

Federal Advisory Committee Act
Clean Air Act Advisory Committee

Mobile Sources Technical Review Subcommittee

June 16, 2016

*EPA's National Vehicle & Fuel Emissions Laboratory
2000 Traverwood Drive, Ann Arbor, MI 48105*

Introduction/Opening Remarks

Mr. Drew Kodjak called the meeting to order at approximately 9:00 am on June 16, 2016, reviewed the agenda, and asked all workgroup members and persons in attendance to introduce themselves. The list of meeting attendees is provided in the appendix. Mr. Karl Simon (sitting in for Ms. Gay MacGregor) noted that the next MSTRS meeting would most likely be in October of 2016 and mentioned that a request would be sent to members to ask about availability for specific meeting dates. Mr. Simon then asked for a vote on the minutes of the December 17, 2015 MSTRS meeting (approved).

Office of Transportation and Air Quality Update

The Director of the EPA's Office of Transportation and Air Quality (OTAQ), Mr. Chris Grundler, thanked subcommittee members for their attendance and provided an update on EPA activities. He also noted that he was glad the members were able to tour the laboratory facilities, as they have been upgraded recently, and the EPA is proud to have the capacity to do the testing they do. Mr. Grundler also mentioned that a lot of changes are occurring and coming, both with a new administration in 2017 and also with changes in automobiles. He noted that there are new automakers and changes in automobiles that reflect customers' needs and wants.

Mr. Grundler noted that OTAQ is working on the Renewable Fuel Standards, which will be finalized in November. They are also working on the final Phase 2 Greenhouse Gas (GHG) Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. Mr. Grundler stated that the EPA is conducting a rigorous midterm evaluation of the Light-duty Vehicle Standards for model years 2022-2025 and will make a determination by 2018 on whether the standards are appropriate, overly stringent, or not stringent enough. The draft technical assessment report is undergoing interagency review, and the report will be published for public comment at the end of June.

Mr. Grundler stated that the EPA is working on an endangerment finding for GHG emissions from aircraft. The EPA is expecting the International Civil Aviation Organization (ICAO) to finalize international CO₂ standards for aircraft, and the EPA will evaluate whether to adopt this international standard in the U.S.

Mr. Grundler stated the EPA is working on a settlement with Volkswagen over its emissions standards violations. However, he also noted that he has a gag order from the Court, so he will not be able to discuss the settlement details at this time.

Mr. Grundler expressed appreciation to the Ports Workgroup for their efforts. He mentioned that the EPA is seeking advice on the best place to start their efforts for a ports program, and the EPA is ready to start working on implementing the recommendations of the workgroup.

Comments and Discussion

Mr. John Viera asked when the heavy-duty rule will be published. Mr. Grundler responded that the EPA has requested expedited Office of Management and Budget (OMB) review, and he expects the rule to be published by the end of summer.

Mr. Jim Kleish asked about the timing of the proposed mid-term evaluation determination. Mr. Grundler replied that a decision about the proposal date has not been made, but the final rule must be completed by April 2018.

Ms. Nancy Kruger asked whether there was any information about Volkswagen three-liter engines that could be shared. Mr. Grundler responded that the EPA is having intense conversations with the company about what can be done.

Ms. Deborah Bakker asked whether there was a tool available that could increase the transparency of the data the original equipment manufacturers (OEMs) provide. Mr. Grundler noted that it is a general goal of the EPA to be as transparent as possible with information collected related to vehicles and fuels. Mr. Kodjak mentioned that from an international perspective, the U.S. EPA is the most transparent agency of its type, but he noted there is still room to improve upon this. Mr. Grundler noted that the positive outcome with Volkswagen proves the importance of testing, accountability and enforcement.

Mr. Reynaldo Agama asked whether the interagency summits the EPA has started having could be open to the public or to industry. Mr. Grundler responded that this may be a possibility in the future, or for a portion of the meetings. He noted that at this beginning stage, the goal was for the agencies to be able to have direct informal conversations with each other.

One MSTRS member asked what could be done to celebrate the cars or companies that are highly compliant with regulations, noting that the public usually only hears about the non-compliant, bad actors. Mr. Grundler responded that the vast majority of vehicles are compliant, and it is important to have consequences for law-breakers, but he noted that more could be done to highlight compliance.

Mr. Kodjak noted that China has developed a domestic emission control area (ECA) focused on fuel sulfur, which will be an acceleration of what is already being done under the International Maritime Organization (IMO), stating that it is good that China is concerned about emissions in these areas and is taking this step. He also noted that there is international movement in "green freight."

Presentation – Ports Workgroup Report to the Mobile Source Technical Review Subcommittee (MSTRS)

Dr. Lee Kindberg and Ms. Sarah Froman gave a presentation on the MSTRS Ports Workgroup recommendations report. A map was presented showing ports in relation to areas designated as nonattainment or maintenance for the National Ambient Air Quality Standards (NAAQS). The charge for the Ports Workgroup included developing an EPA-led voluntary port initiative and determining how to effectively measure air quality and greenhouse gas (GHG) performance of ports. The workgroup was asked to consider past MSTRS recommendations, existing port environmental programs, ports in the context of the broader transportation supply chain, and information from the EPA's ports assessments. Ports are complex legal and operational systems that include the port authority, port facility visitors and users, other port operators, and other entities that are impacted by port operations, such as surrounding communities.

The following subgroups were created within the Ports Workgroup: Definition/Scope of a Port, Technology Implementation and Barriers, Federal Agency Coordination, Port Inventories and Metrics, Strategies for Community-Port Engagement, and Program Design/Structure. The recommendation report reflects the viewpoints of all workgroup members. Recommendations where workgroup members had differing views were identified with an asterisk. An overview was provided of the recommendations in each section of the report. In Section 2, the workgroup recommends that the EPA establish a voluntary ports environmental performance program, which the Workgroup called PACE (Port Action for a Clean Environment). The scope of the PACE program and overall program design are also addressed in Section 2. Summaries were provided for the subsequent six sections of the report, which comprise six focal areas of the program, including: emission reduction strategies, community-port engagement tools, coordination with relevant government programs, increasing and targeting funding, information clearinghouse and communications, and inventories and metrics. Section 9 identifies non-consensus or out-of-scope recommendations.

Next steps include discussion of the recommendations report and incorporating MSTRS suggestions into the report. The Ports Workgroup will present an update to the CAAAC at the June 29, 2016 meeting in Washington D.C. Next, CAAAC suggestions will be incorporated into the report, and the CAAAC will submit the final recommendations to the administrator.

Comments and Discussion

Ms. Nancy Kruger stated that Congress thinks of air quality as needing one pot of money, so it is important to note that Diesel Emissions Reduction Act (DERA) funding needs to be balanced against other state grants. She suggested that the report note that DERA should not be increased at the expense of other funding programs. She would also like to see "reduction in air pollution and improvements to public health" be noted throughout the report as the goals of the recommended program.

Mr. Rich Wagner noted a few lessons learned from working with China: 1) there must be measurements to understand the extent of any emissions problems, 2) any path forward needs to be location-specific for ports, 3) there need to be clear benchmarks, such as emissions benefits,

timetables, etc., and 4) there needs to be monitoring for compliance and enforcement, both for voluntary and non-voluntary programs.

Mr. Kruger requested that Mr. Wagner's four lessons learned be incorporated into the report as part of the "vision" of the program, noting that the goal of the workgroup is to make recommendations to address ports in a meaningful way.

Mr. Kodjak mentioned that enforcement may not be the best term to use when talking about a voluntary program.

Mr. Wagner suggested that "monitor, adjust, and improve" could be used as the term rather than "enforcement."

Mr. Simon mentioned that the report could mention that there may be private funding areas that could be investigated along with public funding for the recommended program.

Mr. Rasto Brezny stated that the workgroup has developed a good report and noted that one valuable area of the report to note is that ports are different from each other and have differing amounts of money and experience to put toward emissions reductions. He also mentioned that the value of inspection and maintenance (I&M) did not make it to the roadmap in the report, and he would like to see it added. He feels that I&M is an important part of any program and can provide a lot of good information to an inventory. He also stated that there are emission benefits associated with maintenance, but these are difficult to quantify. Additionally, he noted that retrofits could also be a pathway for the roadmap.

Ms. Simone Sagovac suggested that guidelines for a port would be helpful, and she noted that the equipment going in and out of the port would be a good place to start because that equipment provides more benefits - they provide benefits not only at the port but also the other areas where the equipment travels.

One MSTRS member suggested that the report focus on exposure reduction rather than emissions reduction. This member also suggested that the long list of recommendations could be expressed as "elements" of the program and noted that the program should focus on the value proposition.

Mr. Kodjak noted that the Ports Workgroup authored this report and opined on how to integrate comments from the MSTRS into the report. He suggested that there might be a statement from the MSTRS included at the beginning of the report, and he recommended that the report itself not be modified based on MSTRS comments.

Another MSTRS member wanted to note in the report, somehow, that consensus could have been reached, given more time. The concern was that the EPA could interpret non-consensus as impasses within the group, and the member did not want these areas to be ignored by the EPA.

Mr. Kodjak asked whether there was a motion to approve the report with the items discussed and a draft cover note from the MSTRS. The motion was moved and approved by the MSTRS.

Ms. Froman noted that the CAAAC will have several weeks to review the report. The Ports Workgroup is going to try to have a teleconference this summer with the CAAAC to get approval of the report, rather than waiting for the fall CAAAC meeting.

Mr. Simon thanked the Ports Workgroup for its efforts in developing this report.

Presentation – Truckers Against Trafficking

A video was played by Mr. Blair Chickasuye from the organization Truckers Against Trafficking that described the scope of the human trafficking problem and ways that truck drivers can help.

Panel Presentations - Greenhouse Gases and Transportations Planning - New Opportunities for State and Local Governments

Ms. Laura Berry introduced the presenters and the topics to be discussed in this panel.

Presentation – The Travel Efficiency Assessment Method (TEAM): Development and Case Studies

Mr. Mark Simons gave a presentation on the development of the TEAM and case studies. A chart was presented showing U.S. GHG emissions by economic sector. After electricity generation, transportation is the next largest source of U.S. GHG emissions. Another chart was presented showing the contributions of transportation GHG emission sources. Light duty passenger vehicles contribute the largest share of GHG emissions from transportation. Travel Efficiency (TE) strategies reduce emissions by affecting travel activity. Examples include travel demand management, changes to public transit, travel pricing, and changes to land use. A chart was presented showing expected reduction from TE strategies in 2050.

The Office of Transportation and Air Quality's (OTAQ) travel efficiency program is working on the development of TE assessment tools, is assessing TE strategies for reducing vehicle miles traveled (VMT) and emissions, and is working to inform and encourage TEAM use. Regional case studies were conducted, and an overview of the 2015 results was presented for each region, along with a more general summary of case study findings.

Comments and discussion were held until after all panel presentations were delivered.

Presentation – Lessons Learned from California's Sustainable Communities Act

Ms. Nicole Dolney and Ms. Heather King gave a presentation on the lessons learned from the Global Warming Solutions Act (Assembly Bill 32, 2006) and the Sustainable Communities and Climate Protection Act (Senate Bill 375, 2008). Benefits of the Sustainable Communities and Climate Protection Act include: public health/air quality, natural resource conservation, economic opportunity, accessibility, mobility and housing choices. The Act supports increased coordination within metropolitan planning organization (MPO) regions and inter-regionally, increased public dialogue, and shared knowledge of modeling and data. Early successes, challenges, and opportunities of the Act were also presented.

Comments and discussion were held until after all panel presentations were delivered.

Presentation – Climate Change and the Planning Process

Kelly McGourty presented an overview of her organization, the Puget Sound Regional Council (PSRC) and its work to reduce GHG emissions. The PSRC is a federal and state designated planning organization involved in transportation, growth management, and economic planning. The PSRC adopted VISION 2040 in April of 2008, which includes a sustainable environmental framework, a numeric regional growth strategy, multicounty planning policies, regional policy direction, designated regional centers, implementation actions, and monitoring. More than 20 multicounty planning policies in VISION 2040 address climate change.

The PSRC also adopted Transportation 2040 in 2010, which makes progress on major transportation system issues and informs near-term project designs, aligns with VISION 2040 and the Regional Economic Strategy, and is designed to support access to job centers and improve freight. The PSRC employs a four-part GHG strategy, including: land use considerations, user fees (i.e., implementation of roadway pricing), expansion of transportation choices, and supporting the development of technology to reduce vehicle emissions. The PSRC receives over \$240 million per year in federal transportation funds from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The PSRC is engaged in climate resiliency planning that will be expanded in the 2018 update to Transportation 2040.

Comments and discussion were held until after all panel presentations were delivered.

Presentation – The Impact of Community Design on Greenhouse Gas Emissions

Mr. David D’Onofrio gave a presentation on the Atlanta region, and the Atlanta Regional Commission’s (ARC) work on climate change, community design, and greenhouse gases. Past climate change work at the ARC included emission inventories, scenario planning, project evaluation, and community design. A chart was presented showing a decline in per capita CO₂-equivalent emissions through 2040. Another chart was presented showing potential future increases in CO₂ emissions for various emission control/reduction scenarios. A chart was presented showing that transportation and household electricity account for 61 percent of U.S. GHG emissions. Research is being conducted to understand neighborhood level emissions, including work in transportation emissions modeling to establish a neighborhood-level inventory of CO₂ emissions. Additional graphics were presented on the subject of how community design can impact GHG emissions. Lessons learned include: technology drives emissions; planning has a small, but important role to play; good community design can reduce emissions without asking people to change behavior; and the federal government has to drive change in conservative states.

Comments and discussion for all panelists

One MSTRS member asked whether there were any incentives offered or planned to get older vehicles off the road. The panelists replied that there were not any for personal vehicles, but

there were some retrofits offered for other types of mobile equipment. They noted that it is a cost issue.

Ms. Jackie Grimshaw noted that improvement in emissions will not be realized in less densely populated areas with the programs discussed today. The panelists noted that service and land use of a transit system must be considered together, or the transit system will fail.

One MSTRS member asked whether the panelists' organizations will be commenting on the proposed Department of Transportation performance measures. The panelists responded that they would be commenting, and Ms. Dolney and Ms. King noted that the California Air Resources Board will be commenting in support of the performance measures.

Mr. Jim Kleish asked about the sentiment in Georgia regarding electric vehicles (EVs), noting that there have been drops in sales when no incentives were offered. Mr. D'Onofrio noted that some incentive may be returning in Georgia for EVs, but not at the previous level.

Mr. Rich Kassel asked Mr. D'Onofrio about how to close gaps between business-as-usual and 2050 projections. He noted that New York estimated they need reductions of 50% from non-technical solutions. Mr. D'Onofrio noted that New York City and Atlanta are quite different in size and density, and the land-use patterns in Atlanta make reducing GHG emissions from the transportation sector more difficult.

Adjournment

Mr. Simon noted that the MOVES workgroup will be starting up, with the first meeting anticipated in August or September of 2016 with quarterly meetings. He noted the workgroup will be providing recommendations for the MOVES model updates over a one-to two-year process.

Mr. Kodjak thanked everyone for their attendance and adjourned the meeting.

Appendix

MSTRS Meeting Attendance List	
Subcommittee Members	
Name	Organization
Reynaldo Agama	Caterpillar
Bob Anderson	Chevron Global
Bob Babik	General Motors
Deborah Bakker	Hyundai Motor Company
Rasto Brezny	Manufacturers of Emission Controls Association
Rick Cameron	Port of Long Beach
Blair Chikasuye	Hewlett Packard
Andrew Cullen	Penske Logistics
Mridul Gautam	Mid-Atlantic Research Institute
Andrew Green	Puget Sound Clean Air Agency
Jacky Grimshaw	Center for Neighborhood Technology
Peg Hanna - by phone	New Jersey Department of Environmental Protection
Michael Iden	Association of American Railroads
Tracey Jacksier - by phone	AIR LIQUIDE Research & Development
Rich Kassel	Tri-State Transportation Campaign
Lee Kindberg	MAERSK
Jim Kliesch	American Honda Motor Company
Drew Kodjak	International Council on Clean Transportation
Nancy Kruger	National Association of Clean Air Agencies
Courtney McCubbin	U.S. Environmental Protection Agency
Matt Miyasato	South Coast Air Quality Management District
Chris Nevers	Alliance of Automobile Manufacturers
Simone Sagovac	Southwest Detroit Community Benefits Coalition
Rashid Shaikh	Health Effects Institute
Daniel Short	Marathon Petroleum Company
Matt Solomon	NESCAUM
Luke Tonachel	Natural Resources Defense Council
John Viera	Ford
Rich Wagner	Cummins
Presenters and Attendees	
Brian Barnes	South Carolina Department of Health and Environmental Control
Laura Berry	U.S. Environmental Protection Agency
Cheryl Bynum	U.S. Environmental Protection Agency
Bryan Comer	International Council on Clean Transportation
David D'Onofrio	Atlanta Regional Commission

MSTRS Meeting Attendance List	
Nicole Dolney - by phone	California Air Resources Board
Sarah Froman	U.S. Environmental Protection Agency
Chris Grundler	U.S. Environmental Protection Agency
Erica Holloman	Southeast CARE Coalition
Sabrina Johnson	U.S. Environmental Protection Agency
Heather King - by phone	California Air Resources Board
Reema Loutan	U.S. Environmental Protection Agency
John Lovenburg - by phone	BNSF Railway
Kelly McGourty	Puget Sound Regional Council
Meg Patulski	U.S. Environmental Protection Agency
Matt Payne	U.S. Environmental Protection Agency
Mark Simons	U.S. Environmental Protection Agency
Karl Simon	U.S. Environmental Protection Agency
Christina Wolfe	Environmental Defense Fund
Dan Yuska	U.S. Department of Transportation
Contractor Support	
Lesley Stobert - by phone	EC/R Incorporated
Alden West	EC/R Incorporated