



Representing the Interest of America's Industrial Energy Users Since 1978

# Environmental, Energy & Technical Committee Meetings

**June 10-11, 2008**  
Radisson Hotel, Reagan  
National Airport  
Arlington, VA  
(703) 920-8600

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## MINUTES

TUES-WED June 10-11, 2008

### CIBO JUNE 2008 COMMITTEE MEETINGS

Introductions, **Bob Bessette**, Council of Industrial Boiler Owners & **Bob Corbin**, CIBO Consultant

**Maxine Dewbury**, The Procter & Gamble Company did the normal introductions. **Lisa Jaeger**, Bracewell & Giuliani, L.L.P., gave the antitrust admonition. The minutes from the March meeting were approved.

### ENVIRONMENTAL COMMITTEE SESSION

**Maxine D. Dewbury**, The Procter & Gamble Company, *Environmental Committee Chairman*  
**Ann McIver**, Citizens Thermal Energy, *Environmental Committee Vice-Chairman*

Boiler MACT Update - **Maxine Dewbury**, The Procter & Gamble Company

The ICR request will be out late July or August. Based on the responses, EPA will decide on what data is needed and then issue additional requests for testing. Selected units will have 120 days to respond to the testing. Rob Kaufmann of Georgia Pacific reported on the definition of solid waste. AF&PA had a meeting with the EPA Office of Solid Waste. GP was concerned about the treatment of biomass and the various definitions thereof. The EPA issued white papers on the treatment of biomass. OSWER stated that they were in agreement with the white papers. The first indication of the overall definition of solid waste will likely come from the Portland Cement MACT, which is supposed to issue in Sept. 2008. One of the fuel value definitions was to have a bright line value of 5,000 BTU/lb or 2,500 BTU/lb. CIBO had proposed a net positive heating value. EPA requested help with understanding this concept. Contaminants were pointed out as a concern. Creosote treated wood was an example. "Discarded and abandoned" was discussed. A material that never leaves the site can be considered as not having been discarded and abandoned. The concept of "processing" was discussed with regard to the processing of materials that are brought to a site. Wood that is chipped is processed. Tire Derived Fuel (TDF) is processed. Processed fuels were thought to be OK. Contamination is a problem. Painted wood could be considered to be contaminated. EPA recognized that it would be impossible to inspect every piece of wood for paint. However, if a plant set out a specification for minimal levels of contaminants, this might help to qualify a material as a fuel. Firing a minimal level of "contaminated" material will not be allowed. This is due to the problem in the definition of an incinerator. An incinerator is defined as one that burns "any" solid waste. EPA did not seem to be worried about creosote, as that material was derived from coal. Heavy metals appeared



to be a concern, along with chlorides from things such as PVC. EPA would like some back up from industry to support that these candidate materials are fuels. The timing of the overall actions includes Area Source MACT, CISWI, Boiler MACT, and the definition of solid waste. EPA is in negotiations with the e-NGOs on the deadlines. EPA must issue the negotiated settlement for notice and comment. CIBO could comment on the problem associated with the timing. A deadline of June 2010 would imply a proposed rule by June 2009. With testing results not likely until early 2009, EPA would only have 6 months to digest the test data from about 300 units, plus the base data from the ICR, and develop a proposed rule. This does not seem reasonable (or likely). There is an expectation that the e-NGOs would not necessarily agree with OSW's view on what constitutes waste and what constitutes fuel.

On the 112(j) issue, OMB will be making a decision on the EPA request during the week of June 16<sup>th</sup>. If OMB approves EPA's request, EPA has indicated that there will be guidance. However, the guidance will be only procedural. There will be no attempt to issue standards. Industry response could be to challenge the OMB approval of EPA's request. However, the likelihood of delaying the process is small, in that the courts would have to stay the process while the OMB decision was being debated.

#### NACAA Model Rule - **Bob Bessette**, CIBO

NACAA has issued their model rule. The proposed emissions levels are at least an order of magnitude lower than the vacated Boiler MACT rule. There is no data on oxygen level, NOx levels, types of firing, or load conditions in the NACAA data. Further there are only 4 fuel categories (coal, oil, gas, and wood). The NACAA website indicated that the data collected would be available on June 13<sup>th</sup>. The model rule is 88 pages long. The difficulty is that some states may be willing to adopt this document as a basis for case by case MACT. A fast response will be needed in order to avoid this problem. Consideration might be given to a press release. A response document has been underway. A targeted watch on the states to determine if any are applying case by case MACT and at what levels. Wisconsin has issued a 100 pm limit on CO for Title V renewals. Any information of this sort should be communicated to CIBO.

#### NSPS Update - **Patty Strabbing**, Chrysler LLC

EPA issued a notice of proposed rule making to change sub part D of the NSPS for boilers. EPA proposes to amend the NSPS for utilities and industrial boilers. These proposals are not in the federal register. Once in the register, comments must be received within 45 days. Amendments are proposed for opacity limits for units without continuous opacity monitors. Three options are proposed: Annual Method 9, Annual Method 22 in lieu of Method 9, or the use of a digital photographic technique. If Method 22 or the digital photographic technique indicates an opacity greater than 5%, a Method 9 will be required within 24 hours. Facilities that use PM CEMS to measure filterable and condensable PM must conduct a Method 9 test during calibration. The results must be reported electronically. Some of the requirements that are being proposed are corrections that were supplied by industry in the prior round of NSPS modifications (Coke Oven Gas, June 2007). For synthetic natural gas derived from coal, this is treated as natural gas if burned. Water heaters will be treated as a steam generation unit and will be covered by NSPS. The definition of very low sulfur fuel oil is changed from 0.3% to 0.5% for facilities built after February 28, 2005 (the date of the prior proposal). The 30 day SO2 limit maintenance exemption for coke oven gas units is extended. Units burning gasified coal will be



treated as gas fired units with regard to the NOx CEMs requirements. Comments are requested for the units using PM CEMS being exempt from opacity requirements.

#### Ins and Outs of Life Cycle Analysis - **Lauren Laabs**, Environmental Resources Management

For most facilities, the CO2 footprint is more than just the CO2 emanating from the stack. Life cycle analysis looks at the entire process from raw materials to operations to plant emissions. Some guidelines, think boundaries rather than the fence line. Boundaries relate to the site's impacts. Functional reporting units are metric tonnes of CO2 (rather than US tons). Facilities must roll up to divisions and ultimately to corporate levels. Insurance companies and stakeholders are looking at the corporate levels. Consistency is the key. A corporate protocol or inventory management plan is essential. The process needs to be verifiable by a third party. Considerations include partial ownerships, financial control, operational control, equity shares, or other approaches. Documentation will be needed to line up the control aspects with whatever regulations are promulgated. Operational boundaries include scope 1 (direct emissions from internal production), scope 2 (indirect emissions from the import or purchase of electricity, heat, or steam), and scope 3 (other indirect emissions, which includes business travel, outsourced activities, supply chain, end use, disposal, etc.). Companies in Europe are asking their suppliers to do life cycle analysis in order to identify the total carbon impact of their products. Some de minimis thresholds will be needed, since it will be impossible to track down everything. A baseline is needed. Reporting metrics should be established. Impacts occur at every stage in the product life cycle. Mapping the product or project life cycle forms the basis. Quantities need to be identified at each step. Ultimately a mass balance is done on the system. The total of CO2 represents the carbon footprint. The level of precision needs to fit the purpose.

### GOVERNMENT AFFAIRS SESSION

**Karen J. Neale**, International Paper Company, *Government Affairs Committee Chairman*

Chemical Security legislation passed out Homeland Security and will now go to the House Energy and Commerce Committee. The current law expires in October 2009. Homeland Security will be sending out letters soon for risk assessments based on the old law.

The Lieberman-Warner bill came to the floor last week with modifications from Senator Boxer. There was a vote for debate, which was widely supported. The vote for cloture was 48 - 36, which was insufficient. The bill was pulled from the floor. Several Democrats that voted for closure indicated that they still had problems with the bill for reasons of high cost, wealth transfer, timing, technology availability, etc. They needed to "vote for something". There is an expectation that new legislation will come forth early next year. In the House, there is no bill at present. The House Energy and Commerce Committee has jurisdiction. Chairman Dingle and sub chairman Boucher have been looking at potential legislation, but have not been able to engage Rep. Barton or the Republicans. At this point, hearings are being called on the Senate bill and other proposals. The Speaker of the House, Nancy Pelosi, set up a select group on climate headed by Rep. Markey. He proposed his own personal bill which is more severe than any of the other bills. We had a number of visits with House staffers on Tuesday. In particular, we met with Lorie Schmidt, who has recently taken over as Chief Counsel for Energy and Air Quality on Rep. Dingle's staff. She was interested in multi year compliance options, which would allow some flexibility. We brought up the acid rain definition for



cogeneration units. The difference between utility units and industrial units was emphasized. The House sub committee has issue 4 white papers on climate issues. These are available on the sub committee web site. We also need to show some examples of the problem of NSR with efficiency modifications. We also met with Cory Hicks on the Republican side of the committee. He seemed to be generally in agreement with our issues. We pointed out that CIBO could be a resource for their efforts. Congressman Whitfield of Kentucky is not convinced about the whole climate issue and is from a coal state. We met with Steve Plevniak of Congresswoman Diane DeGette's staff from Colorado. Again, the staff person seemed to nod in agreement with our positions. However, we did not get an impression of how the Congresswoman stood on the issue. We met with Ryan Tracy from representative Shimkus staff of Illinois. We met with Pat Cavanaugh of Mike Doyle's staff from Pennsylvania. He is working on a new proposal for a bill that would be quite different from the current proposals. His idea is a rebate system based upon output by sector. The goal is to promote energy efficiency, particularly for energy intensive industries. He was very much aware of the impact of global competition. He was looking for input on this proposal. There are issues with how to set up the baseline and the average as there are many differences between individual plants. Mr. Cavanaugh pointed out that industry data was readily available and is reasonably transparent.

### ENVIRONMENTAL COMMITTEE SESSION continues

Energy and Environment - **David McCarthy**, House Minority and Chief Counsel

CO2 Regulation - **Rob Kaufmann**, Georgia Pacific LLC

EPA is preparing a decision document for internal use on reporting rules for greenhouse gases. A rule would be proposed later this year to be finalized in June 2009 and effective in 2010. Issues include coverage (all sectors, all 6 gases), boundaries (direct and indirect), reporting level (facility, process area, and unit), and reporting threshold (10,000 to 100,000 tons/yr). The treatment of cogeneration and avoided emissions is a difficulty. This has to be considered from a calculation point of view. The treatment of biomass centers around the need to report or not. Biomass is considered to be CO2 neutral. Methane or nitrous oxide are not neutral. However, the use of landfill gas converts methane that would have been emitted into CO2. As methane is 22 times stronger as a greenhouse gas, offsets can be claimed for methane reduction. Reporting rules considerations include base year, frequency of reporting, quantification, exemptions, de minimis levels, verification, preemption, and the Climate Registry. EPA will issue an advanced notice of proposed rule making on CO2 as a regulated pollutant. There is a battle going on between EPA and OMB about the length and coverage of the notice. The content covers Clean Air Act applications as the vehicle for regulation, the impact of the Supreme Court decision, limitations of the endangerment finding, implications for other programs, and implications for technologies. Additional problems include cap and trade legality, sequestration issues, state and regional program, and international issues. Once the notice comes out, CIBO expects to provide comments.

Litigation Update - **Lisa Jaeger**, Bracewell & Giuliani, L.L.P.

There are a number of litigation cases going on. The particulate matter case will go to oral argument on Sept. 15<sup>th</sup>. CIBO participates in a coalition supporting EPA rule making. A number of states and environmental groups are challenging EPA over the differences between primary and secondary standards. Industry interest is in the fine PM standard. A major issue is the CASAC group, which was set up by Congress to advise EPA on science. CASAC is a scientific advisory committee. Also EPA





staff recommended a lower limit than that which was set by EPA. A similar situation exists for ozone. Uncertainty and risk assessment are key issues. The legal question is how much discretion EPA has in setting a standard. A decision in this case is likely by the end of the year. The next case will be the NSPS case. The briefing on this case will continue through August. CIBO was originally a petitioner and also an intervenor within a coalition. The petition issues have been resolved. The states and environmental groups are aiming at the utility standards. However, because there are implications to rule making, the industrial standards could be at risk. The argument is that the language of the CAA with regard to NSPS requires that design considerations should be taken into account as NSPS. The implication is that IGCC and Supercritical designs should be required for NSPS. EPA (and CIBO) argues that design is not a control technology and that EPA has discretion to decide what the best technology is. Environmentalists also want separate standards for condensable particulates. The state of New York wants low sulfur fuel to be a required control technology for SO<sub>2</sub>. The language centers around what is a "system of control". The states and environmentalists also want SCR to be NSPS, trumping combustion controls. Sub categorization is being pushed by environmental groups. Utilities and industrials are intervening together. An industry draft brief is expected next week. Oral argument is expected in the late fall or early winter. A decision is not likely before the middle of 2009. The ozone issue is similar to the particulate matter case. CIBO is in a coalition that includes UARG. The arguments are similar to the particulate matter case. States and environmental groups are suing for a lower ambient ozone standard. Earlier this year, EPA issued a 75 ppb ambient standard, against the advice of CASAC and staff, which recommended 60 - 70 ppb. In this case, there is the question of whether EPA has to listen to the White House. Documents are being subpoenaed, claiming that the White House unduly influenced the EPA in selecting the standard. An accommodation has been reached whereby documents can be looked at by Congress under controlled conditions. Executive privilege has not been invoked. Another issue is why EPA is changing the standard at all, since the same data is being used from the last change 8 years ago. CIBO is petitioning to preserve language that allows EPA to take other considerations into account, which could include costs and other issues. In the Whitman case, although cost was not to be considered in health issues, it was allowed that some of these issues impact health (besides ingestion). In the HON case, we had a victory. This case centered around residual risk. Again ample margin of safety is to be applied in setting a standard. Environmental groups argued that cost could not be considered in addressing the margin of safety. The benzene rule was taken as an example. Standard setting for that rule was considered adequate. The court indicated that Congress could have set a more concrete requirement if it wanted to. Instead, it gave EPA the discretion to set an ample margin of safety. The Supreme Court granted certification in the case where the lower court vacated EPA standards for Section 316 B. The Supreme Court will be deciding if EPA could take into account costs and benefits when deciding about cooling water standards. The lower court took away EPA flexibility in providing methods for compliance. In the CAMR rule, the courts denied reconsideration of the lower court vacature of the CAMR cap and trade rule for mercury. In doing so, the court invoked Section 112 immediately. A decision on CAIR is likely by August. An extension of the comment period on the coal preparation case has been issued. EPA is thinking about doing a supplemental notice on control technologies. The standard does not cover open piles. Enclosed systems are covered and would be highly regulated.

**NAAQS - Maxine Dewbury, The Procter & Gamble Company**

The severe areas for ozone fall under Section 185 for fees for units that exceed 80% of the baseline. The fee level is running about \$8 K/ton.



Rob reported that EPA is considering several ideas for changing procedures including the elimination of SIPs. Nothing is expected before 2010.

#### NSR - **Maxine Dewbury**, The Procter & Gamble Company

Precursors can be included in consideration for NSR. The significant emission rate for PM 2.5 is 10 ton/yr rather than 15 ton/yr. States can take more stringent actions. Significant rates for NOx and SO2 are 40 tons. For non attainment areas, offsets can be obtained using conversion factors for SO2 and NOx into particulates.

Rob reported on a case involving the Potawatami Indian Tribe. The Tribe requested that their non-contiguous tribal lands become Class I areas. The states objected. The EPA granted the request. This was not a precedent. However, if a new plant needs a permit near these areas, 60 mile impacts must be considered. The total tribal land area is about 80 acres.

#### CO & PM Data - **Bill Becker**, NACAA

Bill announced that NACAA has hired Bruce Buckheit, a former EPA enforcement lawyer to assist them with their project. NACAA published a model guidance document this week, not a mandate. It will not fit every situation or every state. The goal was not to have some 200 entities redo the goals 200 times. NACAA believes that Section 112(j) applies following the vacature of the Industrial Boiler MACT rule.

#### Particulate Matter Test Methodology - **Patty Strabbing**, Chrysler LLC

Particulate matter definitions include total suspended solids, coarse particulates, and fine particulates. The fine particulates are now generally PM2.5, or 2.5 microns. Testing for PM in the 90s was Method 5 for filterable and Method 202 for condensable particulates. Method 202 showed poor repeatability. Method 17 can be used for flue gas with low moisture content in the stack. Method 202 is susceptible to artifacts due to interferences from ammonia and SO2. There is also a matrix effect from air chemistry and water chemistry. Errors are also introduced due to the fact that the beaker weighs 160,000 milligrams and the particulate sample weighs 1 - 10 milligrams. Small subtraction errors can be compounded. A stakeholder group was set up by EPA to look at modifications to Method 202. A Dry Impinger Method has been proposed. Laboratory and field testing has been carried out and a validation phase is now underway. EPA has put out a modified method 202 on the web site and is asking for comments. Comments are due June 27<sup>th</sup>. The website is <http://www.epa.gov/ttn/ernc/prelim/otm28.pdf>. The method is referred to as OTM 28. This method is somewhat of a "quick fix" method. The dry impinger tends to eliminate the interaction between water chemistry and air chemistry. Another method, now referred to as OTM 27 is looking at the front half, or filterable, fraction. EPA is finalizing the technology for air dilution sampling. This method is now called CTM039. There is also an ASTM work group working on an air dilution method (WK8124). The air dilution serves to put the gas sample in an ambient type environment that more resembles the interaction of the flue gas and the air.



## ENERGY SESSION

**Frederick P. Fendt**, Rohm and Haas Company, *Energy Committee Chairman*  
**Robin Mills Ridgway**, Purdue University, *Energy Committee Vice-Chairman*

Energy Session - **Robin Mills Ridgway**, Purdue University

Details of the Energy Bills - **David South**, Technology & Market Solutions

The Energy and Policy Act of 2005 and the Energy Independence and Security Act of 2007 have environmental as well as energy implications. The 2007 act did not extend the renewable credits. Most of this act is a gap filler for the 2005 act. Renewable fuels production is intended to increase. EPA must come up with some action as the EISA 202(a)(1) requires a 20% reduction in GHG emissions relative to baseline levels (through the use of renewable fuels). Title IV D covers Industrial Energy Efficiency. In particular, waste energy recovery and waste utilization will be encouraged. Projects with an ROI of greater than 5 years would not be forced. DOE will provide technical support and some partial funding for these evaluations. The program provides for incentive grants. Grants would not be available for projects that already have federal assistance. The DOE Regional CHP Application Centers are renamed Regional Clean Energy Programs. Under Section 452, DOE will issue competitive grants for R&D to promote the use of feed stocks for energy efficiency improvements. Capture of methane and the use of onsite renewable technologies for government buildings can get grants under another section. Carbon capture and sequestration RD&D is promoted with substantial funding. Title XIII covers the "smart grid" concept. With the advent of new meters and metering system, electric load can be measured at the equipment level. Selective curtailment could reduce the peaks in electric demand. One of the provisions of the Warner-Lieberman bill was that the SEC would require issuers to identify risks relative to climate issues. The Energy Tax Incentives bill (HR6049) is now going through the Senate.

Energy Management - **Chris Russell**, SAIC

Simple payback is the wrong tool for energy project analysis. Relative to investments, it is important to understand what questions should be asked. For energy projects, the "save or buy" question becomes important. The penalty for doing nothing needs to be identified. Payback criteria rarely change, but interest rates, cost of money, and profitability change almost daily. Simple payback is a risk assessment tool. It is not a profitability metric and does not reflect the cost of money. Payback poses 2 questions. These are the time to get the money back and the desirability of the investment. More applicable are questions like the cost of buying energy, the cost to avoid buying energy, the cost of doing nothing, and the maximum cost that should be paid to save energy. In the case of investing in a new piece of equipment that saves energy, the reduced energy use is the committed energy volume. The energy that is saved is the volume at risk. The choice is to buy the energy at risk or to save the energy at risk by doing the project. When the cost to save the energy is less than the cost to buy the energy, the project can be justified. The investment cost can be annualized. There are a number of approaches to annualizing the investment cost. It is important to include all of the costs. The difference between the value of the savings and the annualized cost represents the annual cost of doing nothing. The break even cost of the project is that which will cause the cost of savings to be equal to the cost of doing nothing. An energy audit can identify a number of projects. These will have different savings, different investments, and different cash flow implications. The savings can be capitalized



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ABMA 2009 Boiler & Combustion Technology Conference - **Bob Bessette**, CIBO

ABMA would like to do a technical meeting about boilers and combustion technology that would allow CIBO members to attend. Bob would like to get suggestions on what type of information we would like to hear about.

Decoupling

John DeRuyter asked for a conference call on this issue as we ran out of time.

**Next, Energy, Technical & Environmental Committee Meetings**

**TUESDAY & WEDNESDAY, SEPTEMBER 16-17, 2008**

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**2020 Jefferson Davis Highway**

**Arlington, Virginia 22202**

**Ph: 703-920-8600 ~~~Fax: 703-920-4033**