

Federal Advisory Committee Act

**Clean Air Act Advisory Committee**

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**Virtual Meeting  
February 8, 2022**

**Welcome & Opening Remarks**

Due to concerns about safety regarding the coronavirus, this Clean Air Act (CAA) Advisory Committee (CAAAC) meeting was held remotely via Zoom. Ms. Lorraine Reddick, the Designated Federal Officer, opened the meeting and reviewed the agenda, which is displayed below. A list of attendees is provided in Attachment 1. Previous meeting minutes as well as materials associated with this virtual meeting will be available online at the EPA’s CAAAC website (<https://www.epa.gov/caaac>).

**Virtual Meeting Agenda**

<b>Time</b>	<b>Item</b>	<b>Presenters/Facilitators</b>
1:00 - 1:10pm	Opening Remarks	John Shoaff Lorraine Reddick
1:10 - 1:35pm	Approval of Reports	John Shoaff Lorraine Reddick
1:35 - 2:25pm	Demonstrations of OAP Tools	Travis Johnson Kong Chiu
2:25 - 2:40pm	Break	
2:40 - 3:40pm	Air Monitoring: ARP Update, Fence-Line Community Monitoring, and Air Monitoring	Mike Koerber Chet Wayland Kristen Benedict Ned Shappley
3:40 - 4:00pm	Public Comment and Closing Remarks	John Shoaff Lorraine Reddick

Mr. John Shoaff added that due to agenda constraints and the recency of the last CAAAC meeting, there wouldn’t be a formal update from the Office of Air and Radiation (OAR) leadership, but that the Principal Deputy Assistant Administrator, Mr. Joe Goffman, sends his regards, and the entire office is exploring ways to enhance collaboration and engagement with the CAAAC as well as follow up on the CAA 50<sup>th</sup> Anniversary Report that was adopted in 2021.

## **Approval of Reports**

Mr. Shoaff explained that there were two reports being considered for adoption by the CAAAC: the Mobile Sources Technical Review Subgroup (MSTRS) Motor Vehicles Emissions Simulator (MOVES) Technical Report, and the MSTRS “Future of Mobility” Report. He noted that Mr. Rich Kassel, the MSTRS chair, was present at the meeting to answer any questions members might have. Mr. Shoaff noted that consensus was preferred, and there were only a few comments on previous drafts of the reports, so rather than a roll call vote, they would ask the body as a whole to adopt each report. If anybody wished to vote “No” or abstain, they should speak up, but otherwise a “Yes” vote would be assumed.

### *MOVES Technical Report*

Upon opening the floor, there were no members who abstained or voted “No” either out loud or in the Zoom chat. Ms. Rosemary Ahtuanguaruk spoke up to express her appreciation and support for the report. Mr. Shoaff declared that seeing no opposition, the report would be officially adopted.

### *Future of Mobility Report*

Mr. Gary Jones asked whether the MSTRS considered the Life Cycle Analysis (LCA) of newer technologies, such as electrification. Mr. Kassel explained that they found a theme among all four workgroups and chapters related to the need for improved, updated, continually updated data and analytical tools, including but not limited to LCA. Mr. Jones asked whether this is discussed in the report. Mr. Kassel described more of the process of writing the report and how many topics came up the more deeply they considered and dove into each subject area. He stated that it is now up to the EPA to consider their recommendations and map out the agency’s role in the future of mobility, including collaboration with state, local, and tribal partners as well as other stakeholders. Mr. Jones suggested that the next charge for the MSTRS should include LCA.

Mr. Clay Pope added that he was a member of the MSTRS and was part of the Future Technologies workgroup, which did discuss LCA. He stated that they ultimately found that regardless of the type of electricity generation, electric vehicles (EVs) are cleaner than traditional internal combustion engines (ICEs), so car companies should put more effort into transitioning to electric vehicles (EVs) than designing cleaner ICEs.

Mr. Dan Greenbaum also stated that when he read the report, it included extensive discussion of LCA and its importance, including in the executive summary, and for such a wide-ranging report, this topic did emerge as a critical issue going forward.

Mr. Shoaff declared that seeing no opposition, the report would be officially adopted.

## Demonstrations of OAP Tools

Mr. Shoaff then introduced Mr. Travis Johnson to provide the first of two demonstrations of tools developed by the Office of Atmospheric Programs (OAP).

### *Demo 1: Power Plants and Neighboring Communities Mapping Tool*

Mr. Johnson began by noting that these tools are a work in progress, so they invite feedback and suggestions on them.

He stated that they began to develop the tools in early 2021 as part of the Biden Administration's focus on environmental justice (EJ). For the Power Plants and Neighboring Communities Mapping Tool, they pull the underlying data from EJSCREEN as well as some other sources within the EPA, and the mapping tool is designed to make that data easy to navigate and useful for people interested specifically in EJ and power plants. The data is presented in the form of interactive maps and graphs, and there are also detailed instructions for how to access the EJSCREEN data to help users become more familiar with EJSCREEN as well.

Mr. Johnson then walked attendees through the tool and explained how to use the various filtering and layers as well as read the legends. He added that they sought feedback from the National Tribal Air Association (NTAA), who pointed out that some tribes have certain notice and comment provisions for power plants within 50 miles of their lands, so they added a feature to the tool that draws a line between those areas and any power plants within that radius. He also shared a link to the tool:

<https://experience.arcgis.com/experience/2e3610d731cb4cfbce9e2dcb83fc94>

Mr. Shoaff acknowledged a question in the chat from Mr. Pope, who asked, "Is the 50-mile notice comment only for [Electricity Generating Units] EGUs?" Mr. Johnson stated that he doesn't know himself, since they added that feature based on input from the NTAA.

Ms. Adrienne Hollis asked whether it's possible to further refine the "people of color" category by specific races, which she pointed out is important for certain analyses, such as health studies. Mr. Johnson said that it is not, since those distinctions are not available in the data from EJSCREEN, but they could look into that.

Ms. Ahtuanguak asked if the layers are community-based and whether nearby facilities are included in the filters. Mr. Johnson noted that the mapping tool only shows EGUs, but the other tool would cover some of those other facilities. Ms. Ahtuanguak also asked whether this mapping tool would allow users to look at the cumulative evaluation of air quality concerns, or if it is just based on the communities. Mr. Johnson explained that the information provided by the mapping tool only includes the population that lives within 3 miles of each plant, but they are working on improvements that would allow users to select their preferred buffer size, such as 10 miles. He added that this tool only summarizes demographic information, and it does not make decisions about cumulative impacts or put forward qualitative interpretations of the data. Ms.

Ahtuanguaruak then asked whether the evaluation is done on the site-specific reporting of the emissions or if it adds layers as projects develop. Mr. Johnson clarified that data included is power plant emissions - that is, SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, and fine particulate matter (PM) from 2019. The tool does not predict future emissions or include data for other pollutants.

Mr. Jason Howanitz commented that this tool simply takes information from EJSCREEN and focuses in on power plants to save users some time, so for people interested in other industries, they would be able to find that information in EJSCREEN. He asked what the EPA is doing to inform EJ communities about the availability of tool and other tools. He noted that in his experience, the general public is not aware of these tools or how to use them, and state and local agencies are left to do the education and outreach. Mr. Johnson acknowledged this point and invited people to share suggestions for how to better inform the public about these tools. He added that they have held a series of webinars with over 1,400 people about the mapping tool, and they have tried to include resources on the website to help introduce people to the underlying data and related tools.

Ms. Natalene Cummings asked if there is a way to add a tab for the tribal areas filter on the main landing page to make it easier for users to find. Mr. Johnson agreed that the tool is not as intuitive as it could be, so they would take this suggestion under consideration.

Mr. Shoaff read a question in the chat from Mr. Eric Massey, who asked, “If we see there might be missing information, specifically as it relates to things like retirement dates, with whom do we need to talk?” Mr. Johnson stated that people can reach out to him directly, but he noted that the EPA uses publicly available data for this and for all of the information used by the tool.

#### *Demo 2: Greenhouse Gas (GHG) Reporting Program (GHGRP) Demographic Data Tool*

Mr. Kong Chiu demonstrated the GHGRP Demographic Data Tool. He noted that it is part of the mandatory GHGRP under 40 CFR Part 98, which has been in place since 2010 and requires power plants to report their annual GHG emissions directly to the EPA. This includes both direct emitting facilities as well as upstream suppliers. He also shared a presentation that included screenshots and links to the materials.

Ms. Ahtuanguaruak asked about the way the information is recorded, how that relates to unit development, and whether there are ways to evaluate state exemptions or unit development. Mr. Chiu explained that the GHGRP is set up to collect annual emissions, not information about permits or operations, and they don't get data from a facility until there is a complete year of operations to report. However, they do have a way to look at a facility's emissions over time using the tool, although this is not the same as being able to see information about changes to the units. Ms. Ahtuanguaruak asked about enhanced oil recovery, and Mr. Chiu stated that information on that is available through the tool, although it may be a little more difficult for users to find.

Ms. Ahtuanguaruak then described her village experiencing an eighty-day period of exposure due to a flare at a nearby facility and asked how to evaluate those concerns. Mr. Chiu stated that such an issue goes beyond the GHGRP; although combustion emissions would be reported for the flare, the data collected would not include the rationale behind the decision to begin flaring or other operational factors.

Mr. Shoaff promised to follow up with CAAAC members later over email to share the links to the tools as well as Mr. Johnson's and Mr. Chiu's contact information.

During the break, Mr. Johnson offered to stay and answer more questions. Ms. Ahtuanguaruak asked about when data is collected as part of the GHGRP. Mr. Johnson elaborated that most power plants report data annually, but larger plants (*i.e.* those over 25 Megawatts (MW) of nameplate capacity) may report on a quarterly basis. He also reiterated that data is not collected until a facility has a full year of data to report.

## **Air Monitoring: ARP Update, Fence-Line Community Monitoring, and Air Monitoring**

After the break, Mr. Shoaff introduced several staff members from the Office of Air Quality Planning and Standards (OAQPS) to provide updates on air monitoring activities, beginning with the Deputy Director, Mr. Mike Koerber.

Mr. Koerber began the presentation by acknowledging the recommendations in the CAAAC 50<sup>th</sup> Anniversary Report regarding improvements to monitoring programs. He gave some background information about how the EPA supports and carries out air monitoring work and how the EPA's research and regulatory work interacts with these activities. Mr. Chet Wayland then presented information about the American Rescue Plan (ARP), and Ms. Kristen Benedict discussed more specific details about several funding opportunities and grant competitions that were created as a result. Finally, Mr. Ned Shappley provided information about fence-line monitoring applications and measurement technology. Following their presentation, the floor was opened for questions.

Ms. Mary Peveto observed that diesel PM makes up a disproportionate portion of EJ community exposures, but research around this topic has been hampered by the fact that the federal government does not have a federal reference method for it. She asked whether there is any intention to do so in the future to make it easier to get more consistent data. Mr. Wayland responded that from a policy standpoint, the federal reference methods are designed to measure pollutants under the CAA, and diesel PM is not one of those. From a technical standpoint, the EPA has considered it, but nothing is currently available. Ms. Peveto requested follow-up on that topic. She then asked if fence-line monitoring can be done for oil storage-only sites even though there is no refining taking place and also asked whether the EPA has data on the breakdown of emissions from storage versus refining. Mr. Shappley explained that current monitoring has shown tanks contributing to fence-line emissions, and it might be possible to follow up on this topic as well. Mr. Wayland added that at large refineries, a lot of the higher emissions levels

were attributed to the tanks, so it would be possible to use fence-line monitoring even at storage-only locations.

Ms. Peveto then asked if there is a health-based reason to not consider anomalies or spikes that might otherwise get lost in annualized averages. Mr. Koerber stated that the risk analyses they do consider long-term cancer effects from various chemicals, so those long-term exposures are more useful or relevant.

Ms. Cummings echoed Ms. Peveto's comments on the importance of monitoring oil and gas storage, which is relevant to tribes in Oklahoma. She also pointed to the chemical sector, which is often located in close proximity to tribal communities, as an important area to consider. She added that one individual from the NTAA asked for the revival of publicly accessible fence-line data. Mr. Koerber responded that they would take that feedback back to OAQPS, since meaningful, clear, and accessible publicly available data is important, and they hope to provide more such data going forward.

Mr. Max Sherman pointed to the fact that most exposure takes place indoors and noted there is a growing need to monitor indoor air. He explained that four out of the five most harmful contaminants in the indoor environment are from the National Ambient Air Quality Standards (NAAQS) and have indoor sources, so measurements need to be taken indoors as well as outdoors. He stated that the measurement methods for the NAAQS are inappropriate for use indoors, and there needs to be efforts to make sure that monitoring is accurate, consistent, affordable, and accessible. He asked if there are any developments in the area of real-time indoor monitoring. Mr. Wayland stated that he would have to defer to the Office of Research and Development (ORD) and the Office of Radiation and Indoor Air (ORIA), since he is mostly involved in outdoor ambient air issues. He is unaware of any EPA research on indoor air measurement method development, but he can check on this and follow up. Mr. Shoaff added that there are some activities in ORIA that could be relevant.

Mr. Howanitz observed that while fence-line monitoring is not difficult technically, using the data in a useful and effective way is much more challenging, and the regulatory scheme needs to catch up in this area. He stated that most of the time, the data that is gathered is just informational, and there is no action level or enforcement that goes along with it. Without specific rules or standards, the only result is a risk assessment with no weight behind it. He cautioned the EPA not to embark on monitoring programs that will produce large quantities of data and place a greater burden on local agencies without having a good plan for using the results in a concrete way. He added that on the indoor air side, it is not clear where regulatory authorities would get involved beyond an informational level since people generally do not want the government involved in their personal housing.

Mr. Bob Hodanbosi asked whether universities were eligible for the community grants under the ARP if they intended to conduct traditional community monitoring that was not part of a research study. Mr. Wayland stated that universities are not excluded, subawards are allowed to universities, but the proposal must be for gathering data to help communities, not conducting

research.. He added that they will verify this with the grants staff and follow up to make sure this is the case. Ms. Benedict clarified that universities would be eligible as a sub-recipient to a primary eligible entity, so universities would need to partner with somebody, and this should be reflected in the Q&A page for the Request for Applications (RFA) (<https://www.epa.gov/system/files/documents/2022-03/eaqm-arp-rfa-qa-03-11-22.pdf>).

Mr. Beto Lugo-Martinez asked whether black carbon from diesel falls under particle pollution for the community monitoring grant. Mr. Wayland explained that black carbon is one of the species of PM that can be measured by a filterable approach, although it cannot be continuously monitored, and it would be eligible. Ms. Benedict added one of the proposal considerations is that commercially-available technology be used, and there is likely already a response on the Q&A page for the RFA (<https://www.epa.gov/system/files/documents/2022-03/eaqm-arp-rfa-qa-03-11-22.pdf>), but if there isn't, they will post one soon.

Mr. Lugo-Martinez then noted that technically, “commercially available” could include extremely expensive instruments as well as more affordable, but potentially less durable, equipment. He asked for clarification of this definition. Ms. Benedict responded that they have answered a lot of questions related to this topic already, so interested parties should check the RFA Q&A page for the most consistent and thorough answers.

Mr. Lugo-Martinez also asked how the EPA knows that the funding will be used for community monitoring rather than research. Mr. Wayland explained that the ARP grant is intended to get quality measurements to help communities, not to allow a vendor to evaluate or test their own products. So, the equipment included in the proposal should be reasonably high-quality and already commercially tested, even if it is not on the level of a regulatory sensor.

Ms. Peveto observed that the objective of the CAAAC is to advise the EPA and stated that although she respects the presenters' desire to preserve the integrity of the open RFA and keep things fair for all applicants, she encouraged them to place the appropriate value on feedback from committee members and recognize that their questions are also insights into how to communicate clearly about these topics. She noted that the federal grant application process is very difficult, and with the extensive reporting requirements included, large institutions like universities can provide important infrastructure support to communities. She noted that to restrict them from being the lead on the applications unintentionally places a huge burden on small organizations, which may result in conflict with the EPA's stated goals of placing more funding and resources into community hands. She encouraged the EPA staff members present to be more receptive to feedback and be more responsive to questions from committee members who represent the communities and organizations they are seeking to support.

Mr. Wayland noted that while they are open to feedback, because the RFA is already open and published, it cannot be substantially changed now. He added that the EPA did have listening sessions at the beginning of the process, However, the input they get now will be useful in the future. Ms. Benedict also acknowledged the feedback. Mr. Shoaff added that the EPA is trying to

figure out how to do a better job of getting funds to communities through other grants that it is issuing, such as providing training or other assistance to help people navigate that process.

### **Public Comment and Closing Remarks**

During the time for public comment, Mr. Hodanbosi referred back to the reports that were approved at the beginning of the meeting. He spoke about the importance of MOVES, complimented the MOVES Technical Report, and expressed his appreciation for the MSTRS members who contributed to it.

Mr. Shoaff and Ms. Reddick then adjourned the meeting.



## Attachment 1

<b>CAAAC Virtual Meeting Attendance List<sup>1</sup></b>		
<b>CAAAC Members</b>	<b>EPA Staff</b>	<b>Other Attendees</b>
Rosemary Ahtuanguaruak	Kristen Benedict	John Kinsman
Susan Anenberg	Kong Chiu	Margaret Overton
John Booher	Travis Johnson	Stuart Parker
Deb Brown	Mike Koerber	Sean Reilly
Natalene Cummings	Jonathan Lubetsky	Lesley Stobert
Veronica Figueroa	Lorraine Reddick	
Gail Good	Tamara Saltman	
Dan Greenbaum	Ned Shappley	
Sara Hayes	John Shoaff	
Mitch Hescoc	Justin Spenillo	
Robert Hodanbosi	Chet Wayland	
Adrienne Hollis	Osmond Lindo	
Jason Howanitz		
Gary Jones		
Miles Keogh		
Beto Lugo-Martinez		
Eric Massey		
Mary Peveto		
Clay Pope		
Kim Scarborough		
Max Sherman		
Bill Spratlin		
Ted Steichen		
Tim Wallington		

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<sup>1</sup> This list of meeting attendees is not comprehensive due to a number of unidentified call-in participants.