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Environmental, Energy & Technical Committee Meetings

Dec 8-9, 2009
Radisson Hotel, Reagan National Airport
Arlington, VA
(703) 920-8600

M I N U T E S

TUES-WED DECEMBER 8-9, 2009

FOCUS GROUP SESSION

Mercury Control on Industrial Boilers - **Richard Miller**, ADA Environmental Solutions

ADA provides activated carbon systems for mercury control on stationary sources. Industrial Boiler MACT and either CAMR of Utility MACT will require mercury control from coal fired units. Factors influencing mercury control include halogen content and sulfur content (particularly SO3). Mercury forms different species in the boiler including elemental mercury and oxidized mercury. The oxidized form of mercury is easier to capture. We cannot identify forms of non-elemental mercury. The amount of non-elemental mercury depends on coal chemistry and equipment characteristics. Some forms of non-elemental mercury can be removed in a wet scrubber while other forms will pass through a scrubber. Units with high SO3 have low mercury removal. Oxidized mercury is water soluble and can be collected in wet scrubbers. Elemental mercury cannot be captured in wet scrubbers. Unburned carbon can be effective at removing mercury.

The effectiveness of unburned carbon suffers from the presence of SO3. Activated carbon can adsorb elemental mercury. The effectiveness also suffers from the presence of SO3 as the SO3 competes for sites. While SO3 is at the ppm level, mercury is at the ppb level and is thus swamped by the competition from SO3. In such cases, an alkaline compound can be added to reduce the SO3 concentration and thus allow the sorbent to work on the mercury. An example is the Cornell University boiler. This unit is a small stoker fired boiler firing low sulfur bituminous coal. For operating reasons, the plant runs at a somewhat higher excess air and thus has greater than 10 ppm SO3. Initial results showed low native mercury removal and low activated carbon removal. In 2009, testing was done with trona (sodium sesquicarbonate) injection for SO3 mitigation. The mercury removal improved dramatically. Early results without trona injection gave 20 - 40% mercury reduction. With the trona injection, the level increased to 60 - 90%.

Reducing Nox Emissions - **John Boyle**, Fuel Tech, Inc.

Control methods include combustion controls and post combustion controls and combinations of the two. Combustion controls include low NOx burners and combustion modifications (over fire air, gas recirculation, and staging). These have advantages of low capital cost, but have some limitations on the amount of reduction and the application to small units. Post combustion control includes selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR).

SNCR employs the introduction of ammonia or ammonia producing compounds into the gas stream at the appropriate temperature and react with NO that has already been formed. The limitations are

the variability of the temperature window and the ammonia slip. SCR employs a catalyst and a reactor system to get the highest levels of NOx reduction. The limitation is the higher costs for the catalytic reactor and installation. Low NOx burners control the mixing of fuel and air to minimize the exposure of oxygen to the liberation of fuel bound nitrogen as well as to control peak flame temperatures. Low Nox burners are available for coal, oil, gas, and refinery gases. Over fire air is used to reduce the level of air in the combustion zone to minimize the formation of NO, but still provide enough air to burn out all of the fuel. SNCR technology uses ammonia or urea or another compound that produces ammonia to react with the NO to form elemental nitrogen (N2). The temperature window is from 1500 - 2200 F. The urea provides for a somewhat safer system than ammonia and also allows for better placement of the reactant as the urea evaporates after the water evaporates. Ammonia evaporates immediately, close to the injection nozzle. This makes it more difficult to get the reactant into the center of a large furnace.

Computation fluid dynamics (CFD) is needed to understand the flow regime, the mixing, and the temperature locations in order to properly place the injection nozzles as well as the momentum of the injected stream. Field assessments of the flow stream are very useful in the calibration of the CFD models. SNCR has been used in a number of utility boilers and several hundred industrial boilers. Reductions range from 30% to 70%. SCR reacts ammonia and NO to get N2 within a catalyst at the 600 - 700 F. The re-agent utilization is nearly 100%. The system is capable of very high reduction levels. Alkali metals and some heavy metals are poisons to the catalyst. There can also be issues with resins and sticky materials that sometimes come with alternative fuels. These tend to block the pores of the catalyst. Costs can be reduced by lowering the baseline NOx entering the reactor. This decreases the ammonia slip and increases the performance of the catalyst. Layers of catalyst can be used to facilitate change out of the catalyst.

Finally, using a combination of technologies helps to optimize the overall performance of the system. Physical flow modeling helps to understand the flow regimes that result from units in tight spaces with convoluted ductwork. These models help to properly locate even a small SCR that can be optimized with the combination of low NOx burners, combustion modifications, and a conservative SNCR.

Wet Scrubbing Systems - **Nicholas Confuorto**, Belco Technologies

Belco Technologies has primarily worked in the oil refining industry for particulate, SO2, and NOx technologies. Belco was founded in 1968 as part of Foster Wheeler. The company was sold to a French firm and subsequently to DuPont in 2006. The products include wet scrubbers, regenerative SO2 systems, and tertiary separation systems (TSS). Applications include cat crackers and refinery boilers. Ship board systems are now being developed. The EDV (R) system provides a quench system to saturate the gas followed by an absorber with special nozzles that spray from the center out to the walls. The drops penetrate to the wall to wash the wall and keep it clean. The system is designed to operate continuously for 5 - 7 years without a shutdown. In this system, nearly all of the SO2 and all of the particulates above 2 microns are removed. With the exception of the nozzles, there are no other materials inside the absorber.

The flat nozzle is a relatively open design that produces two streams of relatively large drops that create a curtain of liquid for the gas to pass through. A filtering module provides a period of time to grow particles that start out as fine mist. The droplets are removed by imparting a spin to the gas (using vanes) to drive the droplets to the wall, where they are collected. Typically soluble reagents are utilized. A purge stream is taken and sent to a clarifier for solids separation. The liquid is sent to

oxidation towers for converting sulfites to sulfates. The pH is neutralized so that the purge solution can be sent to a conventional water treatment plant with no problems. The absorber is made out of stainless steel. The LoTOx (tm) system adds low temperature oxidation to oxidize NOx to form N2O5, which is soluble and can be absorbed in the scrubber. Ozone is used as the oxidant. Ozone oxidizes mercury as well so that mercury scrubbing can be achieved. The final product ends up as soluble sodium nitrate in the purge solution that goes to the water treatment system.

About 2 dozen systems have been installed in the US. Over 90% NOx reduction can be achieved. A regenerative scrubbing system called LABSORB (tm). The system produces a concentrated SO2 stream (90+%) that can be sent to a sulfur recovery unit or a sulfuric acid plant.

Particulate/SO2 - **Richard Saab**, Siemens Environmental Systems and Services

Siemens provides fabric filters, electrostatic precipitators, wet FGD, dry FGD systems, having purchased the old Wheelabrator Environmental company. For SO2 control, systems include duct injection, dry sorbent reactor, spray dryer/absorber, and wet scrubber systems. The level of SO2 reduction that is attainable increases in going from duct injection to wet scrubbing along with the cost. As HCl is more reactive than SO2, chlorides are nearly always collected. For dry injection, the limitations include the particle surface area, the mixing, and the residence time. Typically, a bag filter provides the majority of the SO2 reduction. Dry systems produce calcium sulfite hemihydrate (CaSO3.1/2H2O) as a solid. For spray dryers, Siemens uses a dual fluid nozzle for atomization. This allows the removal of a single nozzle during operation for cleaning or replacement. Rotary atomizers are also used.

There are about 50 operating SDAs in operation on Waste to Energy plants. SDA systems are also in operation on large utility and industrial plants. Fabric filter systems use pulse jets, reverse air, and shaker systems to remove the solids from the bags. Siemens has a JET VIP(tm) system that uses a split gas entry into the baghouse. This uses a vane system to force the gas along the walls and through the vanes in order to move the gas flow across all of the bags. A pulse of gas snaps the bags against the cage to cause the solids to disengage from the bag. Reverse air uses a gas flow in the reverse direction to break the solids from the bag. Shakers deploy a shaking mechanism and are harder on the bag material. Electrostatic precipitators (ESPs) typically use rapping systems to vibrate the solids from the electrodes. Siemens uses a rigid discharge electrode with a tumbling hammer rapping systems. Magnetic impulse rapping is also used. Mercury control can be added to any of these systems.

ENERGY COMMITTEE SESSION

Frederick P. Fendt, The Dow Chemical Company, *Energy Committee Chairman*
Robin Mills Ridgway, Purdue University, *Energy Committee Vice-Chairman*

Introductions - **Fred Fendt**, The Dow Chemical Company

Overview - Bob Bessette, CIBO

Bob gave the anti-trust admonition. Fred Fendt initiated the usual round of introductions. Bob Corbin welcomed the new members from ADA and GRAYMONT. Two guests were also present from Standard Filter and Tri-Mer. Bob also requested that boiler owners indicate the names of some of

their energy personnel on a sign up list for updating our contact list.

IECT Conference Update - **Fred Fendt**, The Dow Chemical Company

Fred pointed out that there is a tentative program for the Conference. There are a few gaps in the program. We would like more case studies for the meeting. The new Industrial Boiler MACT is scheduled to be released in April. The rule will be finalized by December. We will need to be looking at the technologies needed for compliance. Any case studies that can help demonstrate these technologies will be given preference for presentation.

ENVIRONMENTAL COMMITTEE SESSION

Maxine D. Dewbury, The Procter & Gamble Company, *Environmental Committee Chairman*
Rob Kaufmann, Koch Companies Public Sector, LLC, *Environmental Committee Vice-Chairman*

Committee Leadership - Bob Bessette, CIBO

September Minutes - **Maxine Dewbury**, The Proctor and Gamble Company

The minutes from the September meeting were approved as written. The introductions and anti-trust admonition were already given.

GHG Reporting Rule - **Ann McIver**, Citizens Thermal

This rule was published in the federal register at the end of October and will be effective at the end of the year. This rule is based upon the Global Warming Potential of each of the greenhouse gases. The GWP value is 21 for methane and 310 for N2O. The emissions of these compounds are multiplied by these factors to get the global warming potential. These are summed to calculate the CO2 equivalent of all GHGs. The emissions are to be reported in metric tons. There are no de minimis levels.

The rule is economy wide and covers the energy sector, the support sector, and the manufacturing sector. Subpart C is the fuel combustion category. Any devices that combust solid, liquid, or gaseous fuels are covered except portable equipment and emergency equipment. Any electric generating facility that emits 25,000 metric tons of CO2 equivalent is covered under this category. Any facility that emits more than 25,000 metric tons of CO2 equivalent in total is covered. The 25,000 metric tons of CO2 is the amount generated by 11,000 tons of coal or 58,000 bbls of oil. Mass emissions of CO2, CH4, and N2O must be reported. Electric generation must use CEMs for reporting.

For other units, there are 4 tiers of calculation protocol. For Tier I units, an estimate is made from monthly fuel sampling. For Tier II, fuel analysis and emissions factors can be used. Tier III can use a combination of measurements. Tier IV requires CEMs. Units over 250 MMBTU/hr must use Tier IV. Units that combust solid fuel or waste must use Tier IV. Units with CEMs will need a flow monitor in order to multiply measured concentration times flow rate to get the actual emissions. Estimated accuracy of instruments shall be recorded. The technical basis for estimates shall be provided. Periodic calibration of instruments is required.

Subpart D covers electric generating units. Facilities with one or more EGUs are covered and includes any unit that is subject to the acid rain program and any other EGU will be required to monitor and report to EPA emissions of CO2 on a year round basis in accordance with 40 CFR 75.

There is a provision for using oxygen measurements and calculating CO2, but there are restrictions. CO2 analyzers and flow monitors are required. Emissions factors are used to estimate methane and N2O.

Annual GHG emissions reports are due no later than March 31st of the calendar year immediately following the emissions year. These requirements start Jan. 1st, 2010. Full compliance is required by April 1st . For those units not ready on January 1st, Best Available Monitoring (BAM) can be used provided adequate justification is given. A 90 day extension can be requested up until the end of January. There are some case by case considerations that might allow BAM for all of 2010.

A designated representative (DR) must be identified. This person is responsible for certifying, signing, and submitting the report. Only one person can be identified as the designated representative. The certification is more stringent than that required for Title V. The statements and information must be certified to be true, accurate, and complete (to the best of the person's knowledge). If the facility has a designated representative under the Acid Rain program, the same DR can be used. A list of all units and operations must be recorded. Data used to calculate GHG emissions must be recorded. A copy of the annual report must be maintained. Missing data computations must be recorded.

A written GHG monitoring plan must be maintained. Laboratory equipment (ie Bunsen burners) is exempted. For small units firing natural gas, a site gas meter can be utilized provided no unit is greater than 250 MMBTU/hr. Some systems can use steam flow and design fuel flow to estimate CO2 emissions. The strict calibration requirements do not apply to Tier I and Tier II estimates. However, the certification statement would still imply some degree of calibration.

Biomass fuels can be used to reduce the threshold levels of CO2 (not N2O or CH4). However, the amounts must be reported. Tire derived fuels are uncertain at the moment. The moisture content of the biomass should be checked as the rule may have been based upon 12% moisture. The monitoring plan must identify data collection responsibilities, explain the process for data collection, QA/QC procedures for monitors, reference existing corporate documents and procedures, reflect "best available monitoring" methods, and be made available for on-site review. Since monitoring starts Jan. 1st, the plan should theoretically available on Jan.1st. The annual report must contain the facility name, the data reporting year, the date of submittal, annual emissions, total electricity generated, and the signed certification statement. Reporting is, once in, always in with a few exceptions (cease to operate, reported emissions less than 25,000 metric tons/yr for 5 years, or reported emissions less than 15,000 metric tons/yr for 3 years).

EPA has developed a series of fact sheets and tools to assist with implementation that are on the EPA web site. Since the first report will be due at the end of March, 2010, and the Industrial Boiler MACT rule will be finalized in December, 2009, it might be a good idea to identify equipment that will be impacted by the new Boiler MACT as well. The Area MACT rule and some of the exemptions may be changed, which might require additional notification.

GHG Regulatory Issues - **Rob Kaufmann**, Koch Companies Public Sector, LLC

There are a number of regulatory actions going on at EPA. On the GHG reporting rule, there are thousands of questions pouring into EPA, so much so that the rate of response has slowed markedly. At least one trade association plans to litigate. Key issues are the timing requirements, the use of BAM, the availability of an electronic reporting tool, the 5% accuracy requirement, and the treatment of contiguous property.

The Climategate scandal has captured the attention of the Wall St. Journal. Some e-mails were exposed that intimated that temperature data may have been manipulated to support the warming hypothesis. Data that might have supported a cooling trend were alleged to have been suppressed. The Congressional Republicans have attempted to thwart or delay the issuance of the endangerment finding issued yesterday by EPA. The Chamber of Commerce requested an "on- the-record" formal rule making and was denied. The Competitive Enterprise Institute plans to sue the EPA on the issuance of the endangerment finding. A trade association letter was circulated and sent to OMB over the finding. This letter was issued in order to preserve the potential for a future law suit.

The endangerment finding was issued by EPA on Dec. 7th in order to coincide with the president's trip to Copenhagen. The EPA ruled that there was compelling scientific evidence that GHGs endanger public health and welfare. The rule was directed to mobile sources which contribute 23% of GHGs in the US. The Administrator used "judgement" to weigh the threats for health and public welfare. The endangerment finding and the tail-pipe standards proposals are the first steps that would lead to a PSD program and bridge the gap from mobile sources and stationary sources. The rule must go final by March 31st, 2010 in for the auto industry to retool by the 2012 model year. There have been some analysis done that estimate that the CAFÉ standards and the refrigerant rules for autos would accomplish the same goals as the tail pipe standard. This rule will likely be challenged.

The Johnson memo was recalled for reconsideration. This memo stated that a compound does not become a pollutant until an actually regulation is in force. The NGOs wanted to force this to become a regulated pollutant when there is a monitoring or reporting requirement. The Obama Administration has re-issued the guidance and agreed that the effective date is on the first substantive control compliance date. PSD would only be triggered for pollutants for NAAQS are set. Ironically, this was essentially the same position taken by the Bush Administration.

The Tailoring Rule addresses the problem of CO2 becoming a pollutant and being subject to PSD and Title V requirements. The problem is that the source threshold is 250/100 tons of GHGs/yr. Addition of new equipment or modification of existing equipment that increase GHGs by any amounts would trigger PSD and BACT. The EPA estimated that 6.1 million sources would require Title V permits (vs 14,700 today) and that 41,000 sources would require PSD permits (vs 280 today).

The EPA and the States are not in any position to accommodate such a rule. Thus, EPA has proposed to raise the limits to 250,000 tons/yr for CO2. The legal justification relies on the " absurd results " doctrine and the " administrative necessity " doctrine on the grounds that the results would contravene Congressional intent and would be impossible to administer. Many groups have stated that EPA has under estimated the number of permits that would be required. There are also 39 states that have the lower thresholds on their books which would not be affected by the EPA ruling. There could be retroactive liability if the EPA rule is overturned. The EPA has not addressed what BACT would be for GHGs. There have been two approaches to this problem. One is for EPA to delay issuing rules until Congress acts or more flexibility can built in to an EPA program. The other is to allow this to become a "train wreck" for the states and the economy, at which time Congress will recognize the problem and take appropriate legislative action.

The Center for Biological Diversity has petitioned EPA to set a National Ambient Air Quality Standard (NAAQS) of 350 ppm. Since the current global concentration is 390 ppm, the entire US would be in non- compliance. EPA has stated that they have no plans to create a NAAQS. The implications of this petition would be a long court case that would tie up EPA staff and introduce the wild card of a court

decision that requires a NAAQS. One approach to PSD is that there would be no PSD without a NAAQS.

There is a work group established by the Clean Air Act Advisory Committee (CAAAC) to evaluate what BACT should be for GHGs. This new work group is supposed to have an interim report out by the end of the year and a final report by the end of March. Work group membership includes DPA, NACAA, NRDC, ED, Clean Air Trust, states, autos, paper, utilities, oils, and lawyers. On the EPA staff, the primary worker is David Solomon who is an NSR expert. Issues include very few BACT experts, design changes, fuel switching, biomass carbon neutrality, whole source (vs modified facility), traditional BACT, top down policy, and the potential for the CAAAC to revise the results.

The Waxman Markey bill requires an NSPS for GHGs by 2025 for utility boilers. The NSPS rules are currently under a voluntary remand on the grounds that EPA is interested in integrating the NSPS and utility MACT. The integration could bring NSPS requirements by 2018. States actions include California (implementation of AB32), Idaho (voluntary inclusion of Title V CO2 limits), Illinois (petition to require coal syngas plant to burn natural gas in boilers rather than syngas), and multiple NGOs and states sending letters to Congress arguing that federal legislation will nullify GHG reduction program implemented by the states.

NAAQS & CAIR Update - **Rob Kaufmann**, Koch Companies Public Sector, LLC

Current NAAQS schedules include an NO2 primary standard by Jan. 22, 2010, an SO2 primary standard by June 2, 2010, a revised ozone standard by August, 2010 (likely to be between 60 and 70 ppb), an a revised PM2.5 standard by October 2011. There could also be a reconsideration of having a PM coarse standard. The SO2 proposal is in today's federal register. The proposal is to replace existing annual and 24 hour standards with a new 1 hour standard at a level between 50 and 100 ppb. Secondary targets are due by 2012. Current standards are 140 ppb 24 hour and 30 ppb annual, both set in 1971. EPA considered a 5 minute standard in 1996, but no rule was forthcoming. (Not enough elderly joggers encountering a 5 minute "blast" of SO2) Along with a new standard, the monitoring network is proposed to be updated. There are 488 monitors, but 2/3 is not properly sited to capture plumes of SO2 at higher concentrations. There would not be many non-attainment areas under the new rules, but this could be due to the monitor locations.

Comments are due in 60 days. A new CAIR rule is planned for the 1st quarter of 2010 to be finalized by the 1st quarter of 2011. It is not known if industrial boilers will be included in this rule. It is not known if any trading will be allowed in the new rule (one of the reasons why the original rule was vacated). It is not known if the standards will be set to address the upcoming ozone and PM2.5 standards.

Industrial Solar Energy Opportunities - **Mike Levin**, Michael H. Levin Law Group, PLLC

Mike is with Carbon Finance Strategies which is an outgrowth of the National Landfill Gas Strategies and was formed 2 years ago. The group has the resources to evaluate sites for solar facilities to determine eligibility for solar installations. The group provides risk management for decision making on solar projects. Solar projects have undergone a rapid change in the last 6 months. Solar generates electricity at peak, which is when power costs are typically at their highest. Most of the work has been done with industrial installations, but non-profits can also take advantage of the various credits and incentives that are currently available. First movers will have an advantage because a number of these credits and incentives are either "stimulus" are crisis related. Pre-screening is important as this

will not work for all sites. This is an asset management program. Criteria include sites that have a significant load and an area with significant electric prices; sites that are in areas with RPS or RFS or other green incentives. Roof top installations with 100,000 sq ft of roof space (about 0.5 Mw) or more are required. States with solar renewable energy credits (S-Rec), are good states for solar. In one state, these were going for $600/Mwhr, which would make any solar project economical. Facilities are currently being built for less than $5/peak watt.

DOE Update - **Bob Gemmer**, DOE

Bob is now responsible for DOE's distributed generation program, which includes combined heat and power. The DOE Industrial Technologies Program has a mission to improve national energy security, climate, environment, and economic competitiveness by transforming the way US industry uses energy. Industry makes use of 32% of energy consumption in the US. While the prime purpose of industry is to make things in order to make money. The strategic objectives are to reduce industrial energy intensity by 25% in 10 years.

Industry has historically reduced its energy intensity (on the order of 1 - 2%/yr). The DOE has two approaches to help improve in this area. One is on the R&D side. The other is on the delivery side. DOE has people that are trained to look for energy savings opportunities. These can be made available to companies for useful energy savings. The R&D program is divided into industry specific R&D and cross cutting R&D. Technology delivery strategies include plant energy assessments, software tools and training, plant certification, technical resources and outreach, incentives and recognition, and reduction of market barriers. Strategic partnerships are anticipated to promote cooperation with industry to meet the "25 in 10" goal.

The theme is "Save Energy Now ". Save Energy Now will promote Leaders that pledge to adopt a goal to reduce energy intensity by 25% or more in 10 years. The DOE commitment, will deliver customized resources and technical assistance, priority access to plant assessments, and recognition. Thirty two companies have signed up. DOE is looking for more. In the combined heat and power program, universities and institutional entities can be included. The web site is SaveEnergyNow@ee.doe.gov. The contact is Jeffrey Walker at 202-586-5059. Two areas of interest on the R&D side are steam generation and combined heat and power.

Boilers are the largest energy consumers in the industrial sector. The former Gas Research Institute had been developing the Super Boiler program. This utilized a membrane system to absorb water out of the flue gas to be recovered for make up or heat recovery. The successor to GRI is the Gas Technology Institute. GTI has licensed the membrane to Cannon. They will be using it on fire tube boilers. Discussions are underway with Cleaver Brooks, Inc. for somewhat larger fire tube boiler applications.

Combined heat and power and distributed generation are also being promoted. DOE is working with prime mover companies to develop small systems with high efficiencies. Today less than 9% of US electric production is done with combined heat and power (a little over 90Gw). If the US could get to 20% of electric production with combined heat and power by 2020 over 240 Gw would be needed. Such an achievement would provide roughly 60% of the needed GHG reductions needed to meet the GHG targets for 2020.

Boiler MACT - **John deRuyter**, E.I DuPont de Nemours & Co.

EPA will be issuing a new MACT by April. Along with the Industrial Boiler MACT, there will be an Area Source MACT for small units. There will also be a Utility MACT. The MACT rules may differ for new and existing sources. For existing sources, the average emissions that can be achieved by the average of the best performing 12% of existing units set the limit. Key issues were the failure (by EPA) to establish limits for all subcategories and the definition of solid waste. A unit that burns any solid waste is considered to be an incinerator and would fall under the incinerator rules. EPA's office of solid waste is leading the development of a definition of non-hazardous waste. The key word is "discarded".

In order to get better data and improve the sub categories, EPA requested additional testing from industrial facilities. Some 13,100 units were surveyed and testing was requested from 158 facilities. Some 54 units were withdrawn for a variety of reasons, most of which were either shutdown or not burning the particular fuel. EPA has to decide how to come up with sub categories. They could be fuel types, boiler types, industry sectors, size, etc. There is some question about the use of surrogates. The HAP for gas fired units needs to be identified.

HBCA is still an open issue. Another problem is the use of data from units that installed controls to meet the vacated MACT (so called MACT on MACT).

Area Source emissions are based on GACT (Generally Available Control Technology). Under GACT, costs and economic impacts can be considered. The focus will be on the 30 HAP that have been identified as "urban HAP". Under Area MACT, there are 137,000 boilers including those in schools, churches, hospitals, hotels, apartments, restaurants, office buildings, and a variety of small businesses.

Other concerns include "cherry-picking the data", "best of the best" approach, and failure to consider variability, limits of detection, and unit performance. The problem with identifying the best performance of individual HAPs is that no individual unit can meet all of the limits for all of the HAPs.

The CIBO Board has asked for proposals from environmental consultants to work on the database that we have thus far. The data would be analyzed and characterized to help us understand what is available and what can be learned from the data. Two proposals were received. The Board voted to allow a fixed price contract of $45 K for this work. Each group is working with other associations on the database for specific industries. It was the sense of the attendees to initiate discussions with URS.

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

There is a lot of activity in the litigation area. The NSPS was voluntarily remanded by EPA. On CO2 NSPS, a challenge to Mass vs EPA has been remanded to EPA. On the ozone NAAQS, EPA will propose a new rule by 12/21/2009. The CEM rule revision on protocol gas verification program has been held in abeyance as no certification program is in existence and, thus, requiring CEMs owners to purchase protocol gas from certified suppliers was not possible. The SSM rule on vacating the SSM exemption was stayed. However, there is a petition to take this to the Supreme Court. The Johnson Memo issue has been resolved for the moment. The PSD Interpretive Rule was issued which adopts a similar position to the Johnson Memo. Getting back to the ozone issue, there are a number of forces coming to bear on EPA. Industry has requested that the briefing be resumed.

Industry further requested a complete stay of the rule on the grounds that EPA, itself, agrees that the rule needs to be changed. Of course, EPA stated that they agree that the rule needs to be changed, but for vastly different reasons. It will likely be difficult to claim irreparable harm. There are 3 categories of litigation going forward. These include NAAQS/]NSPS, MACT, and GHG issues. Many of these will have to be addressed by amicus briefs given the number of actions going on in parallel. As an example, boiler owners would not have "standing" for hospital medical waste incinerators. However, depending upon how the waste definition goes, some of the industrial boilers could become incinerators. The climate suite of rules involve 5 new rules (reporting rule, tailoring rule, PSD rule, tail pipe rule, and endangerment).

Emission Factors Improvement ANPR and NSR Update - **Maxine Dewbury**, The Procter & Gamble Company

EPA would like to get additional data via the reporting tool in order to improve the emission factors that are often used to estimate emissions for those units that do not require CEMs. Maxine noted that they had only one unit in the 114 data request. The cost to input the data into the reporting tool was more than 11% of the cost of the testing. A number of members reported difficulties with using the electronic reporting tool. The input screens for many of the compounds were not available or were changed during the testing. In one case, an extension had to be filed because of the difficulty of inputting the data. Basically, the tool was not ready for user input. It was nearly impossible to check the data to see if it was correct. It was suggested that EPA hold a public meeting to get feedback to improve the tool. Maxine will draft comments that are due shortly.

RCRA Ash - **Gary Merritt**, Inter-Power AhlCon Partners, L.P.

The EPA has proposed a "hybrid subtitle C" for coal ash or coal combustion byproducts. The OMB has held meetings on this proposal. Most of the respondents have recommended subtitle D. In particular, the state governor's organization, which has never commented on a rule, went in to OMB to recommend subtitle D. The pressure for the "C" classification comes from Lisa Jackson and Carol Browner. OMB is reported to be leaning toward signing off on the "hybrid classification" . The problem is that once there is a hazardous waste determination, beneficial uses are no longer possible. Major users such as cement and road construction will no longer be able to use coal ash.

Although the proposal is for utility CCBs, ash from the same coal used for another application still has the same properties. There are only 4 hazardous waste landfills in the country. There are requirements for operations handling hazardous wastes. As an example, a bin that holds ash prior to loading a truck would have to be completely emptied every 90 days. Making a guarantee that the bin completely empties is nearly impossible. OMB thinks that everyone that comes in will say the same thing. CIBO needs to provide a different perspective, particularly for schools and universities. Operational issues and costs need to be emphasized.

Coal ash does not meet the standards for being classified as a hazardous material. The difficulty comes in with a need for a "federally enforceable permit". Such a permit could only be obtained from a sub title C designation. A document has been prepared with talking points to address the issues raised by such a designation. These include the following: such regulation will affect all coal combustion sources, such listing is contrary to national energy and conservation goals, such listing is contrary to scientific evidence, potential liability issues will escalate problems for all users, disposal costs will increase exponentially, disposal is and should be regulated by the states, hazardous

disposal sites are not available, small entities will be disproportionately impacted, boiler operations could be severely impacted should the boiler become classified as a "hazardous waste storage site".

GOVERNMENT AFFAIRS SESSION

Anthony Reed, Archer Daniels Midland Company**,** *Government Affairs Committee Chairman*

Government Affairs - **Karen Neale**, Hummingbird Strategies, LLC

Karen noted meetings have been set up with Senate staffers on the RCRA ash problems. A total of 9 Senate offices will be visited. This week, Copenhagen is hosting the COP-15 meeting. During the first week, there are meetings of the chief negotiators. There are a number of official panels and side events for presentations and debates on key topics. There are country briefings for country nationals each day. All of this is in preparation for the second week. During the second week, major speeches are given leading up to a potential agreement. The Council of the Parties (COP) then attempts to reach an agreement. The US has indicated that it would cut emissions in the range of 17 - 20% below 2005 levels by 2020. The US wants binding commitments from China and India. Most of the developed countries want to replace Kyoto with a schedule that includes nearly all countries except the most vulnerable. The EU has pledged 20% below 1990 levels by 2020. Japan has also committed towards similar targets. The LDCs have indicated a willingness to work towards carbon neutrality. They want payments and technology and stronger cuts from the wealthy nations. President Obama changed his plans and is now expected to speak during the second week. The Senate has indicated that climate legislation will come up in the spring of 2010.
The environment and Public Works Committee has reported out a bill (S. 1733). The Energy and Natural Resources Committee has a bill from the summer (S. 1462), but continues to hold hearings. The Finance Committee is unsure of a markup on any bill early on. The Agriculture Committee is expected to protect agricultural issues. Senators Kerry, Graham, and Lieberman are working on a bill. Senator Stabenow and the mid- western Senators are working on offsets. Senator Alexander has been pushing for nuclear provisions. A number of coalitions are speaking up about various provisions. Senator Cantwell has a bill. Healthcare and financial reform will have to get done first before a climate bill will come up for a vote.

CIBO has commented on the wording for the definition of an Electric Generating Unit (EGU). CIBO has consistently recommended the Acid Rain definition. The House bill has language that is inconsistent. This issue has been raised to staffers for both HR. 2454 and S. 1462. The inconsistency has been recognized.

Next, Technical Focus Group/Environmental & Energy Committee Meetings
TUESDAY & WEDNESDAY, MARCH 9-10, 2010
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