

Federal Advisory Committee Act

Clean Air Act Advisory Committee

**Virtual Meeting
October 18, 2021**

Due to increased concerns about safety regarding the coronavirus, this Clean Air Act Advisory Committee (CAAAC) meeting was held remotely via Microsoft Teams.

Welcome & Opening Remarks

Ms. Lorraine Reddick, the Designated Federal Official, opened the meeting by welcoming the attendees and introducing the new members of the CAAAC. She noted that the purpose of this meeting is to review and vote on the Clean Air Act (CAA) 50th anniversary report and quickly revised the agenda, which is displayed below. She added that there would be a public comment period at the end of the meeting, then conducted roll call. A list of attendees is provided in Attachment 1. Previous meeting minutes as well as materials associated with this virtual meeting are available online at EPA's CAAAC website (<https://www.epa.gov/caaac>).

Virtual Meeting Agenda

Time	Item	Presenters/Facilitators
1:00 - 1:20	Opening remarks	John Shoaff - EPA Lorraine Reddick - EPA
1:20 - 1:50	AirNow and Wildfires: 2021 improvements and thoughts for 2022 and beyond	John White - EPA
1:50 - 2:20	OAR Acting Assistant Administrator update and comments	Joe Goffman - EPA
2:20 – 3:20	Discussion of CAA 50 th Anniversary Report	Gail Good - Workgroup Chair Bob Meyers - Workgroup Chair Gillian Mittelstaedt - Workgroup Chair
3:20-3:35	CAAAC vote on sending CAA 50 th Anniversary Report to EPA	John Shoaff Gail Good
3:35-3:50	Public comment	Members of the public
3:50-4:00	Closing remarks	John Shoaff Lorraine Reddick

Following the roll call, Mr. John Shoaff also greeted the attendees and recognized their hard work, particularly that of the workgroup members.

AirNow and Wildfires

Mr. John White presented updates to the committee about the AirNow program and its tools related to wildfires. He began with an overview of the program, which is the national framework for acquiring and distributing air quality information. It gathers and conducts quality assurance on hourly air quality data sourced from over 150 federal, state, Tribal, and local air quality agencies in addition to US embassies worldwide and sources in Canada and Mexico. It provides information about air quality and health as well as next-day air quality forecasts for hundreds of cities.

Mr. White noted that the public relies heavily on AirNow for information during wildfire events; web traffic can be 100 times greater than average during these periods. He explained that the EPA made major improvements in 2020 and 2021 to target these topics and provide information that will help the public protect their health, including transitioning its website infrastructure to cloud.gov to ensure that they can handle increased online traffic. One such improvement was the AirNow Fire and Smoke Map, which was developed in partnership with the US Forest Service and the EPA Office of Research and Development and released in August 2020.

The AirNow app has also been updated to include an interactive air quality map as well as the fire and smoke map. The EPA team is currently working on designing a notification capability that will replace the old EnviroFlash system, which is email-based. They are also adding trends and the ability to share screenshots via social media.

Mr. White paused briefly to take some questions before continuing. The first came from Mr. Shawn Daniel, who asked if they have data about user engagement on the app in addition to the numbers for the website or if the website data was inclusive of app users as well. Mr. White clarified that they track app usage statistics separately. During peak wildfire events, they also see an increase in app usage and downloads. He estimated that in 2020, there were several hundred thousand downloads, which exceeded the previous five years.

Ms. Mary Peveto explained that she has been working with the PurpleAir network and some researchers to figure out how results from those monitors relate with the other monitoring that is reported to AirNow. Ms. Uhl asked whether this new collaboration by the EPA on wildfires has resulted in a new data layer that they should direct people to look at. Mr. White responded that if a new PurpleAir sensor comes on, that new sensor will automatically be included on the AirNow map in about a day, as long as it is not marked as private or as an indoor monitor and it passes QA/QC routines. Ms. Uhl clarified that her question was more about conversions and asked if there are recommendations on when to apply conversions for PurpleAir monitors and for which data layers. Mr. White noted that PurpleAir has several different correction factors and averaging times, but they are not identical to those used for AirNow. He added that it's hard to say which

approach is “right” or “best,” but he is biased towards the approach used for the AirNow Fire and Smoke Map.

Mr. Dan Greenbaum asked if there is a way to show the AirNow data as an air quality index (AQI) equivalent. Mr. White responded that there is no straightforward way to do that since the AQI is on a different time basis than what is in AirNow.

Mr. Beto Lugo-Martinez noted that they compile lots of information from PurpleAir and asked about the correction factor for wood smoke. Mr. White explained that their correction is based on about 50 sites that have different meteorology and conditions. This allows them to adjust for the very upper ranges. Mr. Martinez suggested that there should be some messaging about where the numbers come from.

Mr. White then discussed the future of the AirNow program. A major step has been the creation of an OAQPS advisory board, which provides input from the senior management level and holds monthly meetings to review progress and provide input. He added that a major challenge for the future is the fact that the general public has ample and widespread access to conflicting air quality information, so in order to maintain public trust and meet the growing demand for this information, AirNow must be able to adapt and develop new capabilities.

Mr. White then discussed the future of air quality information reporting, noting that there have been radical changes in technology since the program began in 1998, and there has been a large increase in demand for information, especially at the hyperlocal level. He explained that private companies are responding to this demand with their own products, but these can conflict with each other as well as AirNow. The long-term goal of AirNow is to provide scalable, local, real-time air quality information and forecasts to the whole US that will enable people to make decisions that will protect their health.

Beyond 2022, the program is exploring integrating other air quality datasets as part of a “fused” approach that draws on satellites, modeling, and low-cost sensors to provide the most accurate data possible at the finest resolution possible.

Mr. White then answered more questions from the attendees.

Mr. Martinez pointed out that people today are more aware of the AQI than they were in the past and advocated for the EPA to consider its approach to messaging and education so community members can understand it on a more nuanced level than just “it’s green” or “it’s red.”

Ms. Rosemary Ahtuangaruak encouraged the EPA to consider how to gather and distribute data with the goal of protecting human health, especially for smaller and more rural areas. She added that there should be more ways for people to participate in this process, beyond just collecting data and responding to information.

Updates from OAR Leadership

Mr. Goffman began by stating that in the months since July, OAR and the EPA as a whole, has made considerable progress on the matters that were discussed at the previous meeting, in ways that are visible now and will become more visible by the end of the year. He had previously talked about President Biden's executive orders regarding climate change and other priorities for the EPA, as well as Administrator Regan's focus on environmental justice (EJ). Now, the EPA is on the path to make progress on a range of climate and clean air issues, which they see as instrumental to advancing EJ.

Mr. Goffman then explained that the EPA is not working alone; the Administrator has pushed them to adopt a "whole of government approach" and expects them to think in terms of leverage as well as direct outcomes. In other words, he clarified, how do their standards, analyses, recommendations, etc. reflect opportunities to leverage other opportunities or the work of other policymakers. He added that they also engage frequently and directly with a broad range of stakeholders, including affected industries as well as other members of the public who live or work near sources of air pollution. By way of example, Mr. Goffman referenced their outreach effort for the new oil and gas methane standards, which began by offering trainings for members of communities most affected by these industries so that they could effectively represent themselves and advocate for their interests throughout the rulemaking process. He stated that EJ is about empowerment.

Since July, the EPA has issued a proposal for greenhouse gas (GHG) emission standards for light-duty vehicles and light trucks. Mr. Goffman added that these standards strengthen the existing standards that the previous administration had promulgated by about 5 to 10 percent annually; these begin with model year (MY) 2023 and extend through MY 2026. They have received a large number of substantive comments on that proposal, and they are working on finalizing the standards. He added that a number of commenters have made a strong case for increasing the stringency of the proposed standards. He complimented the quality of information provided and the level of care taken by the stakeholders who submitted comments on the proposed rule.

Mr. Goffman added that the president oversaw the release of this proposal and responded by signing another executive order on August 5th, where he directed the EPA to establish GHG and multi-pollutant standards for light-duty vehicles through MY 2030. That work is already underway, and they expect to get a proposal out addressing that sometime in 2022. This executive order also directs EPA to do a two-stage rulemaking for heavy-duty vehicles. In the first stage, they will establish NOx standards that will apply to MY 2027. In an overlapping stage, they will also be doing a Phase 3 for GHG emission standards for the heavy-duty fleet.

Since the last CAAAC meeting, the EPA also promulgated the first and main implementing rule for the AIM Act, which will initialize the phasedown of hydrofluorocarbons (HFCs), a very potent type of GHG. Mr. Goffman explained that the Administrator signed the rule on

September 23rd, and they issued allowances to establish the phasedown compliance regime on October 1st. They have also already used another tool that might allow them to accelerate this phasedown: on October 10th, they granted about ten petitions to address individual use of HFCs in ways that can restrict those uses and promote or speed up their replacement with alternatives that are safer for the environment and the climate.

Mr. Goffman then discussed the proposal for methane standards for oil and gas. Those standards will include updating and upgrading the new source standards that are back on the books after the President signed a resolution of disapproval passed by Congress that eliminated the rule passed by the previous administration to weaken these standards. He stated that they believe they are mere days away from issuing that proposal.

He then noted that the Administrator has made it clear multiple times that he appreciates the power and leverage of EPA's full toolbox to address the environmental footprint of the power sector. He has directed the EPA and worked with them over the last several months to develop a power sector strategy that accounts for the multi-pollutant, multi-media effects of fossil fuel-fired electricity generation. He has asked each office (Office of Water, Office of Land and Emergency Management, and OAR) to align the most urgent environmental and public health problems posed by the power sector with their respective highest-leverage tools for meeting that urgency. Mr. Goffman explained that from OAR's perspective, they have a rich toolbox ranging from addressing the long-range transport of ozone precursors to addressing GHG emissions directly through authorities under Section 111, including both new sources and existing sources that consume fossil fuels and contribute to the US's GHG inventory.

Mr. Goffman turned next to EPA's partnership programs, which celebrated their 30th anniversary over the summer by putting out a report documenting the millions of tons of climate pollution, dollars, and units of energy saved by these programs. Looking forward at the ambitious target that the US government has committed to as part of its Nationally Determined Contribution in the Paris Agreement, Mr. Goffman expects that their partnership toolbox will play an important role alongside their regulatory toolbox.

Lastly, Mr. Goffman reminded everyone that the EPA is deeply committed to EJ. OAR has been developing a number of analytical tools needed to identify the EJ inequities in rulemakings. They have also published tools online that give members of overburdened communities access to useful data about local sources that might be affecting their air quality. For example, they posted a program known as "Power Plants in Neighboring Communities" this summer that has an interactive mode, in which people can identify local power plants and their impact on air quality. Their GHG reporting program website has also recently been updated to add a demographic layer so users can see the community profile of the sources that were reported under that program.

Noting that he had exceeded his allotted time, Mr. Goffman emphasized that he is eager to hear about the CAA 50th Anniversary Report and concluded his remarks. Mr. Shoaff thanked him and

turned it over to the workgroup co-chairs -- Ms. Gail Good (Wisconsin Department of Natural Resources), Mr. Bob Meyers (Crowell and Moring), and Ms. Gillian Mittelstaedt (Tribal Healthy Homes Network) -- to begin that discussion.

Discussion of 50th Anniversary Report

Ms. Good began by briefly explaining the process of developing the report, and she emphasized that their goal was to achieve a consensus report that represented the diversity of views on the CAAAC.

Ms. Good then gave a brief overview of the recommendations given in the report, beginning with the chapter on Attainment and Maintenance of the National Ambient Air Quality Standards (NAAQS) and followed by the chapter on Developing and Utilizing High Quality Data. These are listed in the slides used by the presenters.

Mr. Meyers then reviewed the recommendations from the chapters on Section 112 (Hazardous Air Pollutants (HAPs)), Stationary Source Programs (Major and Minor New Source Review (NSR), Title V Operating Permits, New Source Performance Standards), Visibility and Regional Haze, Mobile Sources, GHG Emissions and Climate Change, Title IV (Acid Rain Program), and Title VI (Stratospheric Ozone Protection).

Ms. Mittelstaedt continued by summarizing the recommendations from the chapters on Tribal Air Issues, EJ, Voluntary Programs, and Indoor Air. She noted that the recommendations in the tribal section were developed in partnership with tribal air leaders; additionally, the third recommendation in the tribal section was included because tribal nations, which are sovereign nations, had a different view than most members of the workgroup, so they compromised by expressing them in a way that appropriately represents their perspective, while acknowledging that many CAAAC members may not agree with their positions.

Ms. Mittelstaedt concluded by reviewing the four overarching recommendations listed at the end of the report. She also described the role of the CAAAC as the “steward” of the report, with the ability to provide oversight and accountability as it is handed over to the EPA. She encouraged the members to request annual updates from the EPA offices and programs on their progress and any challenges they encounter with carrying out the recommendations. She added that they should also establish a subcommittee to monitor progress, provide sector- and industry-specific feedback, and serve as a sounding board for the EPA if they encounter implementation issues.

Mr. Shoaff thanked the presenters and complimented the document for its scope and attention to detail, noting that he counted at least 138 recommendations in the report. The committee then held a discussion of the report prior to voting whether or not to approve it.

Discussion

Mr. Greenbaum stated that he chaired a National Academies of Science (NAS) committee that produced a report on the CAA around its 35th anniversary, and it's very valuable to see this new take on the accomplishments of the CAA. He added that the NAS committee spent a lot of time looking at federal-state partnerships, which they found that they weren't working very well. He asked whether this came up in the workgroup's discussions beyond just the mention of it in the tribal chapter. He also stated that there had been a lot of wasted energy on the less important parts of the State Implementation Plans (SIPs) but acknowledged that progress may have been made in the 15 years since their report.

Mr. Meyers responded that federal-state partnerships did come up in workgroup discussions, and in several places, they made edits to the report to try to make this clearer, including in the mobile sources section where they mentioned Section 209 and 177 as well as in the NAAQS and climate change chapters.

Mr. Andrew Hoekzema, another member of the workgroup, added that the report includes a lot of material that, even if it doesn't specifically invoke federal-state-local interactions, does so implicitly. The NAAQS section has a lot of material on the SIP process and the designation process. The data section also discusses the interaction between states and the federal government on monitoring. He stated that it is woven through all aspects of the report, even if there isn't a dedicated section for it.

Ms. Shannon Broome, also a member of the workgroup, highlighted that on Section 112, there was a desire to see the promotion of innovation, since statutory language can sometimes get in the way of that. Ms. Broome complimented the EPA on doing retroactive studies on cost and stated that she wants to make sure that those are feeding back into new rulemakings. She characterized it as a huge success that after the application of the Maximum Achievable Control Technology (MACT) standards, there has been very low risk from these industrial facilities. She encouraged the EPA to keep this in mind with respect to all costs, such as information collection, work practices, and others.

Mr. Don Peters questioned why there was not more discussion about agriculture, especially industrialized animal production, despite the fact that it produces huge amounts of ammonia and H₂S. Mr. Peters stated that he would like to see some effort made to include industrial animal feeding operations and the gases they produce in this report and in CAA standards.

Mr. Hoekzema responded that they did get comments related to agriculture after they presented the previous report draft to the CAAAC, and in response, they added an item under the "Challenges" part of the NAAQS section regarding agriculture. He noted that the challenges they cited cover emissions from a broad range of farm sources, including ammonia, agricultural burning, NO_x emissions from nitrogen-based fertilizer, and the growth of urban areas into agricultural areas and added that any one of those issues could be the subject of their own report.

Mr. Peters volunteered that his organization would be happy to provide information to the EPA about what they've experienced with emissions from agriculture. Mr. Shoaff agreed to follow up with him for further conversations on this topic.

Mr. Miles Keogh stated that in his non-lawyer understanding, the EPA's implementation of the CAA is driven by science within the constraints that are available under the law, but the law isn't set in stone today -- it's dynamic, and its limits are dependent on which court you're in. Mr. Keogh pointed to the GHG section's call for the articulation of the authority and limits of the EPA to take action under the CAA. Mr. Keogh explained that he did not understand the virtue of this recommendation, given that those legal limits will be tested in court once they begin passing rules and regulations. He added that it seems as though asking the EPA to articulate its authority under the CAA outside of the rulemaking process is unnecessary, especially given that the EPA is extremely resource-constrained. He asked if anyone could explain why he should not feel antagonistic towards those recommendations when deciding how to vote on the report.

Mr. Hoekzema responded that as a fellow non-lawyer, a good reason for supporting this recommendation, particularly on the GHG side, is to go back and look at the document from the Bush Administration where they did something like this and see how comprehensive it is. He explained that when thinking about a whole-of-government effort on an issue like climate change, a whole-of-CAA effort on understanding legal authorities goes hand in hand with this. Understanding the scope of the authority the CAA has provided and how courts have constrained or enabled different parts of that is important. He observed that the endangerment finding happened multiple years ago, but there still is no rule in place for existing facilities. He stated that this is a product of the fact that applying the CAA to GHGs is territory that has needed to be hashed out through the courts, and it would be valuable to ensure that going forward, the next steps the EPA takes in this realm are surefooted ones that everyone can have confidence are within the law. Mr. Hoekzema added that everybody wants to make sure that if the EPA proceeds with tighter regulations and strategies, they do so with as much confidence as possible that they are legally sound and cannot be easily rolled back through the litigation process.

Mr. Keogh responded that he understands this, but he thinks this is what EPA does through the rulemaking process already and that the EPA does not advance any rules that they think are on unsure legal footing. He shares the interest in seeing the EPA take action in ways that sidestep inevitable lengthy litigation, but he is not confident that the EPA saying, "this is legally fine," makes that true. He said he thinks that only a judge can define and articulate that. So, while he understands and agrees with the motivation, he stated that he does not see why a standalone process is necessary or valuable.

Mr. Hoekzema stated that even if Mr. Keogh does disagree with this particular recommendation, there are many things in the report that not everybody agrees on, and if he can bring himself to support the thrust of the report, he encourages him to support the report despite misgivings he may have about specific recommendations.

Mr. Meyers added that he agreed with Mr. Hoekzema, and also stated that the recommendation was not intended as some sort of delay, noting that the report goes through the rulemakings since the endangerment finding in 2009 and notes where there have been successes. In the mobile sources area, the EPA has been largely successful in defending its rules in court, which is not as true for power plant rules. Mr. Meyers explained that the idea is not to conduct an academic exercise, but to recognize that *Massachusetts v. EPA* was a significant change in the understanding of the EPA's authority, and in the nearly 15 years since, the EPA has been implementing GHG standards under the CAA. He added that given that the workgroup's task was to look at lessons learned and recommendations for the future, they feel that an assessment in addition to, not in lieu of, the Administration's agenda, can proceed. Mr. Meyers echoed Mr. Hoekzema's point about the whole-of-government, noting that it's important to understand both where the CAA can be used as well as where other tools and authorities within the federal government are needed. He stated that without that conversation, there's a danger of a lack of progress.

Mr. Bob Wyman acknowledged the workgroup's efforts to remain neutral despite some controversial subject matter areas and stated that because there not many opportunities for CAAAC members to provide comments due to the scope of the project, it makes it difficult to vote because there are many areas that would benefit from further discussion. He added that another unfortunate factor is that comprehensive Congressional action continues to be highly unlikely. So even if the EPA takes a whole-of-government approach, it may be holding the trump card in the form of the most relevant legal authority to regulate GHGs under the CAA. If this is the case, Mr. Wyman explained, it is extremely important that the climate and GHG section of the report be "as close to perfect as we can get it." He expressed appreciation for the workgroup incorporating many of the comments that he previously provided, although several were added as footnotes that he would have preferred to be included in the main text, and several caveats were added to statements where he believed they should have been reoriented to be more positive.

Mr. Wyman further stated that although he is in favor of voting to advance the report to the EPA, he feels as though he needs to submit another document in parallel so that the report won't be misused or misunderstood. He stated that he wants to encourage the EPA to move expeditiously to regulate sources of GHGs using the authorities it has, including Section 115, which he believes was intended to enable such actions. Mr. Wyman also suggested that the EPA take a multifaceted approach, including backstop measures in the case of legal challenges. Mr. Wyman concluded by saying that he is inclined to vote to send the report to the EPA, but he reserves the right to more fully articulate his views -- and he hopes that others will do so either collectively or individually as they wish -- about the importance of the EPA moving forward expeditiously, about using some of the authorities that were reviewed by the report, and about making sure the characterizations of those authorities in the report are not unduly negative (particularly on Section 115). He stated that the EPA may be the most important actor in regulating GHGs in the US, and it is essential to not cripple its authority.

Mr. Clay Pope, a member of the workgroup, explained that in trying to make sure this document could achieve consensus, everyone involved had to compromise and give on several issues. They

discussed the potential of including minority viewpoints alongside the majority opinions, but they thought that doing so would make the document less useful. He stated that Mr. Wyman's comments weren't disregarded, but not everything can be included in a compromise document.

Mr. Wyman responded that he understands that, but he has seen on past CAAAC workgroup that they often had the broader membership debating where to make those compromises. However, this workgroup didn't have that luxury due to the timing and the scale of what they were trying to accomplish. He stated that he wasn't making a criticism, but he thinks that there are things that are worth further thought, such as the possible delay an advance notice of proposed rulemaking (ANPRM) could cause, even if the report goes forward to the EPA in its current form.

Mr. Pope noted that this report has started and continued many discussions that won't end once it is approved. Mr. Meyers added that on the ANPRM point, the report does say "...or a similar document." He also observed that on Section 115, that petition has been before the EPA for over a decade with multiple iterations, and some of the petitions for rulemaking under the CAA date back to 2007, sometimes with no serious articulation on whether the agency has authority or not. He pointed out that some public discussion won't be harmful and should be embraced rather than shied away from.

Mr. Wyman added that he agrees with Mr. Meyers, but it would be a huge burden to the EPA to go back to its initial ANPRM and do a full, holistic evaluation. Mr. Meyers stated that his expectation is that a lot of thought has already been devoted to this since 2008, and the Office of General Counsel (OGC) and other parts of the agency have been thinking about this very intensely over the last decade plus. The issue, he proposed, is that a lot of that is not public.

Mr. Jason Howanitz stated that he has enjoyed the conversation about the report, but he doesn't believe that a lot of people at the EPA are going to take it to heart, and he questioned what will happen to it once it gets approved. Mr. Howanitz explained the EPA has their own plans and ideas already, and he doesn't see this report changing much of that. He noted that many of the things in the report have been pinpointed and addressed through executive actions that were already announced. He commented that it seems that in the past, the CAAAC has fallen on deaf ears.

Mr. Goffman responded by stating that what struck him is that the report identified issues that the EPA is currently working on. Mr. Goffman observed that there are ideas in the report that the EPA needs space and time to think through, and that this report isn't something that's going to go on the shelf to be ignored. He added that the validation by the CAAAC that the issues that the EPA is aware of and seeking to address are important and pressing is valuable in and of itself, even if there is redundancy. He stated that what struck him in the recommendations and the presentation at this meeting was that this report is formidable, and it is clear how much dedication and firepower went into them.

Mr. Goffman admitted that he has a soft spot in his heart for the observation that the boundaries of EPA authority should be in the foreground, because those boundaries have been contested heavily in the last couple of years with the Clean Power Plan and the Affordable Clean Energy rule, the latter of which raised the important question of not only *what* the boundaries of EPA authority are, but also how much those boundaries change as science and technology change. Mr. Goffman explained that they're doing rulemakings that implicate not only the boundary of EPA's authorities, but also the boundary of what they can take into consideration. He continued by noting when you're thinking as hard as they are about questions of leverage, the extent of the authorities plays a large part.

Mr. Goffman concluded by stating that those are mostly his personal opinions, and from the perspective of OAR, assuming this report is adopted, it would be helpful to hear the CAAAC's thoughts about creative and efficient high-leverage ways to engage with the EPA on the recommendations of the report. He has an intuition that certain kinds of recommendations, approaches, or changes in the report are more immediately accessible than others, and if they can think of ways to tee those up for OAR and use the resources of the CAAAC and its subcommittees to engage with the EPA, that would be really helpful for realizing some of the benefits of the report.

Mr. Hoekzema stated that he thinks that the workgroup had the strongest consensus about the position that the CAAAC can be used much more extensively to flesh out these issues more. He stated that one of the biggest challenges with this report was the scope, and any one of these topics could have its own workgroup, which is something that the EPA could think about in terms of how to engage this group more than twice a year. Mr. Hoekzema admitted that he had the best, most meaningful experience of his time on the CAAAC working with the other workgroup members on this report. He acknowledged that there is a lot of material in the report that needs further fleshing out, and he encouraged Mr. Goffman to think about the CAAAC as a great resource to push those issues forward and figure out how to prioritize the ideas in the report down the road.

Mr. Goffman responded that he already knows what the 60th anniversary report is going to look like: an update on the progress that the agency has made to respond to the 50th anniversary report. He thanked the members and complimented them for their impressive effort again, then had to leave the meeting.

Ms. Mittelstaedt noted that Mr. Goffman asked for some high-level ways to engage and explained that in her six years on the CAAAC, there were several programs and divisions that did not bring in anyone to present more than once every few years, so regular engagement with all of the different air program offices would be a good starting place. She also echoed Mr. Hoekzema's statement that to make this more didactic, subcommittees that could take on provisions of this report and work with the EPA on implementation would be an outstanding way to make sure that this report is followed up on. She concluded by saying that most exposures happen indoors, and this should not be forgotten in conversations about the CAA and ambient air.

Mr. Greenbaum observed that there ought to be a way for the CAAAC to accept the report conditionally with the expectation that the EPA come back very soon with its reactions and specific areas where it thinks the CAAAC can engage on more targeted questions. He suggested closing this discussion while following what other people have said about concrete areas where the CAAAC can engage in a more detailed way by coming up with pragmatic suggestions and next steps for the agency.

Through the chat feature of the online meeting platform, at least one member newly appointed to the CAAAC noted that they would not be voting on the report since they had not been part of the process of developing it.

Vote

Mr. Shoaff explained the procedure that would be used for voting on the report; they asked CAAAC members to write in the chat if they did *not* want to vote to approve the report or if they wished to abstain for any reason, and otherwise they would be counted as a “Yea” vote.

Mr. Tim Wallington requested a delay to allow more time to consider before voting. Mr. Meyers responded that that’s an understandable request, but he could just express this wish, and it would be recorded in the meeting minutes instead. Mr. Shoaff added that they would be holding the vote during this meeting.

There was consensus among all CAAAC members present to approve the 50th anniversary report, with no “Nay” votes or abstentions sent to the chat during the voting process.

Closing Remarks

Mr. Shoaff thanked the workgroup co-chairs and members again and acknowledged the EPA staff who contributed to the development of the report. He then asked if any members of the public wished to speak before the meeting concluded.

Mr. Hoekzema noted that since his term on the CAAAC has concluded, he is technically a member of the public now; he expressed his appreciation for the opportunity to serve on the committee for the last six years, and especially working with the other workgroup members on the report.

Ms. Reddick provided a few updates to the committee regarding the winter CAAAC meeting, which the EPA is expecting to take place in December or January. She noted that there would be two items on the agenda from the Mobile Sources Technical Review Subcommittee (MSTRS) that would need to be considered and voted on. The EPA anticipates that those reports will be sent out for review as soon as possible and no later than November. They also welcome the committee’s input on potential topics that they want to see included on the next and future agendas. Ms. Reddick reminded everyone that the Clean Air Excellence Awards nominations are

due by November 30th, and they welcome everyone's help with spreading the word to relevant parties and stakeholders. She then asked if there were any last comments from anyone.

Ms. Ahtuangaruak stated that this report is very important, and she stated that she looks forward to submitting further written comments on this process. She thanked everyone for their discussions and noted that she looks forward to further discussions.

Ms. Reddick then thanked everyone and adjourned the meeting.

Attachment 1

CAAAC Virtual Meeting Attendance List¹	
Name	Organization
Subcommittee Members	
Rosemary Ahtuangaruak	Arctic Futures Project
Susan Anenberg	George Washington University, Milken Institute, School of Public Health
William Bahnfleth	Penn State University
Shannon Broome	Hunton Andrews Kurth
Deb Brown	American Lung Association
Natalene Cummings	Forest County Potawatomi Community, Natural Resources Department
Veronica Figueroa	Mosaic Fertilizer
Gail Good	Wisconsin Department of Natural Resources
Dan Greenbaum	Health Effects Institute
Sara Hayes	American Council for an Energy-Efficient Economy
Mitch Hescox	Evangelical Environmental Network
Robert Hodanbosi	Ohio Environmental Protection Agency
Adrienne Hollis	Union of Concerned Scientists
Tim Hunt	American Forest and Paper Association & American Wood Council
Jason Howanitz	Jefferson County Department of Health
Elizabeth Jacobs	Akwesasne Housing Authority
Gary Jones	Specialty Graphic Imaging Association Foundation
Miles Keogh	National Association of Clean Air Agencies
Kate Konschnik	Duke University, Nicholas Institute
Beto Lugo-Martinez	Clean Air Now
Eric Massey	Arizona Public Service
Bob Meyers	Crowell and Moring
Don Peters	Community Against Pig Pollution and Disease
Clay Pope	Capital Access Partners
Kris Ray	Confederated Tribes of the Colville Reservation
Maria Robinson	Massachusetts House of Representatives
Max Sherman	Lawrence Berkeley National Laboratory
Bill Spratlin	Aptim Environment and Infrastructure
Ted Steichen	American Petroleum Institute
Vicky Sullivan	Duke Energy
Tim Wallington	Ford Motor Company
Bob Wyman	National Climate Coalition

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

CAAAC Virtual Meeting Attendance List¹	
Name	Organization
Other Attendees	
Barbara Bankoff	
Ann Campbell	EPA
Daniel Chartier	
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