



**March 8-9, 2022**

# **Virtual Environmental & Energy/Sustainability Committee Meeting Minutes**

Environmental Committee Chairman

**Robert (Bob) Morrow, Detroit Stoker Company**

Energy/Sustainability Committee Chairman

**Robin Mills Ridgway, Purdue University**

EPA Air - Regulatory Update (MOG Coalition)

**Skipp Kropp, Steptoe & Johnson PLLC and Ann McIver, Citizens Thermal**

The revised CSAPR update litigation was reviewed. MOG filed a brief on this update. Several downwind states also filed briefs. MOG objected to some of the shortcuts that EPA used in coming up with their revised standards. MOG also objected to the short comment period. An extension was denied. EPA also failed to harmonize with downwind states requirements for reductions, maintenance, and significant contributions. EPA's action was inconsistent with the Wisconsin Remand. EPA also used suspect data. The number of states included was reduced from 22 to 12. The universe of units was different. EPA claimed that they did everything correctly. The intervenors basically stated that the ozone needs to be reduced and that MOG's claims are baseless. A reply brief is due March 25.

Linear interpolation of modeling is not an accurate process for assuming air quality. Harmonization of time lines between upwind and downwind states is a serious issue. The update rule applies to the 2008 ozone NAAQS. The 2015 standard kept the 2008 value.

With the new administration, the 2015 standard was put under review. The review is to be completed in 2023. The current standard is 70 ppb ozone. Numbers ranging from 60 – 68 ppb are being considered. The PM standard is also being reviewed. The EPA disapproved the “good neighbor” SIPs for 19 states. A different modeling platform was used by EPA to look at these states. The model uses 2016 baseline data. The EPA issued a 2018 memo concerning the significant impact level. The prior EPA provided some flexibility allowing the consideration of 1 ppb as opposed to 1% of the standard. The new administration claims that the memo was “only guidance” and was not endorsed as standard. EPA has taken the issue under review. EPA also claimed that the CSAPR rule only applied to EGU's and, therefore, cannot be used for non-EGU impacts. New values for ozone would increase the number of non-attainment areas. The major areas, are still the Great Lakes, the I-95 corridor, and California.

The 2015 transport rule was supposed to be issued on Feb. 28. The rule is not out yet (but has been signed). It is anticipated that non-EGUs will be included. A number of member facilities will be

included as named facilities that would have to take action.

**Ann McIver, Citizens Thermal**, had expected to report on the anticipated new rule. However, since it has not been issued, she suggested that a separate call be scheduled to go over that rule when it comes out.

SSM Regulatory Update – **Russell Frye, SSM Coalition Leader, Frye Law, LLC**

Since the early 70s, the EPA stated that excess emissions during startup, shutdown, and malfunction (SSM) would not be considered a violation. However, facilities were required to minimize emissions during these events. In 2008, the courts rejected the SSM provisions in the MACT rules. The court stated that a different standard could be applied, but there must be a standard. EPA then noted that a blanket exemption was not allowed. Alternative standards were applied only if the need was demonstrated. Malfunction was not included.

In 2014, the “affirmative defense” provisions were struck down. Today, EPA has allowed alternative standards for startup and shutdown. However, if there is an exceedance during a malfunction, the facility has to rely on EPA discretion. The DC Circuit basically approved the EPA approach. EPA stated that it was not feasible to create a standard for malfunctions because of the varied nature of a malfunction. State SIPs have to address SSM situations. Automatic exemptions had to be removed. However, under narrowly drawn circumstances, an exceedance could be allowed. This has led to a wide variation of positions in the different states.

The ENGOs pushed EPA to revise state SIPs to modify their SSM positions. EPA originally planned to look at 36 states in 2013, but added two more states in 2014 and decided to remove affirmative defense from all SIPs. In 2015, EPA issued the SSM SIP call to revise these SIPs. About ¾ of the states submitted revised SIPs to EPA for approval. If the SIP is not approved, EPA can issue a FIP in its place. Almost all of these revised SIPs are still awaiting EPA action (included those that did not submit). In 2016, some industrials and 19 states petitioned for review of the SSM rule. The prior administration petitioned for a stay of the suit pending an EPA review of the rule.

In 2020, EPA withdrew SIP calls for 3 states (IA, NC, and TX). EPA issued a new policy in Oct. 2020. Last year, the new administration announced that EPA was going back to the 2015 rule. The litigation is now going ahead, with oral arguments scheduled for March 25. The industry argument is that a SIP can be protective even with SSM provisions. A decision is likely in the 4<sup>th</sup> quarter. This issue has states' rights vs the federal government issues. The EPA maintains that it can require a new SIP from a state even if the state met all of the required standards for the last 20 years simply because the EPA did not like the way the SIP was written. The residual risk and technology review process (RTR) has been under way since the early 2000s. The risk review is supposed to come 8 years after the initial MACT standard. The technology review is required every 8 years. EPA is way behind on meeting these 8 yr reviews.

With all of the litigation and changes to Industrial Boiler MACT, it will be years before the industrial boiler RTR will be completed. EPA has suggested that even the risk review may need to be redone for new HAPs, new emissions data, and EJ considerations. In 2020, the DC Circuit Court directed EPA to consider all of the HAPs that are known to exist. Expanded reviews are proceeding even when modeled risk is already known. A number of issues arise from these expanded review. When is a pollutant “known to be emitted”? No new rules have been issued as yet. Over the years, EPA has only added one new HAP on Jan. 5, 2022. More are likely. EPA is working on a framework regulation for

dealing with new HAPs. Fence line monitoring could potentially be required. EJ concerns and other risk considerations could be implemented.

EPA Water and PFAS Regulatory and Legislative Update  
**Chuck Chaitovitz, US Chamber of Commerce**

The EPA Science Advisory Board is preparing a report on contaminant levels for drinking water. The concern is that the proposed levels are close to non-detect levels. The current level is 70 parts per trillion. The report is expected within the next month. The cost of going to non-detect levels will be well in excess of \$100 million, which would make this a major rule. EPA will then have to propose a rule which will go out for public comment. A CERCLA determination on PFAS is anticipated. The EPA has indicated a willingness to meet with industry on the broader PFAS issues. With the wide variety of uses for PFAS, any regulation will have a major impact on the economy. The DOD has issued a memo to its bases directing them to comply with state regulations on the subject.

EPA Facility Data Reporting –  
**Christopher (Chris) Worley, EPA Office of Clean Air Markets**  
**Travis Lageman, EPA Office of Clean Air Markets**

ECMPS is the reporting tool for Part 75 emissions reporting, as well as some HAP reporting. In the past year, EPA has begun updating that tool. The first software was put out in 2008 and became mandatory for reporting since 2009. The major change is that the system is migrating to a web based reporting platform. A new file format will be used in order to reduce the size of the files. The central data exchange (CDX) will be updated and include the CBS system. There will no longer be any shared capability. There are no changes to the required data or regulations. There are no real changes to the reporting instructions. The fields and the data should be the same. The monitoring plan beta platform was released in December. The import and export functions will be added in the spring. Upgrades and pieces will be added about every two weeks. The emissions functionality should be added by the fall. The new system should be fully functional by Jan. 1, 2023. The system will be hosted on the cloud. There will not be a dual reporting year. Users are encouraged to look at the beta versions so that the system will basically change over at the beginning of the year. There is no login required to look at the beta version. In order to add, edit, and view data a test login will be needed. Data from the last submission period has been uploaded. That means that all data from all submissions will be available. Users are encouraged to mostly view their own data. Facility specific access will be added later.

The key is to attempt to use the system in terms of viewing, making changes, features, etc. Then provide feedback to EPA to make appropriate changes. Try to mimic the existing workflow to see how the normal functioning would proceed. The monitoring plans are available today. A demo was shown Q/A is coming within a few weeks. Emissions are coming over the summer. Feedback can be provided by email or filling out forms. Email is recommended as more information can be transmitted that way. EPA will be contacting users over the next months with information on the system.

CAMD is the tool for the clean air markets division. This tool is being re-engineered to the CAMPD system, which will make the system compatible with the ECMPS. Application Programming Interfaces (API) will be included in the new software. Enhancements and new features are also planned. There will be a webinar on the use of the system. Maps and visualizations will be added to allow better use of the data. Tutorials will be included on the web based system. Data can be selected, filtered, and downloaded. The system will be very flexible. Additional data flags will also be included. For example, the data can be identified as to whether it was measured, estimated, or calculated. The first

release will be towards the end of April. The old system will be available for a while. The data files will be kept up to date. An FAQ page will be available at the website. The presentation will be on the CIBO website with the appropriate links.

EPA Enforcement Update

**David Cozad, EPA-Region 7 Enforcement & Compliance Assurance Division**

The enforcement office does not have appointed leadership yet, awaiting Senate confirmation. David is at HQ right now reporting to the Assistant Secretary. The pandemic severely impacted the enforcement division. At the outset, site visits were discontinued. When some of the restrictions were lifted, inspections were announced prior to visits in order to make sure the plant was open and to make sure any health requirements were known in advance.

EJ enforcement will be a major activity. The EJ Screen tool is now available and is a big help. The current administration has placed a heavy emphasis on this aspect. The president issued 2 executive orders directing EPA to enforce EJ requirements. Enforcement, in general, is a higher priority with this administration.

In the last 9 months, emergency orders were issued (one to a refinery and one to a paper facility). EJ issues will be a part of all actions of the agency. The biggest effort will be to perform half of their inspections at endangered communities. The EPA plans to engage with these communities more than they have done in the past. There was a concern of endangering a potential settlement. Settlements should provide benefits to these communities. Cleanups, monitoring, and other changes will be included to bring about change in addition to getting a facility back into compliance.

Mobile monitors (land and air) will be used to help identify potential sources. About 40 facilities have been identified as potential sites for inspections. HAPs, RCRA areas, accident risk, drinking water, climate impacts, and mobile source defeat devices are priorities. Grants and infrastructure will also be utilized. Where EJ and climate impacts come together, more resources will be applied. Natural gas leaks will be one such area. States will be given less deference. EJ screen has 11 different data sets for types of emissions and discharges. It also has information on various demographic data. Information on a community is input and summarized by a score to help determine if a community has been significantly impacted.

The DOJ is coming out with their own EJ program. There are other efforts by the government underway. The major one is Justice40, which directs that 40% of the money goes to EJ communities.

On climate activities, the HFC issue is a major one. Although outlawed in the US, some are being imported illegally. Coal combustion residuals will also be a target. There are many impoundments and landfills that should be regulated but have not been monitored. PFAS issues will be another priority. Air deposition that occurs miles from a facility can impact the drinking water in the downwind locations. These locations will be investigated. Members were encouraged to go into EJScreen and put in their facility to see what that tool indicated about it.

Washington Energy & Climate Policy Developments

**Joshua Zive, Policy Resolutions, Bracewell LLP**

Right now, the Ukraine situation is taking up a lot of attention. The sanction regime is penetrating every aspect of government policy. API just suggested that we need “warp speed” for energy

production in the US. That position was highly unlikely even 2 weeks ago. Nothing can be discussed without bringing up the situation in Ukraine. This is shaping the debate about every policy. Congress has only been able to agree on budget resolutions and defense. A continuing resolution will likely be needed to get past the next deadline. Of course, the midterm elections are coming along. The polls are currently negative for the Democrats. This means that any legislation for the Democratic agenda needs to get passed in the next few months. There is not much time to get things passed, thereby limiting the types of legislation that can be moved.

In the meantime, the administration will use the agency powers to double down on their pet objectives. The infrastructure bill that was passed will put some funding into energy and climate programs. However, the big spending on climate issues that was in the “Build Back Better” program is pretty much dead. There appears to be a lot of support for hydrogen as a fuel (mostly for transportation).

EPA HAPs Compliance and Listings

**Susan Miller, EPA-Office of Air Quality Planning & Standards**

Section 112 of the Clean Air Act provides the location for listing HAPs. Those listed are regulated under NESHAPs. Since the original listing, no new HAPs have been added until this January. In January, 1-bromopropane was added after a petition from New York State. There are a number of issues that came up with the addition of 1-BP. In particular, if a standard or regulation that states that all total HAPs should be considered, does the new HAP have to be included? It appears to have been decided that the rule change cannot be made retroactive.

HoH was issued when the 1-BP HAP was listed. The rule became effective Feb. 4<sup>th</sup>. On Title V, facilities will have to work with their regulatory agency. If a facility was an area source and now becomes a major source, it has to comply with the major source rules. However, 1-BP is not included for treatment if it was not in the original permit application. Regulations still need to be written for this HAP. An additional concern is that there may be more compounds designated as HAPs.

DOE Update - Industrial Sector Decarbonization – Emerging Technologies

**Bob Gemmer, DOE Advance Manufacturing Office**

DOE is charged with catalyzing economy wide decarbonization. Carbon emissions have been politicized, unfortunately. Nevertheless, it does appear to be an issue that must be addressed. The goal of getting to net zero carbon emissions will be extremely challenging. There are technical solutions, but management solutions will also be needed. Companies still need to survive. Global goals can be articulated, but they presume that someone down at the plant can actually make something happen to help achieve these goals. New ways of operation may be needed. New controls have to be developed. Implementation is typically more complicated.

The ISO 50001 is an international standard that helps provide a framework for improvement in operations. It is a management tool that helps to save money and provide resilience. DOE has a suite of tools that can help facilities assess their energy use called MEASUR. The link is <http://www.energy.gov/eere/amo/measur>.

A new dashboard is coming in 2022 that looks at carbon reduction. Additional tools include the electrification impact calculator, carbon emissions calculator, electro technology, and a carbon management tool. These tools are being developed under the Better Plants program. There is a cost comparison calculator. A new tool is being developed called VERIFI. This provides a dashboard to

give an overview of the plant operations. These tools can be used on the DOE website, but can also be downloaded to be used locally. In that way, the facility can use its own costs and its own data to do their own analysis. The DOE AMO is looking to hire people to be deployed for the bilateral infrastructure bill programs.

Section 45Q Carbon Sequestration Tax Credit; Energy Policies-Advocacy  
**Mike Catanzaro, CGCN Group-Advocacy**

The policy is unsettled at the moment in view of the crisis in Ukraine. Sustained high oil prices are likely for the foreseeable future. This could cause a global recession. The stagflation that was experienced in the 70s could result.

In the US, the energy politics have been polarized and entrenched, which makes compromise difficult. Republicans favor more conventional energy production. The Democrats favor decarbonization and the need to get off of fossil fuels to “save the climate and the planet”. The Build Back Better bill is essentially dead. However, some provisions might be carved out in a separate bill. The 45Q tax credits have bipartisan support. Additional Russian sanctions might provide a back door way to include some energy issues. China legislation is also a complication. Senate confirmations are also a problem.

Oversight hearings are another potential to watch. We could likely see more releases from the Strategic Petroleum Reserves. Emergency authority available to the president includes an oil export ban, price controls, and expedited LNG export approvals.

Biden's first phase has been to attempt to undo Trump rules. This has been easier said than done. Some of the Obama rules have been reinstated. Phase 2 has involved the agencies in a push to implement the Biden agenda.

The Department of Interior has lost several court cases. Leasing is stalled due to legal uncertainty. FERC has set up new certificate policies governing pipeline review and approvals. This makes getting a new pipeline nearly impossible. This may be challenged in Congress. With respect to including climate change risks in any and all government agencies, the CEQ, SEC, and Federal Reserve are all now being charged with looking at climate impacts. EPA is looking at alternatives for GHG regulations in an attempt to get back door CO2 reductions in anticipation of losing a Supreme Court case. The NAAQS, Section 111, Section 112, and Section 115 can all possibly be used. Courts are complicating the Biden regulatory agenda. Republican states have been leading the charge. More can be expected.

Natural Gas: New FERC Gas Pipeline Policy Statement; Pathways to “Net Zero”  
**Matthew Agen, American Gas Association**  
**Rich Murphy, American Gas Association**

The FERC updated its certificate policy relative to new interstate natural gas pipelines. They also issued consideration of GHG emissions in natural gas infrastructure project review. They are stated as interim policies but are being used immediately.

In the first policy, they modified how they determined the need for the pipeline. Typically a gas company would state that it needed the capacity to meet demand to establish the need for the pipeline. Under the new policy, additional information on various impacts will be required to determine the “public need”. If a project is deemed to be “not needed”, it will not go forward.

In the GHG guidance, GHG emissions from the well head to the user will be estimated. If the GHG emissions are greater than 100,000 tons/yr, a broader environmental review will be required. The 100 K tons/yr is about the emissions from a pipeline compressor station. Nearly ¾ of the recent approvals would trigger this level. Mitigation strategies can be included. Pipelines have been very contentious in recent years. Expect a lot of litigation on all of these issues, including projects and policies. FERC will likely try to issue some clarifications going forward. AGA has submitted commits on these policies.

**Rick Murphy** reported on Net Zero Emissions Opportunities for gas utilities. The AGA has just released a report on this subject. The IPCC report put forth additional claims that climate change is impacting us today, not just in 2100. A net zero goal will impact every aspect of a modern economy. The AGA felt that existing gas infrastructure could provide a positive contribution to meeting this goal. There is no single pathway to meet the net zero goal. One group of actions concerns eliminating methane emissions from all aspects of the gas supply system. A second group includes improved efficiency of gas consumer appliances and machinery. A third group includes fuel substitutions such as renewable gas and hydrogen. Finally, offsets and CCS technologies should be considered as a means to allow for the potential use of conventional fuels when necessary. Gas utility associated GHG emissions represent 13% of total GHG emissions. The US has 6.6 gigatons of emissions compared to the world emissions of 52 gigatons.

Customers can take several pathways to reduce GHG emissions. Energy efficiency, gas-electric hybrid systems, renewable and low carbon gas use, and mixed technologies can be applied. Power generation and transportation sectors were not analyzed. Propane and fuel oil use were also not analyzed. Costs were not analyzed. Costs will be very site specific. Each of the pathways were analyzed to get to net zero emissions. All 4 pathways follow similar time frames. No attempt was made to optimize the selection of any one or combination of pathways. Most pathways result in a decrease in demand for natural gas.

Demand growth is expected in the industrial sector. All pathways incorporate a significant expansion of RNG and hydrogen. A combination of increased efficiency, RNG/hydrogen, and CCS work in each pathway. Natural gas demand is much higher in the residential, commercial, and industrial sectors than the demand of the electric industry. An integrated approach to gas and electric systems will likely be needed to minimize costs and improve resiliency in the quest for net zero. More studies that include both the gas and electric industries should be done.

Manufacturing Facilities- Industrial Energy Efficiency Tech & Deployment

**Thomas (Tom) Wenning, DOE, Oak Ridge National Laboratories (ORNL)**

The DOE Better Plants program is looking at resources for industrial efficiency and decarbonization. With the increased interest in climate issues, efficiency brings in the consideration of GHG reductions.

Decarbonization, corporate goals, reporting requirements, road mapping, and action plans are all of the “hot buttons” for companies today. Better Plants looks at manufacturers and includes energy efficiency, water, waste, and decarbonization. The program is voluntary and free to participate. They are partners to set long term strategic goals. Some 90 member companies have pledged to reduce GHG emissions of at least 50% in 10 years.

There are 4 main pieces: technical assistance, national recognition, peer to peer networking, and access to DOE and National Lab R&D. DOE has launched a low carbon pilot program in the last year. The

scope of emissions includes scope 1 and scope 2. Scope 3 is very difficult and will need more work. Barriers include financing and technology uncertainty. While there are many pathways to pursue, there is no real major technology that can be applied in many potential applications. Many companies have plans to get to 2030, but have a lot of difficulty seeing how to get to 2050. Setting up a target road map to 2050 provides a baseline for discussion.

Energy efficiency will never really go away. Renewable energy procurement will play a major role. Electrification will play a role. Process transformation will likely be needed. Onsite carbon capture technologies will be needed. Finally, carbon offsets can be pursued. The green power procurement trend has been expanding significantly. Power purchase agreements are the most common approach. It still takes time, but is one of the fastest means to gain reductions at the plant level.

Low carbon fuel production has been increasing. Hydrogen, electricity, biomass, and nuclear all can be considered. Renewable natural gas is still fairly costly but available in limited amounts. Regional supply is fairly site specific. Hydrogen is also costly. DOE has a major program to try to bring that cost down. Electrification can result in a near term reduction. Heat pumps come to mind. There are several types of electrical technologies that are either available or being developed. High temperature heat pumps are being developed to provide higher temperatures.

The resources include a technical account manager that helps partners develop their plans to achieve their goals. There are training programs available in a dozen areas. Right now, most of this is done virtually. There is also a “treasure hunt” program where company employees are involved with going through the plant to identify potential energy saving opportunities. There are also software tools. There are complementary programs with DOE that can be applied. There are CHP Technical Assistance Partnerships. There are Industrial Assessment Centers all across the US. DOE has a number of R&D programs. Partners can visit the DOE National Labs to help facilitate the connections between industry and DOE. There is also an industrial technology validation program. This helps to better understand and test a new technology.

There is now a Better Buildings Solution Center. DOE is launching a 2 year initiative to trial a wide range of technical assistance resources for energy intensive companies. The goal is to engage these companies to better understand their needs and issues.