Ms. McCarthy welcomed the committee and said she was impressed by the awards ceremony and thanked its sponsors. The award winners for this year were outstanding. They have great enthusiasm and give her and others hope. Ms. McCarthy then thanked Mr. Brenner and Pat Childers, USEPA, for pulling everything together, and thanked the applicant reviewers.

Ms. McCarthy briefly discussed the BP oil spill and acknowledged that it is currently the highest priority for the administrator and for people involved in air quality. USEPA has been doing a ton of work to determine what kind of air quality monitoring needs to be done. In this situation, the first thing people are concerned with is air quality. USEPA has been working to make sure the strategy that is being used to burn the oil on the surface does not increase burdens on nearby communities. Ms. McCarthy encouraged CAAAC members to provide comments and suggestions on what actions to take or how to improve current action, and provide information on different types of available monitoring.

Ms. McCarthy continued by discussing recent accomplishments. The endangerment finding, which came out last December, is a wonderfully sound, comprehensive assessment of climate science to date.

USEPA has also moved forward to finalize the light-duty vehicle rule. They coordinate with the United States Department of Transportation (USDOT) on this joint rule, which moves forward with energy efficiency and greenhouse gases (GHGs). USEPA's involvement allows for much stronger standards against greenhouse gases.

USEPA recently released the tailoring rule, and the Administration is very pleased that they have another climate bill on the table, the Kerry-Lieberman rule. President Obama announced a range of new initiatives related to cars recently as well, in effort to forge a visionary statement. He wants the country to begin to look at regulations in terms of 20-30 years into the future, not just 4-5 years. He also spoke to the importance of looking at how we would regulate the mobile sector in different ways. He told USEPA and NHTSA to look at energy efficiency and greenhouse gas standards for existing vehicles. One important issue is to look at not only new vehicles, but also methods to have better reductions from existing fleets.

USEPA has been busy on the mobile source side because they are doing work with MACTs. This is going to be challenging with regard to state, local, and tribal governments, but they are going to take another look at MACT standards and at pollutants they have not addressed in a while. Additionally, USEPA is also coming out with new SO₂ final standards. USEPA is currently proposing a primary standard only, which has a court ordered date of June 2nd.

One major issue for all regulations is funding. It will be a challenge given all of the challenges at the Federal government level and climbing deficits. They looked at how to provide additional resources to state, local, and tribal governments using creative approaches to streamline the ability of states to respond to issues that are being put forward. They are also looking at voluntary programs and have established a new committee to address these programs.

The Boiler MACT rule came out in April and there are significant reductions associated with that rule. It will hopefully set the stage to move forward with other toxics rules. The cement rule will be coming out soon, and the Utility MACT rule is anticipated to require a lot of hard work.

Ms. McCarthy then thanked staff for allowing her to be involved, and stated her appreciation for their commitment and her desire to help provide them with the resources they need to be successful. She acknowledged that as they attempt to devise rules that hold up to legal scrutiny and meet the requirements to get the necessary reductions to protect public health, there is bound to be dissension because they are dealing with difficult issues. They need to focus on rules that make the necessary reductions and implementable.

Eddie Terrill, Oklahoma Department of Environmental Quality, recalled the issue of states losing their ability to regulate greenhouse gases, which was discussed when Ms. McCarthy met with NAAQA directors. One main challenge is the lack of funding hindering the ability to implement many rules. Another big impediment is the legal and mindset restrictions on the ability of state, local, and tribal governments to be provided with the same training at the same time. USEPA should provide training for all four entities together.

Ms. McCarthy stated that USEPA listens very closely to the suggestions of the CAAAC. They know the difficulties of working at the state level, and people they talk with at the state level share their interest in meeting the reductions.

Tony DeLucia, East Tennessee State University, expressed concern that the letter of the law and legal precedents are one thing, but as a person in the field of public health, there are other very meaningful issues that are subordinate to that. He emphasized the need to address a different set of priorities.

Ms. McCarthy stated that she does not disagree with Mr. DeLucia's comments. While clean air and climate are the top priorities of the Administration, children's health and other concerns are underpinnings of everything they do. The clean air program can deliver more to environmental justice communities than anyone thought possible if they are careful. There are ways to think about vulnerable populations and environmental justice in the rules they are releasing.

Rich Kassel, Natural Resources Defense Council, brought up the issue of diesel retrofits. The original legislation in the Energy Act of 2005 is set to expire and Mr. Kassel wanted to know whether there was a need for reauthorization and whether the level of funding appropriate.

Ms. McCarthy stated that she sees incredible opportunities moving forward. About twenty-five percent of the Administration's new funds are already committed and expended. The next chunk of the funding should go through by the end of September. USEPA is spending money, but there is interest beyond what funding allows. There is a lot of focus on existing equipment, many owned by small businesses that do not have resources available to participate in retrofitting. They have begun focusing stimulus funds in areas that need financing, such as ports.

Steven Hartsfield stated his appreciation that the tribal news and review rule is back on the table. He would like to bring to attention the need for training. He stated that USEPA has omitted the need for training of industry and states on this rule, but they too will be impacted by the rule. Training needs to go beyond only tribes to reveal how the rule will impact states and industry.

Subcommittee Report Outs

Mobile Source Technical Review Subcommittee Report Out

John Guy, USEPA, thanked Gina McCarthy for opening the meeting. He began the Mobile Sources Technical Review Subcommittee Report out, explaining that they had three panels: ECA, ICAO, and RFS2. Regarding the first panel, Emission Control Areas (ECA) for ocean going vessels, USEPA signed a rulemaking in December 2009 establishing these emission control areas, and the North American ECA was adopted in March of that year. The Subcommittee had speakers from USEPA, Maersk, World Shipping Council, and IronBound Community Corps giving different perspectives on the rulemaking. The ECA is 200 nautical miles around the coastline of Canada and the U.S., and includes the island of Saint Pierre & Miquelon and Hawaii. In this ECA, the ships have to use lower sulfur fuels and operate more cleanly due to the tighter emissions standards. In the ECA, there will be NOx controls representing an 80% reduction, the fuel level will be reduced to about 1000 ppm, and there will be large reductions in SOx and sulphate particulate matter (PM). The impact of this rule is not just felt at the ports, but reaches inland for PM2.5 and NOx.

The other panel was the on the progress of International Civil Aviation Organization's (ICAO) concerning aviation emissions. There were speakers from USEPA, International Council on Clean Transportation (ICCT), and Federal Aviation Administration (FAA).

ICAO has agreed to develop CO2 standards for new aircraft, which is especially important because aviation represents eleven percent of U.S. mobile source GHG emissions. USEPA co-led the CO2 task group, and plans to have notice of a proposed rulemaking for NOx standards in 2010.

Finally, the third panel was the Mobile Sources Technical Review Subcommittee (MSTRS), which heard from representatives from USPEA, DOE, and USDA regarding the Renewable Fuels Standard 2 (RFS2), which is 36 billion gallons by the year 2022. The number of gallons and years are set by statutes, and the final rule set the number that applies for 2010, and provided new definitions and criteria for renewable fuels and the feedstocks that go in them. It also sets GHG thresholds as determined by lifecycle analysis.

Economic Incentives and Regulatory Innovation

Keith Mason, USEPA, presented the report-out of the Subcommittee on Economic Incentives and Regulatory Innovation. The Subcommittee continued its discussion about multi-pollutant sector-based air pollution control strategies. In February, the Subcommittee had a robust discussion about how to coordinate air pollution requirements after state and local regulators at that meeting identified the necessity for more coordination. Industry representatives also stated that single-pollutant regulations lead to single pollutant technology investments, and tribal leaders expressed the importance of improving local air quality and the multi-pollutant strategies that could assist in doing so.

Mr. Mason said that the Subcommittee meeting yesterday continued this discussion, and he also spoke about the manner in which the Office of Air and Radiation (OAR) has worked these past two years. Matt Witosky of the Sector Policies Division with Office of Air Quality Planning and Standards (OAQPS) described how OAR has consolidated its efforts around major source categories, and outlined challenges of promulgating major multi-pollutant strategies and the periodic necessity that the Clean Air Act calls for in looking at the standards on a periodic basis. Mr. Witosky pointed out some benefits of a more holistic approach: more efficient use of resources and regulated communities resources; an elimination of redundancies; and a boost for new technologies in areas of energy efficiency investments. He also explained how a coordinated rather than separate rulemaking effort could ultimately lead to this holistic approach.

Mr. Mason reviewed that they then heard from Brenda Shine, USEPA, who leads USEPA's refinery sector efforts at OAQPS. Ms. Shrine identified challenges of moving to a more coordinated approach in refining industry. Members of the Subcommittee agreed that a coordinated, multi-pollutant strategy has advantages but also challenges. These benefits must be communicated to the local community as well. Mr. Mason explained that the Subcommittee was well aware that inherent tradeoffs usually are brought up quickly when discussing a change in policies. The Subcommittee agreed to establish a workgroup, draft a charter, solicit interest for potential subcommittee members, and select key projects that will assist USEPA as it continues to coordinate its stationary air quality programs.

Some possibilities that the group discussed included the manner in which the coordination of a regulatory timeline should begin within a sector; how compliance challenges should be addressed; what capital and investment resources issues are associated with addressing multiple requirements simultaneously; which advanced technology is best; how USEPA can better incentivize facilities to replace outdated/poorly performing equipment; and how to improve energy efficiency while addressing malfunctions. While the group will not be able to address all of these issues, they hope to select a few that will add value. Mr. Mason welcomed potential involvement in this activity, and expressed their interest in establishing a capacity within CAAAC to advise them as they go forward.

Meet 2 of the Clean Air Excellence Award Winners **Bridging the Gap** –*Kristin Riott*

Rob Brenner introduced two of the award winners from the previous night's ceremony, Kristin Riott and Mayor Mick Ireland.

Kristin Riott, Bridging the Gap, thanked Pat Childers for the opportunity to speak to the committee about her organization and the work they do. She described her job as asking people to look into the future and think about the aggregated impacts that their daily behavior will have on all of the earth's systems. She then asks people to change those daily behaviors in order to help these natural systems, as well as ignore the efforts of those trying to create confusion around climate change and other environmental issues. The real effort must be a tripod force, which involves changing public sentiment, law, and industry and technology. She went on to describe Bridging the Gap's philosophy of keeping things as simple, real, vivid, and specific as possible, and helping people take immediate action. She spoke about the more than a dozen different programs they have that engage over 2,700 volunteers in Kansas City per year, and further said that every issue she mentions in her "Five Green Things" presentation has an accompanying program to deal with it, except for population growth.

Five Green Things, which aims to avert close to 10 million pounds of carbon emissions and other pollutants each year through voluntary action. Ms. Riott pointed out that environmental damage is very specific to an individual's age group, gender, and other lifestyle issues, and therefore tailoring the Five Green Things program has been incredibly beneficial.

ZGreen Certification Program – *Mayor Mick Ireland*

Mayor Mick Ireland, City of Aspen, then presented the ZGreen program. Mayor Ireland described ZGreen as a localized program that is primarily aimed at public awareness. Many people in Aspen come forward and ask what they can do to be an active environmental leader, and so they have developed a three-point program which addresses special events, businesses and citizens.

Through the ZGreen Program, it is required that events have zero environmental impact. He explained that this is not simply throwing away all trash from an event, but rather ensuring all trash is recyclable, being carbon neutral on energy use, and providing proof this can all be done with zero carbon impact. He described the critical feature of this program being the availability of the city staff to help, meaning they are on the scene and site with event coordinators and will plan methods to meet the city's standards.

Mayor Ireland said that the business program also has very tough standards to meet. There are strict standard to meet to get into the program, and once accepted, the city will track monthly consumption and help companies reduce theirs. The city looks at everything from energy consumption to materials efficiency, and has a corresponding points system to ensure that a business is comprehensively green.

Lastly, Mayor Ireland discussed the citizens' program. One hundred and fifty citizens of Aspen have been certified green, and the program encourages individuals to take ownership of reducing their consumption rates. The citizens' program checklist also allows citizens to look at their utilities bills and receive a free energy audit, which shows them what steps to take to save money. The individuals who do this and then adapt these steps become certified green citizens.

Mayor Ireland mentioned that they have a lot of ambitious goals in Aspen. They have a goal of becoming carbon neutral by 2015, have joined the climate exchange, encourage the buying of carbon offsests, have a free bike trail system, and plant o double their hydro plant. The main source of carbon in their fleet is the bus system. Aspen is part of RFTA (Roaring Fork Transit Agency), which originated in Aspen and has expanded outward. Mayor Ireland explained that even though they are more expensive, Aspen has hybrid buses, and has sought out and received grants to make their entire fleet hybrid.

BACT Workgroup Update – *EPA initial response to Phase 1 BACT Report and status update on Phase 2 of workgroup – Workgroup chairs*

Anna Wood, acting director of OAQPS, provided CAAAC with an update on the progress that has been made in moving forward with guidance to address GHGs under the Prevention of Significant Deterioration (PSD) program. She explained how CAAAC was instrumental in their efforts to better understand what might be useful to states, permitting authorities, and sources.

Ms. Wood gave an overview of what she will cover, which included a review of Phase 1 recommendations to USEPA and topics for which the workgroup requested USEPA policy guidance; an update on the development of GHG technical information and HG policy guidance; and anticipated plans for providing training for GHG permitting. USEPA's charge to CAAAC in Phase 1 was to discuss and identify major issues and potential barriers to implementing the PSD program under the Clean Air Act for GHGs, with a focus on the BACT requirement. With regard to technical recommendations in the final report, the workgroup put forth that USEPA should provide information about GHG

control measures, including technical, economic, and environmental performance data for these available and emerging measures. The communication aspect is key, and proactivity is important as well, in addition to USEPA ensuring that there is adequate funding for establishment and maintenance of technical resources beyond the January 2011 timeframe.

Phase 1 provided two sets of issues with respect to guidance recommendations. One focused on the need for USEPA to provide guidance on certain aspects of applying the PSD program to GHGs. It also pointed out the need to determine the types of information and methods that are needed to do this in a consistent way. The workgroup suggested that the USEPA provide guidance on pollution prevention measures, efficiency improvement technologies, emissions factors and calculations for GHGs, monitoring requirements, control technologies for GHGs other than CO₂, and ranking of GHGs with regard to climate change impact. Ms. Wood stated that they are moving ahead in developing this guidance. The second set of recommended issues concerned policy issues, with the workgroup consensus that USEPA should address what it means for a control option to “redefine the source”, how to evaluate energy efficiency in a BACT analysis, how to promote new control technologies, how to consider carbon capture and storage (CCS) within BACT, and carbon neutrality of biomass.

Since receiving this information from CAAAC, OAQPS has been working on some technical guidance documents and resources for states, permitting authorities, and sources. They have a GHG mitigation database that their Office of Research and Development (ORD) is creating, which will include performance and cost data on current and developing GHG control measures. Their current focus is on EGUs and cement plants. The other specific aspect that developed was the need for USEPA to enhance the RACT/BACT clearinghouse, with formatting improvements to include GHG control and test data, links to state permits, GHG message boards, etc. Ms. Wood explained that the next key item of focus in terms of technical data will be GHG control measures white papers. The purpose of these papers will be to provide all the available technical, economic, and performance information for certain sectors so that states and sources will have equal access to USEPA’s current thinking based on latest available information.

Ms. Wood moved from the technical update to the policy update. Key policy issues were assembled and prioritized, such as how to use the existing BACT framework for GHGs and calculations. They will follow the framework for top-down BACT and will provide useful and practical insight. The second set of issues in Phase 2 is more difficult, but they anticipate having these issues addressed and resolved by the time they release guidance. Ms. Wood lastly explained that they have a separate effort underway based on commitments made in the tailoring rule to assess and evaluate streamlining techniques that permitting authorities can use to address administrative burden.

Ms. Wood subsequently provided a GHG policy guidance update. Their timeline is between now and January 2011. She stated that they will work closely with states who have permits pending that will include GHGs to address issues related to PSD GHG implementation questions. Ms. Wood concluded with a GHG permitting training update:

OAQPS is developing training models that will have example permits, BACT analyses, and technical references for a training course that will be synchronized with guidance development efforts. Their priority is to provide training for USEPA regions/states before end of 2010.

Lisa Gomez, Sempra Energy Utilities, stated that she appreciates what the Agency is doing to provide clarity on questions of BACT. One thing she urged the Agency to consider is a question related to workshops and training: once GHG BACT has been triggered, what is it and how is it determined? She encouraged a webinar training to clarify when industry has triggered BACT and strategies around Title V and PSD.

Ms. Wood thanked Ms. Gomez for her insight. She said they are also working with NAAQA and regions, and collecting questions. OAQPS is actively looking for PTE guidance for GHGs; the guidance will not be part of the webinar effort, but could be part of a separate guidance effort.

Ann Weeks, Clean Air Task Force, additionally expressed her thanks. As a member of the Subcommittee, she applauded Ms. Wood's summary of their long set of deliberations. Another issue that keeps coming up is the way BACT typically works, which is to start out with an NSPS as the baseline so that BACT technologies are evaluated in a way that meets an NSPS. In this case, there is no NSPS for GHGs for any of the major industries. It is vital that USEPA makes a commitment to working on this to determine the baseline for BACT. This would help to ensure the most success in promoting the more advanced technologies and in attaining the reductions by 2050. They must attain deep reductions by 2050 and maintain the health benefits that they have been achieving in air quality programs simultaneously. Therefore, the Agency must commit on the BACT front and on the NSPS front.

Gary Jones, Printing Industries of America Graphic Arts Technical Foundation, asked whether the training will be available to the regulated community.

Ms. Wood replied that they plan to initially focus on states, locals, permitting authorities, and tribes, since they have not yet thought through other elements. A more clear answer to Mr. Jones's question will be able to be provided as they move forward in the process.

Mr. Jones next encouraged USEPA to not only focus on the emission factors for the industries already identified in Phase 1, but also on emission factors from a broader perspective. This is because the threshold for GHG emission reporting is much lower than that of the tailoring rule; therefore, there are some large facilities that likely will need to report. While it would be infeasible to have emissions factors for every conceivable fuel, it would be useful to have a methodology that states can use to approximate emission factors. This is a critical part of the whole process of releasing additional guidance.

Bill Becker, National Association of Clean Air Agencies first thanked USEPA for acknowledging the daunting challenge for state and local agencies, and for the regulated

community, to meet the requirements of the tailoring rule and BACT; any guidance that can be provided in a timely manner will be beneficial. He secondly stated that everyone should expect some “growing pains” in the new Title V permit program. While he predicted the result would be successful, the launch would not be perfect, and they would have to learn together.

Mark MaLeod, Environmental Defense Fund, added his thanks as well. He said that there was discussion in their subcommittee meeting yesterday about making the BACT permitting process easier. He was glad to hear Ms. Wood say that there would be a separate process to look at BACT, since there was some frustration in the workgroup discussion yesterday regarding a lack of focus. He asked whether the Agency could provide detail on how stakeholders can participate in this.

Ms. Wood confirmed that there is indeed a separate process. Part of the rulemaking that Step 3 of the tailoring rule commits to by 2012 will look at whether the system can administratively handle a lower threshold. Another part will push forward thinking about streamlining measures and how they might work. Important pieces that need to be made public as soon as possible, like PTE guidance, will probably come as a separate piece but still as part of the streamlining effort.

Ms. Gomez emphasized how critical it is that all interested stakeholders have an opportunity to get trained in order to plan for future rules and permits. This would also help states, who would otherwise be inundated with questions from those who were not invited to the training sessions.

Eric Svensen, Public Service Enterprise Group, a co-chair on the Phase 2 group, congratulated Ms. Wood on USEPA’s responsiveness to the workgroup and the seriousness with which they took their Phase 1 report. From Phase 2 they had identified about seven ideas for a Phase 2 focus, and had asked Ms. McCarthy and the Agency for guidance on what would make sense and would be most beneficial for focus. The Phase 2 effort would focus on: 1. How can the BACT process be used to encourage the development of energy efficient processes and technologies, and 2. How can development and permitting for innovative emissions reductions measures be encouraged, and how can innovative control technology waivers be used to change or promote technological applications. They have agreed on a mid-July timeline for work product completion. To date they have had three conference calls and in-person meeting; they anticipate more this month.

Mr. MacLeod provided an overview of the progress of the workgroup on the substance of the two charges. Yesterday they developed an energy efficiency charge of establishing an overall framework with which to look at energy efficiency in the BACT offset process. The overall framework is analogous to the top-down BACT process itself, with the idea of mirroring many of those steps in an energy efficiency process. They are looking into whether it is possible to know available alternatives, rank performance, and assess

context-specific alternatives for various facilities. Mr. MacLeod explained that they are also trying to help develop the questions within that framework that an applicant needs to respond to, and what the state and permitting agency need to ask. States thought it was valuable to develop a list of question and real-life examples of permits in order to ground the process in concrete and not just in theory.

Mr. MacLeod continued with a third observation from yesterday's meeting: his surprise with the extent of information available about energy efficiency, especially for many of the industrial processes. One of the challenges is how to collect, manage, and make available this information to stakeholders and states as they review permits. They are also investigating how to develop an interactive program that builds on the RACT/BACT database.

Regarding the second charge relating to the innovative control technology waiver, Mr. MacLeod stated that the workgroup realized that this is not the first time that the CAAAC has taken up the issue. Therefore, they are reexamining the record and recommendations from the 1996 process.

Anthony DeLucia, East Tennessee State University, followed up with what Mr. Becker said regarding the fits and starts of the process, and wondered whether overarching federal legislation would have the ability to impact the initial bumpy starts of the process. If this is the case, he added that it may be useful to have more discussion about how the process should be guided.

Ms. Wood said that the Agency has stated that legislation is the preferred course of action to address GHGs, but that in the meantime they must respond to the Supreme Court decision in Massachusetts vs. EPA. Their hope is that whatever happens on the legislative front will complement the regulatory front.

Gene Trisko, Attorney at Law, complimented the Agency's management of the process and discussions within the process to stay within the scope of the law. He noted the importance of recognizing the boundaries of the law, and the temptation to explore all the options that may produce beneficial outcomes but which in fact may not fall within the law (and would therefore be a waste of time). In reference to Ms. McCarthy's request for advice on using the BACT process to promote energy efficiency, Mr. Trisko observed that the NSR and BACT process are themselves inherently discouraging of investments in energy efficiency, within utilities sector and probably in other major affected source sectors. Until a legislative relief is devised, NSR itself is the problem, and they need to find a way—either through regulatory or legislative means—to remove those constraints on investment. Otherwise they will continue to slide down the slippery slope of an aging industrial infrastructure that is not being modernized and replaced, and is not competitive in the work marketplace.

Mr. Becker said that there are a few options that may allay some of the concerns Mr. Trisko has expressed with regard to NSR. First, when a plant becomes more energy efficient, by definition, it will have fewer emissions and does not have to increase its

emissions above significant levels to trigger NSR. Therefore, the choice to extend operating circumstances to trigger NSR is within the sources' control. NSR is not automatically triggered unless the source increases its emissions significantly. Another way to alleviate Mr. Trisko's concerns is to get behind the legislation that does away with a large part of NSR and push it through this year.

Voluntary and Community Programs – Jay Benforado, USEPA

Jay Benforado, USEPA, discussed the charge charter for the Clean Air Advisory Committee workgroup and background on analysis that USEPA has already done regarding voluntary programs.

They used CAAAC vision and ideas from last year as the starting point. Ms. McCarthy asked Mr. Benforado to help understand the portfolio of voluntary programs: what they are, how they work, who the partners are, and how they work together.

Ms. McCarthy posed the following questions to the CAAAC:

- What general principles should guide OAR investments in partnership and community-based programs? (have suggestions for improving the proposed principles?)
- What types of best practices should be considered when designing, implementing, and operating partnership programs? What best practices are relevant for community-based programs?
- What improvements would create synergies and improve coordination across OAR's and other EPA partnership and community-based programs, including grant programs?
- How can OAR better leverage opportunities to partner with others (e.g. other federal, state, local, and tribal organizations, NGOs, industry associations, and others) to implement, operate, and evolve its partnership and community-based programs? What partnership models could enable OAR to significantly expand progress towards its goals in light of limited resources?
- How can OAR best understand if its partnership and community-based programs are achieving results commensurate with the scale of investment?

Mr. Benforado stated that Ms. McCarthy would like the task group to think more broadly than which programs can enable OAR. She already commissioned a staff work group over three months, which found that OAR has a lot of different programs. There is no easy definition to separate the programs, but there are partnerships related to communities, information and research, and international programs.

These programs align well with OAR's strategic goals and strategies, but there are opportunities to redefine them. Ms. McCarthy would like to find alignment with OAR priorities. One value of partnership community programs that isn't easy to measure is the capacity building dimension. Programs often build capacity, but do not necessarily achieve actual outcomes.

Mr. Benforado stated that the task group should also focus on whether there is overlap among the programs, or gaps between the programs. In terms of gaps, the group should determine whether any programs did not have coverage in a regulation, whether there are gaps in implementation or no capacity for implementation, or whether there are gaps in institutions at the local level. He said that would also be helpful to have suggestions about how to link programs together in an efficient manner.

Michael Formica, National Pork Producers Council, stated that he would have liked to have seen their program listed. He also encouraged reaching out not just to industry, but also to representatives of agriculture and people from the Department of Commerce.

Mr. Becker wondered how much money is being spent on those programs in total and if USEPA has done analyses of benefits of these programs. Some programs are very good, but difficult to measure. The issue is whether, given priorities, these voluntary programs more important than providing other guidance like BACT guidance to states to meet permitting requirements.

Mr. Benforado agreed that this issue is the heart of the question. Regarding evaluating benefits or programs, USEPA has looked at the programs to see how to evaluate them, and found that they can quantify some single endpoint programs with some degree of precision. They discussed the other kinds of benefits yesterday (i.e. capacity building, community engagement, and linkages with other agencies). Ms. McCarthy would like the task group to provide feedback on how to make decisions on quantification.

Mr. Becker stated that it is sometimes difficult to distinguish between benefits from voluntary programs and the issues they advocate. For example, 3M is going to make decisions in the future to make product changes to be more energy efficient, and they may get the gold star from USEPA for doing so, but the question is whether the company would have thought of making these changes as merely “smart business” changes, or whether it really was ENERGY STAR that deserves credit for the changes.

Lisa Gomez, Sempra Energy Utilities, stated that especially now, when the government is resource-strained, it is vital to make sure they are doing things in the most optimal way. It would be helpful to pull information together on benefits before the first workgroup meeting to be able to discuss whether the benefits reflected are complete.

Mr. Benforado stated that USEPA could pull together benefits with not too much work and share that in first couple of meetings.

Mr. Jones suggested having a communication strategy to let people know that these programs exist, and using this group as an opportunity for USEPA to reach out to industry and contribute to sustainability.

David Foerter, Institute of Clean Air Companies, stated that USEPA seems to have taken a bottom-up approach. He suggested it may be useful to take another broader perspective. In using a bottom-up approach, he suggested looking at how many full-time employees

are working for the programs and whether some partnerships have fulfilled their purpose, or whether programs have altered their purpose. If using a top-down approach, he suggested that they look at whether there are some environmental issues that are not being addressed.

Mr. Benforado clarified that Ms. McCarthy is not looking to evaluate individual programs, but would prefer to be one level up. There is simply not enough time to address all programs individually, but there do seem to be natural groupings of certain programs (i.e. climate programs).

Mr. DeLucia suggested looking closely at what communities are doing. . Communities want tools to measure not just traditional outcomes, but nontraditional outcomes as well, such as a health impact assessment technique.

Mr. Benforado acknowledged that USEPA has not done enough on the community dimension and that one priority is changing the conversation about environmental programs.

Mr. Becker suggested assembling a toolkit intended to inform people who might like some of these programs and want to participate in initiatives.

Mr. Benforado agreed that this was a good thought. He then discussed the five questions in the charge and stated that the questions are general enough so that the group does not have to explicitly answer the questions directly in the report. He then gauged interest in members who would like to be involved in the task group and stated that it would also be nice to have a small USEPA contingent participate.

People interested in participating included Mr. Goff, Ms. Gomez, Mr. Goldman, Mr. Formica, Mr. Jones, Mr. DeLucia, Mr. Muffat, Mr. Hartsfield, Ms. Watson, and Mr. Terrill.

Case Study for Incorporating Reductions from Renewable Portfolio Standards and Energy Efficiency measures in SIPs – *Chris Stoneman, EPA*

Chris Stoneman, USEPA OAQPS, introduced himself and explained that both he and Bob McConnell would be presenting a case study they have been working on for a year with John Moscoe, who is the Region 1 energy expert. He said that they were very interested in gathering feedback from the group.

Mr. Stoneman said that the purpose of the presentation was to discuss the incorporation of energy efficiency and renewable energy measures into state implementation plans (SIPs). Mr. Stoneman explained that this is a priority for the Office of Air and Radiation (OAR), and as the NAAQS are tightened, the need to find additional reductions emerges. He emphasized that all of these new NAAQS are going to put more pressure on states and

industries and others to find additional reductions, so OAQPS has been trying to help with this process. In addition, the states are expanding their renewable energy and energy efficiency programs, and it would be beneficial to capture some of those reductions and bring them into the SIPs in a more significant way than has been done in the past. Finally, the American Reinvestment and Recovery Act has devoted a substantial amount of money to energy efficiency and renewable energy, and a lot of money will be sent out to the states primarily from the Department of Energy.

Mr. Stoneman referenced the EPA guidelines that came out in 2004 that were specific to energy efficiency and renewable energy measures and how to bring those into SIPs. He said the three options available to states today were SIP control measures, weight of evidence demonstration, and a SIPs emissions baseline. He explained that to be approved as a SIP measure providing emission reductions, the measure needs to be quantifiable, surplus, enforceable, and permanent.

Mr. Stoneman talked about the underutilization of the EPA guidance, in addition to the fact that there has been a lot of activity on the energy efficiency and renewable energy side. He explained that 29 states and Washington, D.C. have Renewable Portfolio Standards (RPS) policies in place, and that they all vary in their stringency. The policies range from 10 to 40 percent, and typically have a fee associated with non-compliance. Additionally the majority of the states have adopted energy efficiency programs, which are also highly variable from states in the northeast and west spending at least \$25 per capita on energy efficiency programs, to some that spend less than \$1. He reiterated that since the 2004 guidance came out there has been a growth in energy efficiency and renewable energy programs, but also concern that the states have not done enough with it. He explained that they decided to take a practical approach to this concern, and that is why the case study seemed practical. They decided to take Connecticut's RPS program, and figure out how to bring it into a SIP. OAQPS and Region 1 began scoping out what it would take to bring Connecticut's RPS program into its SIP and found very promising results that seemed worth pursuing.

Mr. Bob McConnell, USEPA Region 1, took the floor, speaking about his interest in this study in Connecticut because of the potential to bridge greenhouse gas and criteria pollutant worlds. The managers at EPA charged them with trying to quantify the emissions reductions of criteria pollutants that state RPS and clean energy programs were getting. Connecticut's RPS program seemed ideal to lend itself to that sort of analysis.

Connecticut's program is similar to many others, as it requires a minimum percentage of their retail load be from renewable energy sources. In 2005, 4.5% of electricity had to come from renewables, and the maximum is reached in 2020 with a mandated 27% of electricity from renewables. Connecticut's program was strong for a multitude of reasons, the first of which was that Public Utilities Control annually evaluates whether electricity suppliers actually purchased the required amount of electricity from renewable resources; if not, they are charged a fee. Since 2005 the electricity suppliers have met those requirements every year except one.

Switching from renewables to energy efficiency, Mr. McConnell spoke about the impact of Connecticut's mandatory program. There is state legislation requiring the Public Utilities Commission to assess a fee to residential and commercial utility bills. These fees are used to raise revenues to assist home owners and businesses with energy efficiency programs. These fees have amounted to about \$90 million per year, which is now being supplemented by additional revenues streams. Connecticut is one of the states that participates in the Regional Greenhouse Gas Initiative, and has begun allocating allowances for this program which raises revenue. He said that a significant amount of money is available to the state to use for energy efficiency improvements, both in the residential and commercial and industrial sector.

Mr. McConnell then moved on to talk about the longer history of Connecticut's energy efficiency program. The program started in 1998, and when comparing Connecticut's growth and electricity use to the whole nation's over the ensuing decade, Connecticut's has been slower. The numbers are rather dramatic, but fail to take into account that the population of the nation has increased much more rapidly than Connecticut's. Mr. McConnell explained that they set out to quantify the magnitude of emissions reductions that some of these programs have had on reducing criteria pollutants. They examined NOx reductions because Connecticut has been in non-attainment for ozone for awhile. Real data exists for the amount of electricity that Connecticut's electricity providers had to procure from renewable means in 2005. They did calculations with NOx emission rates to produce an estimated figure of what the NOx reductions would be with the newly available renewable energies displacing fossil fuel fire generation. The other approach they considered was to use an electrical supply dispatch model. Though they did not have the resources to do the modeling, he explained that they did look at how the existing models could work.

In terms of the open discussions that have taken place with Connecticut, Mr. McConnell said that they are developing a rough outline of what Connecticut would need to include in their SIP for energy efficiency and renewable energy programs. Region 1 will probably develop an outline of what they believe Connecticut needs to do in terms of gathering information, documenting the reductions that accrue from their programs, and submitting them to Region 1. Connecticut will also need to work with OTC to figure out what impact the energy efficiency and renewable energy programs will have on future year EGU emissions.

Mr. McConnell spoke about the predicted initial magnitude of Connecticut's energy efficiency emissions reductions. Connecticut estimates about 60 MW of peak load reductions to occur annually due to existing energy efficiency programs, which are assumed to last for 10 years. Further, Connecticut believes it can boost this to 160 MW per year if additional funding is provided. He said that they translated this into a NOx emission reduction of 10 tons per day by the year 2013, by using historic data from the ISO.

Mr. Stoneman finished up the presentation by discussing the goals of the case study. Sharing the Connecticut study with other states is important, because it allows them to

see an example of a study that worked. They also hope to develop other examples, as well as a workbook manual that shows practical ways to implement the 2004 energy efficiency/ renewable energy guidance. Additionally, OAR is developing a road map for states and regions to incorporate energy efficiency/ renewable energy measures into a SIP. The intention behind this roadmap is to clarify the core requirements and address any issues the states may have in particular.

He put out some questions to the group for their consideration. In particular he asked if there was any best way to instigate efforts to take advantage in SIPs of energy efficiency/ renewable energy-generated emissions reductions. He asked the group what they saw as the biggest obstacles facing the states, what are actions USEPA could do to help states, tribes and local agencies account for energy efficiency/renewable energy measures in SIPs, what states would serve as best examples to feature in a workbook, and what issues concerning the application of USEPA's energy efficiency/renewable energy guidance the workbook should address.

Ann Weeks, Clean Air Task Force, said she is concerned with the permanence of aspects such as the energy efficiency light bulbs, the process changes, the fuel change, etc. She emphasized that she would like to know how they will show the permanence of the energy efficiency measures that are put into place.

Mr. McConnell responded that they asked this question directly to the Connecticut DEP, and they seemed to respond that most equipment will last for a certain number of years, but in general they believe energy efficiency progresses with time.

Susana Hildebrand, Texas Commission on Environmental Quality, said that because Texas is a very large state, and therefore a reduction in one area does not mean that area will actually see a reduction in pollution that will affect its emissions. Additionally, Texas is on its own grid, which complicates things. Ms. Hildebrand said that it is necessary to find a way to address the differences between grids and states.

Mr. Stoneman replied that one of the perennial questions is where and when the emissions reductions will occur. It can be quantified on paper, but the question of where and when they will occur still remains. The idea of doing modeling is one method.

Ms. Hildebrand cautioned them not to assume that what happens in the northeast is applicable to rest of the country. Also, when looking at energy demand there is a big difference for states in the same grid versus states on their own grid.

Mr. Brenner urged the group to step back and refocus on the questions surrounding the Connecticut example. There are definite uncertainties but there will be air quality benefits. The difficulty is figuring out where and how large they are, because it is important to avoid treating them as zero, as well as granting them to areas that are not receiving them. He said the goal was to assess whether this model did a good job or if there was a completely different method that would be more appropriate. He characterized the track they were on as one that tried to use tools such as modeling and

past figures for future predictions. The goal is to determine whether this will provide a good assessment for what the SIP credit should be.

Mr. Childers closed the meeting by discussing the next meeting in October. He informed the committee that membership will expire June 1st and that those who have been members for six years will receive a thank you for their contribution, but they are still welcome to continue working on work groups. There will be many new members in the October meeting and he will send out new topics to discuss. They currently have three working groups, BACT, Voluntary Programs, and Sector-based Multi-pollutant. Members should inform Mr. Childers about their availability for the October meeting or topics they would like to discuss. He would appreciate feedback on the awards ceremony and suggestions for how to increase ceremony attendance.

Clean Air Act Advisory Committee
May 27, 2010
Almas Temple
Washington, D.C.

List of Attendees

William Becker	National Association of Clean Air Agencies (NACAA)
Jay Benforado	EPA OAR
Rick Bolton	Center for Toxicology and Environmental Health (CTEH)
Robert Brenner	United States Environmental Protection Agency (U.S. EPA)
Pat Childers	U.S. EPA
Anthony DeLucia	East Tennessee State University
David C. Foerter	Institute of Clean Air Companies (ICAC)
Michael Formica	National Pork Producers Council
Terry Goff	Caterpillar, Inc.
Lisa Gomez	Sempra Energy Utilities
John Guy	U.S. EPA
Stephen Hartsfield	National Tribal Air Association
Christopher Hessler	AJW, Inc
Susana Hildebrand	Texas Commission on Environmental Quality
Gary Jones	Printing Industries of America Graphic Arts Technical Foundation
Mark MacLeod	Environmental Defense Fund (EDF)
Keith Mason	U.S. EPA
Gina McCarthy	U.S. EPA
Jeff Muffat	3M
Don Neal	Calpine
Eric Svenson	PSEG
Eddie Terrill	Oklahoma DEQ
Eugene Trisko	United Mine Workers of America
Phillip Wakelyn	National Cotton Council
John Walke	Natural Resources Defense Council
Kathryn Watson	Improving Kids Environment
Ann Weeks	Clean Air Task Force
Anna Marie Wood	U.S. EPA

