



**CIBO Environmental Committee Meeting**  
**Dec. 13, 2022**  
**Chair: Bob Morrow, Detroit Stoker Company**  
**Virtual**

I. Introductions – **Alex Stoddard, CIBO**

We have a full agenda today. **Bob Morrow, Detroit Stoker Company** is the Environmental Chair. A number of topics of interest are being covered. Tomorrow is the Energy Committee meeting, highlighted by a post- election review of the Biden administration environmental agenda. We will have several guests attending these meetings. Bob gave the CIBO anti-trust admonition.

II. Energy, Climate, and Environmental Policies  
**Marty Durbin, US Chamber of Commerce**

Next year will bring a new Congress. The Republicans now have control of the House of Representatives. The Senate remains under the Democrats. This will make it somewhat more difficult to pass legislation. In order to do so, more compromise will be needed. A continuing resolution for funding in the next 2 weeks is likely. The government will still need to be funded. The debt ceiling will have to be released. The Chamber will still be pushing on improving the permitting process. There appears to be bipartisan support for this need. In spite of all of the climate goals and other objectives, these will not be achieved without a much better permit process. With the House under Republican control, the administration will likely need to issue more regulations and executive orders in order to achieve their objectives. While the Chamber does not agree with many administration objectives, the Chamber does have a good working relationship with the administration. Nevertheless, the Chamber is not shy about using litigation to support its membership.

The Chamber participated in COP27. The level of engagement from the business community was extensive. Climate activists may have been somewhat distraught (trade show for business?), but these policies, goals, and objectives cannot be achieved without the business community. The reality is that we will continue to need fossil energy and the energy security that those fuels provide for decades to come. The goal should be to reduce emissions, not to reduce the use of fossil fuels.

The debate needs to be changed from governments need to do more and force businesses to do something to one of developing the necessary technologies, providing the right signals, and applying the appropriate solutions. There are 3 significant needs. The first is improved permitting. The goals cannot be achieved if it takes 5 – 7 years to get a permit for a needed technology. The second is critical materials. Shorter and more secure supply chains will be needed. Labor availability is also key. The third are is natural gas. The Chamber is a strong supporter of natural gas. By greater use of natural gas, the US has significantly reduced its GHG emissions. This fuel needs to be made available throughout the world, as developing countries attempt to meet their energy needs going forward.

### III. EPA Air Regulations, MOG Update – **Skipp Kropp, Steptoe & Johnson**

There are a number of issues that are having an impact on requirements for industry in the ozone transport region. The PM<sub>2.5</sub> NAAQS current primary and secondary standards were retained by the Trump EPA. The Biden administration has chosen to review the standard. The administration has also revived the CASAC for advice on these issues. They reported a need to reduce the standard, although there were two different positions. The current standard is 12 micrograms/m<sup>3</sup>. There was one recommendation for 10 – 11 and a second recommendation for 8 – 10. Labor has stated that the standard should be no lower than 10. OMB is reviewing a proposal from EPA. Publication will likely be in the spring of 2023.

The ozone NAAQS final action is expected in March 2023. EPA has proposed disapprovals on 19 states, with requirements for 4 more SIPs. These will be finalized to a FIP the week of December 11, 2022.. EPA needs to include more up to date data in their modeling efforts. EPA is pushing states to implement more monitors, especially nearer to roads. Lower NAQQS standards will impact much of the US. Smaller sources will probably need to be targeted. Non-point/dust/and biomass combustion are significant sources. Wild fires in the West are no significant sources. Agriculture is a major contributory in the mid-West. One problem with modeling is that 2016 data is out of date, 2020 data is skewed because of covid, and 2023 will not be ready in time.

The EPA will be announcing a significant expansion of the Office of Environmental Justice. The EPA has not invited the business community to any meetings so as not to appear to be favoring industry. EPA studies are showing communities near highways, ports, wildfires, and multiple source industrial sites are experience the greatest impact. EPA thinks there are too many synthetic minor sources. All of the planned EPA activities will likely cause problems and delays in the permitting process, the exact opposite of what is needed.

The OTC Modeling Committee has been revamped. There are two new co-chairs from the NYSDEC, not the most reasonable. Recent VOC modeling for the OTR showed little impact to a 30% reduction in VOC inventory, outside of New York City. The Great Lakes region is still in non-attainment. Modeling of that region continues to show more sensitivity to NO<sub>x</sub> rather than VOC. EPA's revised CSPAR rule has been litigated. A decision could be near. On WV v EPA, the Supreme Court remanded the proposed rule from the Obama administration back to the lower courts. The court has asked the parties to come up with a proposal. At the moment, the request is

to drop the mandate and await the new proposal from EPA this spring. The WV decision could impact some of the FIP issues, depending on the outcome of any litigation.

#### IV. Fenceline Monitoring: Real Time Data Processing & VOC Speciation

##### **Rick Osa & Bryan Engelsen, Environmental Resources Management (ERM)**

**Rick Osa** started the presentation by pointing out the regulatory agencies have been pushing for more monitoring in general and fenceline monitoring in particular. A bill has been introduced in the House to require EPA to add fenceline monitoring at 100 industrial sites. EJ considerations are also impacting the drive for more monitoring. Reporting is mostly hard copy. However, public perception is looking at a dynamic website condition, with the idea that any delay in posting the data is indicative of industry attempting to hide something. Facilities do not operate in a vacuum. There are background levels of contaminant concentrations. Facilities also tend to congregate for supply line considerations. Wind and weather can impact results. There are high lab and capital costs. There may also be particle size or speciation requirements. Accurate wind field data should allow for proper evaluation of background or transport concentrations that come into the site. This could involve upwind monitoring to show these concentrations that may be able to net out the facility contributions. Sensor technology needs to be evaluated to control costs.

**Bryan Engelsen** reviewed a number of passive and continuous monitoring approaches. For particulates there are beta attenuation techniques and light scattering monitors. The system also takes an air sample for other measurements. Continuous gas analysis systems are available. They can also be solar powered. Passive techniques do not provide continuous analysis. Refineries are required to do fenceline monitoring for benzene. Absorption tubes were used with a 14 day exposure period. Some exceedances were noted at one refinery. The refinery switched to a continuous system combined with wind data in order to provide much better temporal resolution. This system was able to pinpoint whether the refinery or external sources were the primary contributor. A construction site used a continuous monitoring system combined with data analysis for particulates and heavy metals. Data analysis allowed the inclusion of telemetry data to again show the primary source and then alerts for actions needed to reduce concentrations. Data visualization also helps to alert the facilities.

Looking ahead, drones will likely be utilized to collect data and get it sent to data analysis systems. Both sensors and sampling systems can be included on the drones. The evidence of a plume can be isolated and centered. Trees and towers can be a problem for drones.

#### V. Stationary Engines: EPA Enforcement

##### **Ann McIver and David Foster, Citizens Thermal**

For reciprocating engines there are MACT standards. There are also NSPS standards with new and existing units. The EPA recently sent out an enforcement alert indicating that there are number of engines that had not been reporting to EPA, primarily because they did not realize that their particular engine was covered by a regulation. Types of engine (IC or diesel), 2 stroke or 4 stroke, emergency or non-emergency, etc. all have different regulations. Emergency engines are not supposed to be operated in non-emergency situations. If the grid goes down, the emergency engine

kicks in. As soon as the power is restored, any operating time counts as “non-emergency” time. There are limits on the amount of time to operate in non-emergency operation. There are around 100 different regulations on these engines. Storm mode operation is used to provide water supply either during or in anticipation of a power outage due to a storm. EPA has determined that anticipation of an outage is not an outage.

**David Foster** noted that Citizens Thermal has 95 engines for their systems. These are both emergency and non-emergency units. Catalysts were installed in 2013. For emergency units, non-emergency operation for readiness, maintenance, and testing is limited to 100 hours. All other non-emergency operation is limited to 50 hours. Various tools were developed to help operations staff to understand and follow compliance. Log books, stickers, fact sheets, and FAQ sheets were utilized. Compliance is a “team sport”. The various tools were updated and modified as operations personnel became more familiar with the requirements and relate them to operations. Data visualization helps to monitor performance and alert operations staff. Engine maintenance was shifted to an annual basis based on ZZZZ requirements. The maintenance was moved to the 3<sup>rd</sup> quarter to allow for full compliance checking by year end. An oil sampling program was developed. Oil has to be changed within 2 days of a non-compliance report. By correlating oil changes with use, oil change schedules for each engine were determined. Stack tests are required every 3 years for non-emergency engines. As a result, 5 non-emergency engines were re-classified to emergency engines.

VI. Cumulative Impact Analysis (Environmental Justice (EJ)), State Level Impact Analysis  
**Rich Hamel, All4**

The basic premise for EJ is that no community should be subject to greater environmental burdens regardless of race, religion, etc. etc. No new regulations have been passed on EJ. However, Title VI of the Civil Rights Act has been used to justify federal interventions on EJ. By executive order, EJ and Climate have to be considered in any federal agency action. EPA issued revised EPA Legal Tools to Advance Environmental Justice.

EPA’s External Civil Rights Compliance Office issued guidance on permitting to point out that a permit may be denied even though all emissions requirements were met, if the source does not meet EJ considerations. EPA is modifying its air monitoring plan to include cumulative impact assessments. This concept has been around for nearly 20 years. In this approach, the cumulative effects of all types of emissions and hazards need to be considered (ie traffic, socio-economic situation, etc.). The idea is that certain communities are subject to additional stressors which make it more difficult for them to cope with added environmental issues. Such evaluations would likely be done at the community level (as opposed to the plant level). A screening tool creates an EJ score for each community. Additional data such as health disparities, climate change, and critical services gaps that are not part of the EJ index calculations are being considered for addition. Threshold levels are being calculated. The ECHO database contains a record of violations. A new tool can be accessed and set up to provide an alert of notification if there has been a violation of a particular compound.

The EPA Nexus Tool provides an overlay of the various screens to identify “hot spots”. Some states are adding EJ SCREEN reports to all permit notices. Some states require an EJ assessment as part of the permitting process. California has a proposed EJ component in their permit process by law. Louisiana has gotten a lot of pressure from federal EPA. In one Louisiana Court decision, 14 air permits were denied for a large chemical complex on EJ and CAA grounds.

The EPA issued a 56 page letter suggesting that the Louisiana DEQ is violating Title VI of the Civil Rights Act in their permitting process. The letter recommends including a cumulative impact assessment in their permits. New Jersey requires EJ considerations for permit applications by state law. EPA is investigating Texas for permitting rules for batch concrete plants. One of the key concerns is that many of the requirements are somewhat vague (i.e. conduct an assessment). NGOs are starting to include EJ considerations in their complaints whether the particular facility is near an EJ community or not. Thus, EJ is everywhere. Public engagement is being encouraged. Being well prepared well in advance is the best defense. Community involvement is a must. Know and understand your state environment relative to permitting, etc.

**CIBO Energy Committee Meeting**  
**Dec. 14, 2022**  
**Chair: Robin Ridgway, Purdue University**  
**Virtual**

I. Post Election Administration EPA Agenda  
**Nichole Distefano, Mehlman Castagnetti Law Firm**

We are currently in the “lame duck” session of Congress. We are pushing up against the deadline for government funding. A one week extension is likely. It looks like some agreement is being worked on for next week. The Republicans will take over the House in January. Kevin McCarthy wants to become the next Speaker of the House but does not, as yet, have enough votes. There is a lot of jockeying going on, but an Omnibus Spending Bill is expected to be signed by Dec. 23. Senator Manchin has proposed an amendment on permitting to the National Defense Authorization Act. The main feature is deadlines for decisions on permits to avoid long, drawn out, permit times. For next year, the Senate is still with the Democrats and a one vote majority. Senator Sinema of Arizona has now registered as an independent, but will caucus with the Democrats. That should still give Democrats a little more room to maneuver. There could be some oversight hearings on “Big Tech”. On the House side, there will likely be more activity on the Energy Subcommittee. The Republicans will get to chair that committee. There will be a lot more interest in energy and environment issues and probably more oversight hearings.

The Republicans will introduce an energy bill fairly quickly. While it may pass the House, it will likely not pass the Senate. Therefore, a lot of the bill will be “messaging”. It will be important to identify any key points of such a bill that will be of interest to CIBO. The Inflation Reduction Act was passed in the fall. All kinds of groups are trying to figure out how to get their hands on the

moneys that have been identified in that bill, especially EPA. There is a lot of money allocated for clean air monitoring (including fence line monitoring). Funding could be available to assist with corporate reporting. A revised proposal on the Clean Water Act is expected by the end of the year.

## II. Update on Social Cost of Carbon

### **Chad Whiteman, US Chamber of Commerce**

Chad noted that the economic backdrop is currently an inflationary environment. Regulatory policy is often driven by the economic environment. Wages are growing but not keeping pace with inflation. As a result, savings are down considerably as people are dipping into their savings to maintain living standards. Gasoline prices have come down, but are still higher than they were before the pandemic. Regulatory burdens just add to these burdens.

Since Jan. 2021, this administration has issued 500 new regulations. That translates to over \$200 million in additional paperwork burdens. The top 10 air rules drive about \$400 billion/yr in regulatory costs. That is greater than the GDP for 31 different states. EPA's spring regulatory agenda listed 70 new rules. EPA has proposed a revision to the Risk Management Program (CAA 112(r)(7)). This is a chemical accident prevention regulation. There are 140 regulated substances. There are currently 11,740 regulated facilities. These facilities must have a risk management plan to cover potential accidents. Accidents at these facilities have been reduced by more than 70% in the last 15 years. Over 97% of regulated facilities had no reportable accidents in the last 5 years. However, EPA is pushing for "no risks". EPA is claiming EJ considerations need to be addressed in these plans.

The Obama administration had a proposal in 2017. The Trump administration rescinded the proposed rule. There have been a number of litigations. In the new rule, there is an inclusion of climate considerations. There are also requirements for power loss issues. This requirement states the need for backup power in order to maintain pollution control equipment in operation in the event of a power loss. Third party audits have also been added. Recommendations by such an audit need to be followed or some justification must be supported in the risk plan. Rail cars that are not unloaded within 25 hours can become part of the risk plan. The Chamber has recommended slowing down EPA and coordinating with OSHA.

The Social Cost of GHGs is an analytical tool that resulted from the government estimating the amount of GHGs being reduced from a particular policy. The courts ruled that the government should apply a cost to these claims so as to better understand the costs and benefits. The Obama administration put together a team to come up with an estimate. The Trump administration decided to eliminate world damage costs and only focus on US damage estimates. Also the Trump administration changed the discount rate that was used. As a result, the SCC dropped to something like \$10/ton. The current administration is redoing the estimate and will be proposing a number closer to \$250/ton. The Chamber will be challenging this figure.

III. New Office of Clean Energy Demonstrations  
**Christina Walrond, USDOE**

The Office of Clean Energy Demonstrations (OCED) is charged with delivering clean energy demonstration projects in conjunction with industry. Some \$25+ billion has been designated by Congress for the purposes of getting these demonstration projects built and ready for commercialization. While this is a lot of money, it is probably not enough to generate a substantial number of demonstration plants. One feature is to establish Centers of Excellence for project management of these programs. There is an engagement and outreach group that is looking to improve communications with industry.

OCED is firmly in the demonstration stage of RDD&D. They are to bridge the gap between development and deployment. Projects will be evaluated across EPC costs, business development, community benefits, safety, and environment benefits. Typical projects take around 10 years. Funding has to be obligated by 2026.

Industrial Decarbonization is an incredibly complex problem. Energy efficiency, electrification, low carbon fuels, and CCS/CCUS. The legislation has identified energy intensive industries for priority consideration. The infrastructure bill has identified \$6.3 billion for projects. For FY 2022 – 2025. However, the funds do not expire. Process heat, alternate feedstocks, and CCS are key cross cutting features across industries.

The Justice40 Initiative is intended to drive 40% of the benefits of these projects toward underserved communities. There is an OECD website and newsletter. The Office of Energy Efficiency and Renewable Energy and the Office of Manufacturing and Energy Supply Chains. The website is [energy.gov/OCED](https://energy.gov/OCED).

IV. Gateway for Accelerated Innovation in Nuclear  
**Christopher Lohse, DOE Idaho**

The Gateway for Accelerated Innovation in Nuclear (GAIN) looks to drive innovation in the nuclear energy field. Developers can propose a work scope and the National Labs can execute that work scope to minimize the additional costs of building and troubleshooting new facilities.

There is nuclear technology information from a variety of prior government agencies that is often “lost” to the present. GAIN is looking to relocate that information and make it available. GAIN has a website. There is a coal to nuclear program. There is an industrial outreach program. Process heat applications as well as power are being considered. They are trying to find out what industry needs in these areas. Idaho National Labs is trying to establish an integrate energy system to

consider all of the aspects of energy and then see where nuclear fits in. There is a lot of focus on hydrogen as an energy carrier.

The GAIN Voucher program started in 2016 and \$26 million has been awarded to date. GAIN Vouchers are open to support multiple areas for advanced nuclear applications. End users can potentially make use of this resource. There is a 20% cost share requirement. The next cycle is due Jan. 31st. There are 4 cycles per year. Typically, these are one year studies in the range of \$100 - \$500 K. Summary results for each completed study are available on the website. There are two test beds for SMR projects. There are 6 SMR projects and 2 micro reactor projects that are on the timeline for the next 6 years.

#### V. EPA Fugitive Emissions Rule – **Jay Hofmann, Trinity Consultants, Inc.**

EPA has the fugitive emissions rule under reconsideration. The CAA does not really detail how to deal with fugitive emissions. The court case in 1979 did not really resolve the issue. That was followed by some unfortunate rule making and guidance under New Source Review that further confused the issue. New Source Review includes Non-Attainment New Source Review and Prevention of Significant Deterioration (PSD). EPA is proposing to eliminate the mid-2008 “Fugitive Emissions Rule” and eliminate a source of confusion. The rule was stayed in 2009 and remains stayed.

There was also another exclusion that was part of the original rule. The definition of a Major Source is not being changed. A listed source must include fugitive emissions in its potential to emit. There are 29 listed source categories. The problem is with “unlisted” sources. If not on the list, a source becomes major if the potential to emit is greater than 250 tons/yr. Title III, Section 302(j) mentions fugitive emissions. The list comes from Title I, Part C, Section 169. However, this portion does not mention fugitive emissions. Nor does it consider modifications. The court decision stated that EPA could not count fugitive emissions in a facility’s total emissions unless that facility went through rule making, particularly for modifications. A major modification is any physical change that would result in a significant emissions increase. Unfortunately, that definition came from the NSPS section of the CAA. That does not include fugitive emissions. Fugitive emissions have historically been excluded when dealing with unlisted source categories. In 2002, the PSD rule was modified to include fugitive emissions at unlisted source categories. This rule was amended in 2008 with some new clauses. These were stayed during the Obama administration and remain stayed today. Another part of the 2008 rule excludes fugitive emissions if such inclusion would be the only reason that a source would become a major source.

In October, the EPA proposed to rescind the 2008 rule and proposed to remove the exclusion further down in the CAA. The comment period ends Feb. 2023. In other words. EPA wants to include fugitive emissions for practically everything. The definition of fugitive emissions basically states that such emissions “could not reasonably be vented through a stack” (i.e. become a point source). Further, EPA states that the cost to control such emissions (not collect and subsequently vent) should not be a consideration. A coalition has been formed to comment to EPA.



V. Boiler MACT: EPA Finalized Amendments

**Tim Hunt, AF&PA and Lisa Jaeger, Bracewell**

**Lisa Jaeger** reported on the litigation that is going on relative to the EPA Boiler MACT amendments. The DC Circuit Court is considering the petitions initiated by US Sugar vs. EPA. CIBO subsequently joined the AF&PA as a petitioner. The Sierra Club has filed on both sides. US Sugar opposed the Sierra Club as being a petitioner (i.e. not a supporter). We have not filed to support EPA for the sections that we like.

The definition of new source (the target date) is being challenged. AF&PA (and CIBO) have an issue with multi-fuel boilers and stack testing. The HCl limit for new units is also being challenged. The eNGOs object to CO has a surrogate and the 130 ppm standard. PCBs should also be considered. Final petitions have not been filed, so there could be other issues. Both US Sugar and Sierra Club have filed for reconsideration on procedural grounds. There are claims that EPA did not offer sufficient opportunity for notice and comment. EPA could decide to hold up the litigation to cure the procedural issues. The US Sugar complaint revolves around MACT on MACT. This relates to the HCl standard. The EPA changed some of its methodologies between 2010 and 2022. Sugar argues that the EPA cannot therefore go back to 2010 for the new unit definition but apply the 2022 standard for new units to those that were built before 2022.

**Tim Hunt** pointed out that their issue concerns the “maximum operating load”. Many limits were lowered in the 2022 rule. However, for maximum operating load, for multiple performance tests, the maximum load must be set to the lowest values established during the performance tests. This definition is a change to a footnote in the rule and effective immediately (not 3 years from promulgation). Some solid fuel boilers cannot reach maximum load without support fuels (oil and/or gas). The requirement for multi-fuel boilers complying by stack testing requires a fuel mixture with the highest chloride or mercury content. That could limit the operation with wood, with attendant GHG considerations. The question becomes how to optimize around burning solid fuel or burning solid fuel with natural gas. A number of alternatives have been suggested for performing tests. The PM and CO testing could be done at the full load with both the solid fuel and natural gas, while testing for HCl and Hg under the wood only type of test. If the mill needs to revise their compliance and IT systems, there are substantial costs. Compliance tests occur regularly, meaning that rule certainty would be very helpful. AF&PA continues to try to work with EPA to get the language changed, but will continue to pursue the litigation process.