

**Pennsylvania Department of Environmental Protection
AIR QUALITY TECHNICAL ADVISORY COMMITTEE MEETING**

Minutes

October 20, 2011

Air Quality Technical Advisory Committee (AQTAC) Members Present:

Francine Carlini
Amy Earley
Michael Fiorentino
Josie Gaskey
Jayme Graham
Joe Guzek
Charles McPhedran
Gary Merritt

Patrick O'Neill
Joe Osborne
Jim Sewell
John Shimshock
John Slade
John Tissue
Kevin Stewart
Michael Winek

Department Staff Present:

Joyce Epps
Dean Van Orden
Arleen Shulman
Randy Bordner
Nancy Herb
Bo Reiley
Kristen Furlan
Nick Lazor

Vince Brisini
Ron Gray
Krish Ramamurthy
Jane Mahinske
Susan Foster
Andrew Fleck
Rob Altenburg

Others Present:

Gina Meyers, Buchanan, Ingersoll & Rooney, PC
N. Madziewz, Widener
Wendy Mertz, Trinity Consultants
Jim Erb, American Petroleum Institute
Andrew Hilt, Pugliese Assoc.
Doug Biden, EPGA
Scott Miller, EME Homer City

Jeff McNelley, ARIPPA
Gavin Biebuyck, Liberty Environmental
Bill Dunagan, SBDC-EMAP
Chuck Hauy, SBDC-EMAP
Dan Snowden, PENNDOT
Michael Hirtler, EnviroPlan
Pete Manousos, First Energy

CALL TO ORDER

Patrick O'Neill, AQTAC Chair, called the August meeting to order at 9:20 a.m. in Room 105 of the Rachel Carson State Office Building in Harrisburg, PA.

ADMINISTRATIVE ITEMS

Approval of Minutes

The minutes from the August 4, 2011, meeting were discussed by the committee. Kevin Stewart asked for confirmation that the discussion related to the City of Philadelphia's experience with dual-fuel fleet vehicles was accurate. Patrick O'Neill suggested a revision to clarify that discussion. Mr. Stewart also asked what the difference is between automatic closing and

automatic shutoff containers in the portable fuel container discussion on page five. Jayme Graham requested a revision to the SO₂ modeling discussion. The minutes were approved with the suggested revisions by a vote of 12-0.

Approval of 2012 Meeting Dates

The draft meeting dates provided to the Committee were approved unanimously.

Deputy Secretary's Remarks

Patrick O'Neill introduced the Department of Environmental Protection (Department or DEP) Acting Deputy Secretary for Waste, Air, Radiation and Remediation, Vincent Brisini. Mr. O'Neill noted that Mr. Brisini was an AQTAC member for about 20 years.

Mr. Brisini has 36 years of environmental experience, primarily in the electric generating industry, but has also worked in the steel industry and as a consultant. Mr. Brisini is a graduate of Slippery Rock University. Mr. Brisini indicated that he is solutions-oriented and has a diverse background ranging from very technical activities, such as stack and ambient monitoring, to being a registered lobbyist. Throughout his career, Mr. Brisini has been involved with a broad range of activities including, permitting, trading, market based solutions, regulatory analyses, negotiating settlements, policy advocacy, and policy development. In addition to being a long-standing member of DEP's AQTAC, Mr. Brisini has served as a member of various committees including the EPA's Acid Rain Advisory Committee/Nitrogen Oxides (NO_x) Subcommittee, the Ozone Transport Commission (OTC) baseline review workgroup, the Northeast States for Coordinated Air Use Management (NESCAUM) ad hoc NO_x trading advisory group, the EPA's Clean Air Act (CAA) Advisory Committee, the Permits New Source Review (NSR) and toxics subcommittee, economics incentives subcommittee, the Federal Advisory Committee Act Subcommittee for ozone, PM, and regional haze, and DEP's Mercury Rule Workgroup.

Mr. Brisini leads the management team for the Waste, Air, Radiation and Remediation deputation that includes Joyce Epps as Director of Air Quality, Ken Reisinger as Director of Waste Management, Dave Allard as Director of Radiation Protection, and Denise Brinley as Director of Environmental Cleanup and Brownfields. Tammy Adams is administrative officer and Sharon Trostle is executive assistant. Mr. Brisini articulated his intention to understand issues, perspectives and timing and his desire to be involved in outreach, consistency, certainty, and continue the goals of collaboration and partnership. Mr. Brisini wants to explore options and solutions. The goal is to integrate and achieve the regulatory, business and community objectives in a way that avoids unnecessary delays.

Patrick O'Neill asked what is involved in the Radiation Protection portion of the deputation. Response: Radiation Protection is a comprehensive program that includes oversight of nuclear power plants and dental and medical facilities using radiation, low-level waste disposal, Marcellus Shale drilling issues, etc. Mr. O'Neill asked if Pennsylvania is still working on a low-level radiation disposal facility. Response: Pennsylvania is still a member of the group, but there has not been much recent activity.

Kevin Stewart recognized and thanked the Department for its long-standing involvement in radon issues, indicating that Pennsylvania's program is nationally recognized and respected. The

program has helped to inform the public and make them more aware of radon and has also provided tools to the public to understand and mitigate problems in homes and other buildings. Mr. Brisini agreed that the radon program is an impressive program.

John Shimshock asked whether Mr. Brisini anticipates new or enhanced initiatives with other regulatory agencies, such as EPA, Allegheny County Health Department (ACHD) or Philadelphia. Response: There is long-standing collaboration and partnership with those groups. There are informal relationships as well as formal. Mr. Brisini wants to work toward collaboration and understanding with all of the stakeholders in addition to the formal relationship. The Department is here to act in partnership with others to find solutions. The goal is to understand perspectives and work together to find compromise that works. Mr. Brisini noted that when he worked for industry, he found the Department willing to listen to solutions and offer their perspective.

Jayme Graham asked what the State's position is on the lawsuits on the Cross State Air Pollution Rule (CSAPR). Response: The Department is reviewing the lawsuits on the CSAPR. Governor Corbett and 11 or 12 other governors signed a letter related to the utility maximum achievable control technology (MACT) rule but did not join the amicus brief.

Patrick O'Neill commented that, in the past, the relationship between DEP and EPA could have been described as DEP being very supportive of EPA although disagreeing on some details. The impression in the press is that relationship seems to be changing. Response: There is danger in disjointed implementation of the numerous EPA rules. While the problems may have a common solution, EPA has not developed an integrated solution. Instead, EPA's approach is multi-pronged and presents timing concerns. This places electric reliability at risk. The electric generating industry is now a competitive industry. The implementation timeframe is short. Knowing that a rule is under development does not provide adequate time to prepare for compliance because the final requirements are not known.

Kevin Stewart asked what the schedule is for the inventory work related to the Marcellus Shale industry. Joyce Epps indicated that progress has been made. A meeting is scheduled this afternoon with Special Deputy Secretary Alisa Harris to discuss an outreach effort. The package is being finalized for the Secretary's review and concurrence.

John Shimshock noted concerns related to inconsistencies between DEP regional offices and expressed interest in attempts to ensure uniform policy and implementation of state regulation among the regional offices. Response: That is one of Secretary Krancer's goals. Those issues are recognized. The DEP reorganization included creation of the Office of Program Integration to address some of those concerns.

INFORMATION ITEMS

Overview and Implementation of the Cross State Air Pollution Rule ("Transport Rule")

Arleen Shulman introduced Sam Napolitano of EPA, who delivered a presentation on the Cross State Air Pollution Rule (CSAPR or Transport Rule) using a PowerPoint presentation available on the AQTAC website. Discussion during and following the presentation is summarized below.

John Shimshock asked if EPA has a list of states that have submitted notice to preserve their opportunity to submit a revised SIP that would allow them to implement CSAPR as a SIP and consequently allow them to allocate allowances using a different allocation scheme. Response: Yes, the list is available on the website. Mr. Shimshock asked Mr. Brisini if Pennsylvania would consider auctioning allowances, if states are allowed to do so. Response: At this point, all options are under consideration.

Charles McPhedran asked if there was an emissions performance benchmark used such as the 0.15 pounds per million British Thermal Units (lb/MMBTU) used in the NOx Budget Program or a benchmark based on certain technology such as use of a scrubber or selective catalytic reduction (SCR). Response: A benchmark similar to the NOx Budget Program (NBP) was not used. The 0.15 lb/MMBTU used in the NBP was pegged to reductions costing approximately \$2000/ton. A different algorithm was used in the Transport Rule, which is discussed in the preamble at length. In essence, EPA started at \$500/ton for each state. Sulfur dioxide (SO₂) emissions were reduced until the marginal cost of \$500/ton was reached. This resulted in all of the existing scrubbers being turned on in the analysis. In 2014, \$2300/ton was used for SO₂ for Group I states. Group II states were kept at \$500/ton because maintenance and attainment problems for those states were solved at that level.

Jayne Graham asked for an update on the status of lawsuits. Response: Lawsuits are occurring. The Department of Justice (DOJ) maintains a website.

Gary Merritt noted that some of the waste coal plants seemed to disappear from one of the slides. Response: The dots representing those plants are probably hidden under other dots.

John Shimshock asked for the rationale for eliminating the opt-in for non-EGUs. Response: Refer to preamble.

Amy Earley asked what the deadline for stakeholder input is. Response: The end of the comment period is November 28, 2011.

Charles McPhedran asked if electric reliability was considered. Response: Yes, in a general way of considering resource availability. The Technical Support Document lays out what EPA found.

John Slade noted that in certain Pennsylvania regulations there are compliance options for non-EGUs to purchase Clean Air Interstate Rule (CAIR) allowances and asked if that will continue to be an option in the future. Response: EPA is currently reviewing.

Charles McPhedran referred to the excess capacity mentioned earlier by Mr. Napolitano and noted that there are a number of unscrubbed plants. Has EPA looked at likely retirements? Response: EPA has identified "candidates" that look likely to retire due to economic factors; however, companies make those retirement decisions. Mr. McPhedran asked whether it is the NOx or SO₂ reductions that drive the retirements. Response: EPA did not run de-aggregated runs and so cannot tell from their analysis.

Doug Biden of the Electric Power Generation Association (EPGA) noted that EPA did not use traditional allocation methodology to make allocations for 2012 and 2013. This poses an unnecessary hardship on those that have not installed controls because they will need to buy

allowances at the same time that they are going to the capital markets for funding to construct controls. This will result in more retirements than would have been necessary if EPA had used a traditional allocation methodology for the early years of the program. Response: This issue is in active litigation. Mr. Napolitano deferred to the preamble, which explains why EPA did what they did after considering comments.

Patrick O'Neill asked if it is accurate that many plants have controls but have permitted emission limits that do not reflect operation of those controls. Response: There are some state SO₂ requirements to encourage use of "clean coal" that are higher than levels that can be achieved by the control equipment. Sources may or may not have the ability to bypass the scrubber. Sources can also change coal and reduce the amount of lime. These factors affect percent removal. EPA tracks performance quarterly of all coal units and analyzes relative to allowance price. For example, EPA could observe that SCR catalyst change was not done as quickly when NO_x allowance prices were lower. Mr. Brisini added that requirements depend on whether the equipment is permitted as an air pollution control device or discretionary equipment. If permitted as an air pollution control device, the source is obligated to operate at a specified emission level to meet a regulatory standard. If discretionary equipment, you will have to meet an emission standard but it will generally be less stringent. Then the source makes economic decisions related to the cost of operating controls and cost/value of allowances.

Gary Merritt commented that since 1990, the state's permitting process is much tougher. In many cases, plants built after 1990 were required to undergo best available control technology (BACT) analysis and air quality modeling and have much tighter and more specific permit conditions. Mr. Brisini agreed, indicating such equipment was installed as air pollution control devices, not discretionary equipment.

Michael Fiorentino asked for clarification that the \$200 cost referred to in Mr. Brisini's discussion of facility operators balancing the cost of allowances versus the cost of removal represents operating cost rather than capital cost. Mr. Brisini responded yes, that \$200 is a reasonable estimate of the cost to control using an existing control device. Mr. Fiorentino asked how much that number could vary depending on spray levels selected by the operator. Mr. Brisini indicated that operating at the lower end of the temperature range results in approximately 60% removal. At higher allowance prices, for example \$1000, units with controls will be well-controlled. Mr. Fiorentino asked how much variation depending on operational choices there is in the dollar per ton cost of operating the control. Mr. Brisini indicated he had not analyzed the data in that way, but the cost is not linear across the removal range.

Patrick O'Neill asked what the age range of facilities is. Response: Some were built as early as the 1920's. Most of the fleet is 1960s-1970s vintage. New coal units were not built in the 1990's and early 2000's. Coal units, once built, are cheap to operate. The Transport Rule puts us in new territory, bringing old plants to retirement. Mr. Napolitano offered to provide more detailed information by email. Mr. O'Neill appreciated the offer and indicated the detailed information would be of interest.

Coal Capacity at Risk for retirement in PJM: Potential Impacts of EPA's Cross State Air Pollution Rule and the Proposed Mercury and Air Toxics Rules

Gary Helm of PJM noted that PJM operates the grid from the Midwest to the East coast and has about 178,000 megawatts (MW) of capacity. PJM conducted an analysis of the impacts of the CSAPR and the proposed mercury and air toxics rules. Mr. Helm provided an overview of the analysis of the coal capacity at risk for retirement in PJM using a PowerPoint presentation.

Mr. Helm commented that EPA's proposed revision to CSAPR to delay the assurance provisions and revise the New Jersey budget is helpful in addressing some of PJM's concerns. PJM initially was concerned with being able to freely trade allowances because of the assurance provisions. There were also concerns related to constraints in New Jersey. PJM has enough capacity but concerns remain related to which units will be retired and where they are located and whether retirements will lead to local reliability problems.

Questions

Mr. Brisini asked for clarification that the 11 gigawatts (GW) at most risk and the 14 GW at some risk for retirement are two separate categories. Response: Yes. Mr. Brisini asked what percent price increase \$5/megawatt-hour (MWhr) represents. Response: \$5/MWhr is approximately a 14% increase based on preliminary information. Sam Napolitano asked for clarification that the increase is in the cost of electricity, not the consumer price. Response: Correct, this is the average load-weighted locational marginal price (LMP). Mr. Brisini asked if it would be fair to say 14% represents an average increase. Response: Correct.

John Shimshock asked if PJM will be able to meet its reserve requirements if the retirements indicated as possible in the analysis occur. Response: Yes, PJM projects plenty of capacity to meet reserve requirements.

Charles McPhedran asked if the plants at risk for retirement present a local reliability problem and whether PJM has identified which plants are in which categories of risk. Response: Yes, PJM has done a detailed unit-by-unit analysis but cannot release unit-specific data because of confidentiality.

John Tissue noted that the analysis was conducted using a price of \$5/MMBTU for natural gas, but the actual price of natural gas has been around \$4.50/MMBTU. Mr. Tissue asked if the prices continue to be below the analysis price, if that would put more units and GW capacity at risk. If so, is there a second analysis? Response: Yes, lower natural gas prices would put more capacity at risk. The analysis was retrospective. Looking forward, PJM is looking at the lower gas prices.

Kevin Stewart agreed with Mr. Tissue's concern related to the meaningfulness of the analysis given lower natural gas prices. Response: The Pennsylvania Public Utility Commission (PUC) requested a retrospective analysis. Mr. Stewart referred to the capacity factor graph and noted that it reflects efficiency, with units higher on graph being less efficient. Mr. Stewart asked if there is additional information on trends from the graph. Response: The graph displays current status rather than trends. Heat rate reflects size and age of unit. Smaller, older units have higher heat rates.

John Slade noted that the analysis is complicated moving forward. Development of natural gas will lower the price but will result in a return of uses of natural gas, including exporting natural gas. Permitting to converting a plant to natural gas is a difficult, long process. Building new plants in certain areas may not be possible because Pennsylvania has fine particulate matter (PM2.5) nonattainment areas but very few PM2.5 emission reduction credits (ERC).

Gary Helm noted that PJM commented to EPA proposing a safety valve to continue to operate a unit if needed. PJM's main concern is reliability. PJM has to plan for the worst-case scenario.

Patrick O'Neill noted that many people in the room have environmental backgrounds but not much background on operation of the electric grid. Mr. O'Neill asked for clarification of the meaning of PJM's analysis conclusion that there is not a risk to the grid as a whole, but there is potential for localized concerns. How large are the areas of concern and is the risk that of a temporary blackout or a longer-term problem? Response: The PJM study is a best guess. The study does not say there will be an issue. Most issues will be handled in a normal course of business. There have been instances where it has taken a number of years to get transmission lines built because of permit delays. PJM is having difficulties in northern New Jersey currently. Some factors are beyond PJM's control and result in unforeseen delays. For example, PJM experienced delays in installing transmission lines related to a solution for two Exelon plants that were being retired because the transmission lines went over an AMTRAK right-of-way, so the utilities could not work on the lines 24 hours a day. Some small units provide services to certain load pockets. PJM cannot take action until PJM receives deactivation notice from operators. Operators are required to provide 90 days of notice, but most operators provide more. Once notice is received, PJM conducts an analysis. PJM is trying to be proactive by looking at what-if scenarios.

Joe Osborne noted that, in the analysis, the cost of entry is based on simple cycle unit and commented that it seemed likely new generation replacing coal would be combined cycle. Response: PJM uses the lowest cost of simple cycle for cost of re-entry. PJM also develops costs for combined cycle. PJM sees a mixture of simple cycle and combined cycle new plants, but it is not assessed on a one-to-one basis. Mr. Brisini expects to see plans for units that can operate as simple or combined cycle depending on demands. Mr. Osborne asked for confirmation that the upfront cost of new generation is likely to be higher than the cost of a simple cycle unit. Response: Mr. Brisini indicated he thought the new generation would be more likely to be hybrid giving more operational flexibility. The flexibility is worth the investment.

ACTION ITEM

Proposed Rulemaking Addressing Condensable Fine Particulate Matter

Randy Bordner reviewed changes to the rule. Definitions were added for condensable particulate matter (PM) and filterable PM. In Chapter 139.12, proposed new subsection (a) clarifies that existing testing criteria for filterable PM apply solely to the existing PM standards in Chapter 123. Proposed new subsection (b) requires source testing of condensable and filterable PM to demonstrate compliance with PM10 and PM2.5 emission limits established in permits to comply with certain applicable requirements including best available technology (BAT), prevention of significant deterioration (PSD) and NSR permitting requirements. Section 139.53 requires submittal of periodic source testing to the applicable Regional Air Program Manager with a copy to the Chief of the Division of Source Testing and Monitoring.

Questions and Discussion

John Shimshock asked if there will be a formal comment period. Response: Yes, this is a draft proposed regulation and will have a comment period. Mr. Shimshock pointed out differences in the DEP and EPA definitions and asked why DEP did not use the EPA definitions. Joyce Epps noted that often DEP definitions are not identical to EPA definitions due to stylistic changes required by the Pennsylvania Legislative Reference Bureau (LRB). Ms. Epps indicated that staff will review the definitions to track the meaning of the EPA definitions. Mr. Shimshock also requested consistency with the Department's Source Testing Manual.

Charles McPhedran asked whether Chapter 139.12(b) controls or if subsection (a) carves out filterable PM only for those sources. Response: Chapter 139.12(a) carves out filterable PM for those sources for Sections 123.11 through 123.13. This goes back to the Regulatory Basics Initiative. The intention was to refer to filterable PM because the emission limits of these sources were established based only on filterable PM. Mr. McPhedran asked if the Department's policy goal is to include condensables in PM, why would the Department not include condensables for these sources. Response: This takes care of grandfathered sources. Their emission limit was set based on filterable PM. These sources are not subject to any more stringent PM limit unless they modify or rebuild their facility.

John Slade clarified that the emission standards were based on emission tests of filterable-only PM. If condensables and filterable PM had been the basis for the standard, the standard would have been a different number. For some sources, condensables can be a significant portion of the total PM. Charles McPhedran suggested a category reflecting condensables could be added instead of exempting those sources from meeting a limit including condensables. Mr. Slade disagreed there is an exemption, explaining that the Department is simply clarifying that these sources are subject to a filterable PM standard. If those sources become subject to new requirements, the new requirements will include condensable PM. The Department added that including condensable and filterable PM for the old sources would result in those sources being out of compliance. This is unfair because the standard was premised on filterable-only PM. If the facility is modified or rebuilt, the source would be subject to a new standard that would reflect filterable and condensable PM. Mr. McPhedran suggested the limit could be revised to reflect an appropriate level for filterable and condensable PM.

Francine Carlini expressed concern that the language is confusing. Ms. Carlini suggested adding an effective date to subsection (b) for clarity.

Joe Osborne asked whether condensable PM from the old sources would be considered for other purposes, such as background for attainment demonstrations, state implementation plan (SIP) control strategies, emission inventories, etc., and that subsection (a) only applies to compliance with the filterable PM limit. Response: The Department confirmed that is correct.

Michael Winek commented that subsection (b) needs to be clarified. He pointed out that subsection (a) references compliance, but subsection (b) has no reference to compliance. Instead, it says "shall include." Mr. Winek expressed concern that subsection (b) could effectively change existing PM10 or PM2.5 permit limits to include both filterable and condensable.

Jayne Graham asked for clarification that PM emission limits in subsection (a) refer to filterable-only PM while PM10 or PM2.5 in subsection (b) includes filterable and condensable PM.

Response: Yes, the Department indicated it will look at clarifying. Ms. Graham pointed out that subsection (a) has specifics for testing procedures and refers to source testing manual and asked if the Department intends to include specifics for subsection (b). Response: Specifics related to testing for PM10 and PM2.5 are in the source testing manual.

Kevin Stewart noted that while it would not be fair to abruptly change the definition and require sources that had been complying with a filterable-only PM emission limit to comply with a condensable and filterable PM emission limit, there should be a process for bringing those sources on-line to address their emissions of condensable PM. The sources should not be grandfathered forever. Mr. Brisini responded that, from a practical standpoint, implementation of CSAPR and the boiler MACT will result in installation of scrubbers. Scrubbers are the key to this problem because, in addition to SO₂ reductions, scrubbers will reduce PM_{2.5} emissions about 70 – 80%. The issue will take care of itself as these other programs are implemented. Mr. Brisini noted that more recent permits for scrubbers have included a condition that the PM limits include both filterable and condensable PM.

Michael Fiorentino noted that addressing condensable PM is part of the changes needed over time to bring Pennsylvania into attainment with the PM_{2.5} National Ambient Air Quality Standards (NAAQS). It is important to know where the emissions are for an accurate picture. Earlier discussion indicated that the emission inventory will include condensable PM, but it is unclear how that data would be available if the applicable test method measures filterable PM only. Joyce Epps responded by clarifying that the purpose of this rulemaking is to implement the federal PSD and NSR requirements for PM_{2.5}. The provisions in subsection (a) pertain to PM standards adopted in 1971. The changes proposed for subsection (b) apply to making a determination of compliance with both the filterable and condensable requirements for BAT determination and to determine NSR applicability for PM_{2.5} or PM₁₀. The Federal Register (FR) notice for the rule finalized by EPA on May 16, 2008, states that “applicability determinations made prior to this date without accounting for condensable PM shall not be considered in violation of this section unless the applicable implementation plan required condensable PM to be included.” Our SIP does not require consideration of condensable PM for those sources subject to the standards adopted in 1971. All areas, except Liberty-Clairton, are monitoring attainment of the 1997 annual and 2006 24-hour PM_{2.5} standards. The Bureau is developing a game plan to get these PM areas redesignated as quickly as possible because there are very few PM_{2.5} emission offsets available. To be clear, there are no exemptions provided by this proposed rulemaking. This draft proposal clarifies that if you are subject to the 1971 PM standards, you will continue to only be required to demonstrate compliance using filterable emissions. Subsection (b) of the draft proposal clarifies that if a source has a permit that requires demonstration with both filterable and condensable PM, or the Department has to determine NSR or PSD applicability, both filterable and condensable PM will be considered. The Department will not retroactively require condensables be included for comparison with the 1971 standards. Mr. Fiorentino indicated that Ms. Epps explanation was helpful. Mr. Fiorentino commented that having information about condensable PM for these sources would be useful going forward and asked if the Department had another way get that information.

Patrick O’Neill noted that Joyce Epps has provided information clarifying the intent of the proposed rulemaking. There have been questions about the way the draft is currently written, and some clarifications to the draft proposed rulemaking have been identified. There also seems to be strong sentiment to suggest to the Department that emissions inventory issues be considered and

that future tightening of permit conditions may be needed. Mr. O'Neill asked Ms. Epps how important it is to have AQTAC take action on this proposed rulemaking today. Ms. Epps responded that the changes are needed. She indicated that the Department can review the definitions as requested by John Shimshock and make changes to include a trigger date as suggested by Francine Carlini. These are minor issues to be addressed. The question of what is reported for emissions inventory is beyond the scope of this rulemaking. Emissions inventory reporting is addressed under Chapter 135, not Chapter 139. Ms. Epps indicated that her preference is to not add emission inventory reporting to a proposal that deals solely with Chapter 139. Ms. Epps will look into what is reported for PM emissions, but she believes there are companies that report condensable PM emissions, if the data is available. However, there is no requirement to report condensable PM for compliance purposes for the Chapter 123 requirements.

Josie Gaskey made a motion to move forward with this rulemaking and include further discussion of the emission inventory issue as an agenda item at a future meeting. Gary Merritt seconded the motion.

Additional Discussion

Francine Carlini expressed support for Ms. Gaskey's approach, noting that this is a narrow issue dealing with the stack test requirements. Ms. Carlini expressed agreement that the issue of testing for condensables for emissions inventory purposes is covered in another section. There is nothing in the proposal that would stop stack testing for condensable PM for information purposes as long as the appropriate test method is used as laid out in Chapter 139.

Michael Fiorentino noted that larger issues than consistency of definitions have been identified and indicated he would be more comfortable waiting to see revised language. Josie Gaskey restated the motion that, based on Joyce's discussion of clarifications, the Department move forward making revisions to address John Shimshock's and Francine Carlini's suggestions and deferring discussion of the issues raised by Michael Fiorentino to a future meeting. AQTAC voted 11-5 in favor of the motion.

INFORMATION ITEMS

Single Source Determinations for Natural Gas Operations

Deputy Secretary Vince Brisini presented an overview of single source determinations for natural gas operations using a PowerPoint presentation.

Discussion

John Shimshock asked if the policy is applicable to any other industry. Response: The policy applies to the oil and gas industry only.

Joe Guzek asked if there is aggregation guidance from EPA and whether the definition of adjacent property is consistent with EPA guidance. Response: There are EPA determinations. Department staff can consider the EPA determinations and guidance and can also consider interdependency.

Michael Fiorentino asked if the common-sense meaning of the term "daisy-chain" in the guidance is connecting one thing to another in a linear fashion. Response: Yes, for example, a long train of compressor stations should not automatically be considered contiguous or adjacent. Instead, the

Department will consider on a case-by-case basis. Charles McPhedran commented that it seems this could be used to exclude sources that might otherwise be aggregated. Response: The Department wants to review on a case-by-case basis rather than having the presumption of aggregation. Mr. McPhedran asked how the Department has done aggregations in the past and whether aggregation decisions are documented in review memos. Has the Department aggregated any oil and gas sources and will this policy make a change? Does the Department know the emissions impact of this policy? Response: The Department documents permitting decisions in review memos. There are two cases under appeal in which the Department did not aggregate the sources. Under the new policy, anything closer than ¼ mile that meets the other two prongs will be aggregated. The Department believes this policy is consistent with EPA.

Joe Guzek asked whether sources separated by more than ¼ mile will be considered on a case-by-case basis. Response: Yes, sources separated by more than ¼ mile will be considered on a case-by-case basis to consider the facts and make a decision.

Michael Winek asked if EPA has commented on the policy and if the ¼ mile for aggregation is a rule or a presumption. Response: The policy was not shared with EPA but will be open for public comment starting on Saturday. Sources located less than ¼ mile apart will be aggregated if the sources are under common control and have the same SIC code.

Michael Fiorentino noted that the policy does not create a presumption against aggregation beyond ¼ mile. Response: That is correct.

Kevin Stewart expressed the concern that the language referring to daisy-chaining could be interpreted as an exclusion. If the intent is to prevent air quality problems, it is important to work toward the intent. Response: The policy provides incentive for companies to install the cleanest burning engines because the Department could aggregate the sources.

Joe Osborne asked if the ¼ mile is measured from the fenceline or the center of the site. Response: That is a good question and still needs to be clarified.

Gavin Biebuyck asked, given the Department's focus on proximity, if the Department has considered setting a maximum distance, for example, air basin. Response: No, the Department will consider on a case-by-case basis.

Joe Osborne asked how much ownership percentage satisfies common control. Response: There is a common control worksheet that the Department uses to make this determination.

Amy Earley asked what the implications would be if the ¼ mile straddles two nonattainment areas. Response: All of Pennsylvania is in the Ozone Transport Region, and the largest concern is NOx.

Joe Osborne asked for the Department's interpretation of interdependency. Response: The Department may look at previous determinations. The Department does not have a specific definition and will consider on a case-by-case basis. Mr. Osborne asked, as the gas field is developed, when the Department will determine that a new aggregation assessment is needed. Response: If changes are made to a facility, it could be considered a modification, and

aggregation would be reassessed. Mr. Osborne expressed concern that modifications might not be noticed to the Air Program. Response: The Department is developing a comprehensive approach.

Policy Revisions – Guidance for Application of Regional Civil Assessment Procedure – DEP Technical Guidance Document Number 273-4130-003 - Summary of Comments

Ron Gray reviewed the background of, changes to and comments received related to the Guidance for Application of Regional Civil Assessment Procedure (civil penalty policy). The Department conducted the first public comment period on the civil penalty policy from October 30, 2010 to November 29, 2010. No comments were received during the comment period. The policy was discussed at the December 16, 2010 AQTAC meeting. A second comment period was held from August 13, 2011 through September 12, 2011. Comments were received from: GenOn Energy, Inc., Electric Power Generation Association, and Pennsylvania Chamber of Business and Industry.

Francine Carlini indicated she did not agree with the comment that there should be no penalty if a facility initiates efforts to correct a violation, noting that a facility could be in noncompliance for years before reaching compliance. Ms. Carlini expressed agreement that the Community Environmental Project (CEP) policy should continue to be a stand-alone policy and its provisions not incorporated into the civil penalty policy. Ms. Carlini suggested that the CEP policy should be updated.

Ms. Carlini raised a question about the meaning of the comment that a certified professional engineer (PE) should sign a Technical Support Document to support the Department's determination of any violation of the requirement to operate according to good operation and maintenance practices, and asked whether that refers to a PE on Department staff. Patrick O'Neill asked if the Department engineers are PEs. Response: Engineering section chiefs are PEs and most Engineer III positions are filled by PEs. Permit writers are not necessarily PEs. Jayme Graham commented that not all violations need to be certified by a PE. Some violations are as simple as an open door that should be closed. John Shimshock noted that this comment was made by him; that he would be glad to discuss it with any of the membership; that the suggestion was made to address vague language in the regulation; that certification by a PE is standard practice in many industries; and that a knowledgeable evaluator is necessary in order to ensure good engineering judgment. John Slade agreed with Ms. Graham that many violations do not require engineering judgment, adding that where engineering judgment is required, it should be conducted or reviewed by a PE. Patrick O'Neill indicated that some Philadelphia Air Management Services (AMS) positions do not require a PE but are filled by trained engineers and added that an engineer with long experience with DEP or AMS may be equivalent to a PE. Gary Merritt commented that the requirement for Department engineers to have a PE has been an ongoing issue for the Department, and that the engineering board compelled DEP to have PE's review engineering reviews. Mr. Merritt noted that permit applicants are required to seal the application with a PE seal. John Slade stated that this is not the case in the Department's air program but is true with regard to some Department programs. Mr. Merritt concurred that sound engineering judgment is an important consideration. Ms. Graham added that the ACHD does not require PEs.

Michael Fiorentino noted that inflation since 1992 or 2002 has not been negligible or out of line with the inflation adjustment the Department proposed. Mr. Fiorentino suggested the Department disregard the comment that because the maximum penalty is unchanged, the lower number should not be changed, noting that the maximum penalty is almost never a real factor in final penalty

derivations. The lower numbers are the tools used by the Department to encourage compliance by the regulated community. If those amounts are no longer providing incentive for compliance due to inflation, the amounts need to be adjusted to account for inflation, regardless of the maximum penalty. Joe Osborne expressed agreement with Mr. Fiorentino's comments, noting that \$0.62 in 1992 is equivalent to \$1.00 today. Mr. Osborne suggested the Department consider future inflation to get ahead of the curve. Mr. Osborne also asked for confirmation that a CEP requires a voluntary agreement and that the amount of a penalty under a CEP is usually lower than it would be if a civil penalty were assessed. Response: A CEP is a voluntary agreement. The amount of a civil penalty is generally higher because the Department has to take into account the potential cost of litigation.

John Tissue spoke regarding the comments that suggest that violations occurring on continuously monitored sources be excluded from this policy. Mr. Tissue noted that his interpretation of the comment in question is that it is limited to an emission exceedance determined using a certified continuous emission monitoring system (CEMS), which would have to be operating under the quality assurance provisions of the Department's policy. In order to be covered by the Department's applicable Compliance Assurance Policies, a source has to have a certified CEMS, and an uncertified CEMS would not be covered by a Compliance Assurance Policy. Mr. Tissue noted that Title V permits he is familiar with have a provision related to penalties that excludes sources operating under the CEMS policy.

John Shimshock asked if the Department has a schedule for responding to the comments.

Response: The Department does not have an established schedule for responding to the comments but would like to move the policy revision forward as expeditiously as we can.

Michael Winek asked whether the new policy would apply prospectively as of the date of the revision. Response: That is correct.

John Slade asked for the status of the draft rounding and truncation policy that was reviewed at an earlier AQTAC meeting. Response: There is no change in the status of that policy, though the Department does adhere to the National Stack Testing Guidance as applicable.

EPA's Proposed Guidance for 1-Hour SO₂ State Implementation Plan (SIP) Revisions

EPA proposed guidance for the 1-hour SO₂ SIP revisions. After reviewing available meteorological data, the Department has pared down the preliminary list of areas and facilities for SO₂ modeling that was previously reviewed with AQTAC. Facilities where meteorological data is inadequate for model performance have been eliminated from the list. This is not an environmental concern because unclassifiable or nonattainment areas have to attain the SO₂ NAAQS by 2017. The Department will develop some refinements to the designations and will consider ACHD AERMOD modeling if provided and any final action on the New Jersey Section 126 petition, but is shifting focus to the attainment demonstrations.

John Slade asked if the Department has a new list of facilities to be modeled for the SO₂ NAAQS. Response: The Department is not providing a public list at this time.

Charles McPhedran asked if in narrowing the list was the Department removing sources or modeling smaller areas. Response: The Department is removing sources and modeling smaller areas because of the meteorological data availability issues.

John Shimshock asked if the Department has submitted comments to EPA on the guidance. Response: EPA published the guidance on October 3 with comments due on November 3. EPA is also pursuing a rulemaking. The Department is preparing comments. The guidance as it pertains to modeling is not new. What happens to nonattainment areas is the most controversial issue. The timeframe is also an issue with modeling and enforceable emission limits within three years. Clarification of whether the threshold of 100 tons per year refers to allowable or actual emissions is also needed. Another issue is whether there will be a non-modeling methodology for demonstrating attainment for areas with no or very small sources.

Michael Winek noted that when EPA issues guidance while developing a rulemaking, EPA is forcing compliance with guidance before rulemaking is final.

Charles McPhedran asked for the timeline for designation milestones. Response: The Department intends to model a limited number of sources. EPA plans to issue the 120-day letter in February. The Department will provide any refinements to the designations in the response to the 120-day letter.

Jayne Graham indicated that ACHD will provide additional AERMOD modeling results.

Gavin Biebuyck asked how many facilities have sufficient meteorology for the Department to plan to model. Response: Three facilities have very high quality meteorological data that is least likely to inappropriately overpredict SO₂ concentrations. Mr. Biebuyck asked if one of those facilities is the Titus station. Response: Yes. A reasonable schedule is needed for the attainment demonstrations because additional meteorological data may need to be collected for the attainment modeling. There is limited time for the designation process.

John Tissue asked if the Department considers CSAPR to be the SIP for SO₂. Response: CSAPR will be part of it but is a trading program. The guidance indicates specific permit limits are needed to address the SO₂ NAAQS.

Updates on NAAQS, SIP Revisions, and Regulations

Arleen Shulman provided an air planning update.

Regulatory Update

- Flexible Package Printing and Lithographic and Letterpress Printing approved by EQB in September as proposed rulemaking.
- Developing the rest of the rules based on Control Techniques Guidelines (CTG).
- Anticipate presenting a draft categorical reasonably available control technology (RACT) rule with emission limits to AQTAC at a future meeting.
- In discussion with management on the low sulfur fuel oil rule. The rule will not be effective in 2012 as proposed.
- High Electric Demand Day (HEDD) rule is being reevaluated in context of a CSAPR SIP.

Amy Earley asked for the status of the Title V fees rulemaking. Response: There has been no change in status of the Title V fees rulemaking. Patrick O'Neill asked for the deadline for the Title V fees rulemaking and the consequence if the deadline is missed. Response: The deadline is the end of December for delivering the final rule to the Independent Regulatory Review Commission (IRRC). If the deadline is missed, the Department would have to restart the rulemaking from the beginning.

John Tissue raised the issue of HEDD interaction with CSAPR. Response: The Department is waiting for EPA input on CSAPR non-EGU participation. EPA has indicated the issue is still under review.

NAAQS

2008 Ozone

Arleen Shulman reviewed the background on the 2008 ozone standard. The Department submitted initial recommendations in 2009 based on 2006 - 2008 data. States have the opportunity to submit additional recommendations. The Department's 2011 recommendations reflect significant progress. EPA is expected to send 120-day letters in December 2011. Final designations are expected April 20, 2012. The infrastructure SIP is overdue.

1997 Ozone

Re-estimation of the mobile emissions inventory for the 1997 ozone maintenance areas is necessary due to EPA's transition to the MOVES model. Transportation planning agencies are required to use the new model for transportation conformity. The Department is revising the SIP to provide a fair comparison.

1997 and 2006 PM2.5

The Department is developing maintenance plans and redesignation requests. The Department will be working with the Mid-Atlantic Regional Air Management Association (MARAMA) on development of regional inventories and future year projections. MARAMA is also coordinating a project to develop technical demonstrations to support interpollutant trading ratios.

John Shimshock asked if all ozone areas have improved to marginal. Response: Yes, every nonattainment area, including Philadelphia, would be marginal, if EPA makes the classifications based on methodology that was proposed in 2008. This is good news but means areas will have only three years to attain the standard. A voluntary bump-up would remain an option if more time is needed to attain the standard. Mr. Shimshock asked about the status of EPA's review of the PM2.5 NAAQS. Response: The Department has a timetable provided by EPA.

Amy Earley asked if the Department received any comments on the OTC model rules. Response: The Department received some comments, and the OTC also received comments. There have been a number of changes of commissioners in the OTC states. Work continues on the model rules, but it is uncertain which rules will be considered by the group in November. The natural gas compressor rule and the degreaser rule received the most comment in Pennsylvania. The Department also had a conversation with the Marcellus Shale Coalition related to the nonroad idling rule and whether there are special kinds of operations that might mistakenly be considered idling when actually part of the drilling or hydraulic fracturing process.

Charles McPhedran asked whether more information related to sites where the SO₂ modeling and monitoring data do not match is available from the National Association of Clean Air Agencies (NACAA). Response: The Department has heard discussions of the SO₂ issue on conference calls but does not know if NACAA has more information.

Lead

Lead SIP revisions are due in June 2012. The Department plans to submit a maintenance plan and redesignation request for the Lyons area in Berks County and is developing control measures and attainment demonstrations for the other nonattainment areas. The infrastructure or 110(a) SIP revision for the lead NAAQS was due October 15, 2011. EPA issued guidance for the infrastructure SIP revision on October 14, 2011.

Discussion

Pete Manousos from First Energy asked when the Department anticipates sending data requests for facility information for SO₂ modeling. When will the modeling be done and who will do the modeling? Response: The Department anticipates working informally with the regional staff during the designation process. Attainment modeling will be conducted after the designation package is complete. The decision on who will do the modeling has not been made. Mr. Manousos mentioned a briefing from the Pennsylvania Chamber that indicated the Department was considering modeling only sources more than 5000 ton-per-year threshold and asked whether the Department was considering the 5000 ton-per-year threshold or the 100 ton-per-year threshold. Response: The Department would be looking at the 100 ton-per-year threshold; this threshold has been included by EPA in draft guidance for SIP revisions. The sources will have to be considered in some way, whether explicitly modeled or included in background.

Michael Fiorentino noted that there were many more large NO_x sources (more than 500 sources larger than 100 tons per year) to evaluate during the NO_x RACT process than there are large SO₂ sources.

Michael Hirtler from EnviroPlan noted that, during EPA's 1-hour SO₂ modeling webinar the previous day, EPA used 50 tons actual emissions as a reference, in addition to the 100 tons-per-year threshold.

OPEN DISCUSSION

Next Meeting: The next AQTAC meeting will be held at 9:15 a.m. on Thursday, December 15, 2011, in Room 105 of the Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA.

Adjournment: With no further business before AQTAC, Patrick O'Neill adjourned the meeting at 2:55 p.m. EST.

Minutes prepared by Nancy Herb, Air Quality Program Specialist. For additional information, please contact Arleen Shulman at ashulman@state.pa.us or 717-772-3926, or visit the AQTAC Web page at: <http://www.dep.state.pa.us/dep/subject/advcoun/aqtac/aqtac.htm>.