

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

Minutes
April 8, 2021

Air Quality Technical Advisory Committee (AQTAC) Members Present (joined via Webex or on the phone)

Rob Altenburg	<input checked="" type="checkbox"/>	Kimberly Coy	<input checked="" type="checkbox"/>	Joseph Duckett	<input checked="" type="checkbox"/>	Michael Fiorentino*	<input checked="" type="checkbox"/>
Josie Gaskey	<input checked="" type="checkbox"/>	Jayne Graham	<input checked="" type="checkbox"/>	Joseph Guzek*	<input checked="" type="checkbox"/>	Michelle Homan	<input checked="" type="checkbox"/>
Judy Katz	<input type="checkbox"/>	Charles McPhedran	<input checked="" type="checkbox"/>	Gary Merritt	<input checked="" type="checkbox"/>	Patrick O'Neill	<input checked="" type="checkbox"/>
Richard J. Shaffer	<input checked="" type="checkbox"/>	John Shimshock	<input checked="" type="checkbox"/>	John Slade	<input checked="" type="checkbox"/>	Kevin Stewart	<input checked="" type="checkbox"/>
John Tissue	<input checked="" type="checkbox"/>	John Walliser	<input checked="" type="checkbox"/>	Michael Winek	<input checked="" type="checkbox"/>		

* joined the meeting after roll call.

Department Staff Present (joined the Webex or on the phone):

Mark Hammond	Kirit Dalal	John Krueger
Darek Jagiela	Deborah Wehr	Rebecca Day
Allen Landis	Chris Trostle	Krishnan Ramamurthy
Jennie Demjanick	Jesse Walker	Hayley Book
Nancy Herb	Sarah Pinter	Susan Foster
Sean Wenrich	Valerie Shaffer	Bo Reiley
Keith Salador, Citizens Advisory Committee	David Althoff, Energy Office	Jim Rebarchak, SERO
Kimberly Yeakle, NWRO	Elizabeth Davis, BRC	Sean Robbins, NERO

Others Present (Individuals who joined the Webex or on the phone):

Robert Bessette, CIBO	Abby Foster, PCIC	Alex Charlton, Exelon
Andrew Zwally, Greenlee Partners	Bill Kesack, CMI	Brianna Esteves, CERES
Brook Petry, Moms Clean Air Force	Carolyn Comitta, PA State Senator	Chandra Copplin, Exelon
Cristy Sweeney, ARIPPA	Daniel Dudd	David Hess, PA Environment News
Danya Pelc, TRC	Edward Kubinsky, Crompco	Elaine Labalme
Emily Eyster, PA Senate	Ethan Story, Center for Coalfield Justice	Evan Endres, The Nature Conservancy
Gary Steinbauer, Babst, Calland	George Bibikos, GA BIBIKOS, LLC	George Mesing, Trinity Consultants
Gina Falaschi, Babst Calland	Glendon King, PA House	Jessica August, NJ DEP
Jeffrey Clukey, PA House	Jeremy Hancher, EMAP	Joe McCay, Williams

John Schmelzle, Power Eng. Inc	John Sieger, Sheetz	Joseph Kerecman, Calpine
Josephine Martin	Josh Worth, Wawa	Kathleen Robertson, Exelon
Kevin Garber, Babst Calland	Kim Pizzingrilli	Jeff Broderick, CECO Environmental
Larry Carlson, Tenaska	Lauren Barr, Bravo Group	Laura Legere, Post Gazette
Mandy Warner, Enviro Defense Fund	Mark Beston, ERM	Mark Caskey, Steel Nation
Mark Szybist, NRDC	Michael Krancer, Silent Majority Strategies	Michael Nines, Manko, Gold, Katcher & Fox
Michelle Leslie	Nicholas Kowalski, Clean Power PA Coalition	Michael Szczachor, CECO Enviro
Nicholas Leone, All4	Nick Troutman, PA State Senate	Peter Gleason, K&L Gates
Kimberly Scarborough, PSEG	Rachel McDevitt, State Impact	Robert Barkanic, Barkanic Group
Robert Routh, Clean Air Council	Ryan Buckley, Maryland	Sam Frye, Mercuria Energy America, LLC
Sunny Roe, ICIS	Shannon Dawson, Wojdak Gov Relations	Tamathy Stage, Indiana Co Conservation District
Teresa McCurdy, TD Connections, Inc	Terry Black, Homer City Generation	Todd Ferguson, Tankology
Travis Gery, K&L Gates	Vanessa Lynch, Moms Clean Air Force	Vince Brisini, Olympus Power
William Derge	Joe Pittman, PA State Senator	Leann Leiter, Kee Alliance
Jaret Gibbons, ARIPPA	Matt Walker, Clean Air Council	Sarah Stauffer
Terry Bossert, Marcellus Coalition	Matt Lithgow	Sean Lane, Olympus Power
Jim Welty, Marcellus Shale Coalition	Laura Edinger	Miriam Baril, Boeing

CALL TO ORDER

Patrick O'Neill, AQTAC Chair, called the 4/8/2021 meeting to order at 9:16 AM through Webex.

ADMINISTRATIVE ITEMS

Patrick O'Neill made a roll call for the AQTAC committee members.

Approval of Minutes

The minutes from the 2/11/2021, meeting were approved with two abstentions.

Josie Gaskey made the motion.

Rob Altenburg seconded the motion.

Joseph Duckett questioned the criteria for a good AQTAC candidate. Mark Hammond mentioned members should have a technical background in air pollution control.

General Announcements

Air Quality Bureau Director, Mark Hammond reviewed the agenda and introduced the importance of understanding combining heat and power and its role in the state's climate change plan. He requested a committee member provide a speaker on renewable energy. **Follow-up: Rob Altenburg will provide a contact for the renewable presentation.**

Mark Hammond introduced the RGGI presentation, which is part one of two meetings, a special meeting will be scheduled. Mark reminded the audience of the public participation guidelines.

Clarification on appointments was discussed: The AQTAC website has a link for new candidates to submit interest with a deadline of April 30th. Therefore, the deadline will be April 30th, 2021, for all interested. Shortly after the list of those recommended and not recommended will be forwarded to the Secretary.

PRESENTATION

Robert D. Bessette, President, Council of Industrial Boiler Owners, made a presentation on Combined Heat & Power Application Technology and Benefits.

Discussion

The group discussed the percentage of energy used as heat to be considered a CHP unit. Mr. Bessette responded that it was about 33% of the steam or electricity going to the grid to be considered a qualified facility per historic definitions. Mr. Hammond clarified that the old definition goes back to EGUs and a good CHP benefits from high efficiency as well as saving line loss due to using energy onsite. He referenced the definitions and applicability criteria of GP-20. Mr. Hammond further explained that he believes a total efficiency definition 25% of output energy used as thermal energy is a legitimate CHP. Mr. Bessette added that line losses can be 7.5% -10%, making CHP a major energy and therefore GHG saving tool.

AQTAC asked about air pollution issues that are associated with different size CHP facilities due to differing air pollution control requirements. Mr. Bessette answered that industrial facilities have boilers between 30,000 lbs steam per hour to 100 megawatt sizes and comply with all regulations including best available control technology, boiler MACT, NSPS, national ambient air quality standards, etc., the same as a utility would. CHP industrial boilers have efficiencies up to 94% with condensing heat exchangers. Electric boilers aren't cost efficient in comparison to natural gas.

The Committee asked about cost of the industrial sector using electricity to generate high pressure steam in processes. Mr. Bessette referenced the table at the end of his presentation and added that using electricity for thermal energy would cause cost to go up 5 times which will wipe out corporate profits.

The Committee mentioned that thermal plants are a valuable asset in areas that are densely populated and have need for thermal energy but not as well in rural environments. When electricity prices are low, cogeneration plants become uneconomical. Mr. Bessette added that steam infrastructure and maintenance requires capital expenses, so the cost can be higher.

AQTAC added that CHP has two separate programs – manufacturing/industrial and architectural/heating of buildings. Industrial has a higher steam demand than heating. The committee suggested that CHP must be looked at from a collective point of view over time with respect to carbon emissions and air pollution including criteria and air toxics.

PRESENTATION

Chris Trostle made gave a presentation on Control of VOC Emissions from Gasoline Dispensing Facilities (Stage I and Stage II) Rulemaking.

Discussion

The Committee asked what the compliance date is for stations and the difficulty of replacing the nozzle. Mr. Trostle replied that after a notice is published in the *PA Bulletin* that two or more manufacturers have received CARB approval for their enhanced conventional nozzle, the owner of a station will have two years to install at existing stations. A station owner will need to immediately install an enhanced conventional nozzle for all new dispensers and gasoline dispensing facilities after the notice is published. There are currently 3 nozzles from three different manufacturers approved by CARB. Mr. Trostle added that the process for decommissioning old systems are outlined per the regulation and requires an individual with UMX type certification.

PRESENTATION

Kirit Dalal made gave a Report on Rulemakings/State Implementation Plan Revisions.

Discussion

The Committee asked about HFCs and the related follow-up item from a previous meeting. DEP clarified that HFCs are on hold until the Department sees the federal rule.

The Committee asked if the Department needs a vote from AQTAC on Stage I and Stage II vapor recovery. Mr. Hammond clarified that as AQTAC is an advisory board a vote is not required for the Department to proceed, but the committee is welcome to vote on any items they wish to vote on. AQTAC further discussed this issue and clarified that the bylaws specify that the group may provide opinion on policy and new control techniques, and a committee member could motion to endorse or oppose something by a vote. The Department and Committee both emphasized that AQTAC is most helpful by providing technical information early in the process.

The Committee asked about the RACT III rulemaking proceeding to EQB in the second or third quarter and any particular changes in response to the Third Circuit Court of Appeals decision in *Sierra Club v. EPA*. Mr. Hammond replied that the state has required coal-fired EGUs to submit

case-by-case RACT proposals, which have all been submitted and are being reviewed. The Department does not expect to include any presumptive RACT for these coal-fired EGUs.

AQTAC asked about the item on the nonregulatory agenda which indicates an upcoming Draft Permit Protocol revision. **Follow up: this can be added to the agenda for next meeting.**

DEP asked AQTAC members if it is helpful to have the Regulatory and SIP update document presented during the meeting. The committee agreed that the presentation is an efficient use of time and should continue as it is.

PRESENTATION

Allen Landis gave a presentation on CO2 Budget Trading Program Draft Rulemaking Update.

Discussion

Environmental justice initiatives were discussed, including if they are part of the written regulation and what requirements exist to address disproportionate impacts that are identified. Mr. Landis clarified that the principles on Slide 22 are in the regulatory preamble and the assessment will be in the Annex. If the assessment revealed increased emissions in certain areas, DEP would be taking action in relation to that. Mr. Ramamurthy agreed, the Department will look at data pre and post rule and see if any hot pockets occur but doesn't anticipate this outcome. If there are increases, a plan will be developed to address the issue appropriately.

AQTAC commended the Department for the high public response and encouraged the Department to continue virtual public hearings as they seem successful. Other restrictions in the use of strategic set asides in addition to them not being available for required measures were discussed. Mr. Landis replied that this is similar to other states as it is intended for voluntary renewable energy that is additional, not mandatory. Ms. Demjanick added that it echoes a provision in the offset project component of the regulation in that no allowances for projects that are already going to happen. The application will require documentation, calculations, and allowances are not granted until project completion.

The Committee questioned the ability of an entity requesting an allowance to request that it be retired or sold. Mr. Landis clarified that the voluntary renewable energy application is not as prescriptive as other states' programs. DEP is looking for the application information to help decide the outcome of the credits.

The group asked that the Department look at the impact of AEPS changes on potential increase in output from waste coal plants, especially low capacity plants. The committee expressed concern that shutdown of coal plants may convert local communities to EJ communities and asked how much the outlined money spending plan is allowed under current statutes and if there is a geographical breakdown of what areas of the state commented, as many of the comments seem to be from Philadelphia and surrounding counties. Mr. Landis replied that the AEPS change and waste coal will be included in the modeling and that many fossil fuel communities are already EJ communities. The work with the Delta Institute engages with many stakeholders, such as county commissioners, school districts, and others, to get comprehensive input from across the state. The

governor's proposal to include energy trust funds and environmental trust funds would require further legislative authority. The Department wants to use the funds to reduce air pollution which can include investing in EJ communities in ways that reduce air pollution. Regarding the geographical breakdown, over 1,100 pa zip codes submitted comments out of about 2,300 zip codes. There currently isn't a map of comments.

CHP applicability to a boiler with capability to generate electricity based on fluctuating steam demands was discussed. Ms. Demjanick clarified that electric generating units are defined as those generating 25 megawatts or above annually while generating useful thermal energy as indicated in the presentation slide 15.

The technical justification for joining RGGI to reduce global climate change was questioned. Mr. Landis discussed that the rulemaking is a piece of the global effort and goals are set based on scientific analysis. It will also benefit Pennsylvania by reducing co-pollutants. This will be addressed in comment response document per the Air Pollution Control Act to address all significant comments.

AQTAC indicated that the Independent Regulatory Review Commission (IRRC) expressed significant concerns along with stakeholders and legislative representatives as to this being completed by executive order instead of legislation, and IRRC recommended delaying implementation by a year. What happens if IRRC doesn't approve the regulation? Ms. Demjanick clarified that IRRC's March 18 press release was a summary of comments and not a recommendation of a one-year delay. The Department is acting under authority in the Air Pollution Control Act to complete this regulation. If IRRC doesn't approve, it would follow the Regulatory Review Act rulemaking process. A link to the IRRC regulatory manual was provided in the chat box. **Follow up: Ms. Demjanick said she would provide the IRRC press release to AQTAC.**

Modeling inclusion of recent changes to units and transmission projects within the state and neighboring states as well as leakage from other states was discussed. Mr. Landis added that the model incorporates all known information regarding generation and transmission within PA and outside the border. DEP, PJM and FERC are looking at leakage issues, and leakage is typically best addressed at a regional level rather than a state level.

The impact of RGGI and the possibility of increased emissions in EJ communities was discussed. Mr. Landis stated that stakeholders have indicated that cap and trade may cause some facilities to operate more based on the ability to operate at lower cost in certain areas. This issue has been raised with transportation climate initiative, but we haven't seen that happen with RGGI. Mr. Ramamurthy added that the origin of this concern is CA, where it is an all sector cap and trade, unlike RGGI which is limited to EGUs. Mr. Landis stated that the annual air quality assessment will assist the Department, and the public, in ensuring that any potential increased emissions are not concentrated in certain areas.

Public Comments

Patrick O'Neill reiterated that this is not the official public comment period for a rulemaking, nor is it a question and answer period. There are other available options for that. Historically, AQTAC

limits each commentator to 3 minutes and asks that there not be multiple speakers from the same organization, company or group.

Brianna Esteves, Manager of State Policy at CERES, provided a summary of a letter signed by investment managers and shareholders supporting regulation of VOC and methane emissions from oil & gas wells. They encouraged DEP to expand the scope and maintain frequency for routine leak and maintenance inspections to ensure the future of the industry. For example, in 2020 the French halted import of LNG from the US due to producers' high methane emissions. CERES supports methane reduction to include low producing wells as recent studies show they can emit 11% of emissions while producing less than 0.5% of natural gas.

Senator Joe Pittman of the 41st district, Armstrong, Indiana and portions of Butler and Westmoreland Counties emphasized that his constituents have not been involved in the dialogue on RGGI. Premature retirement of coal plants costs jobs and affects school and community funding due to lost property tax revenue. A proactive approach is needed to address the needs of these communities. RGGI is a regressive tax that will lead to increases in utility bills, affecting those in need. Revenue is only generated if carbon is emitted, so if emissions are reduced the communities will not benefit. This regulation must be deferred until concrete economic solutions are provided to the affected communities.

John Sieger from Sheetz, provided comments on the Control of VOC Emissions from Gasoline Dispensing Facilities regarding the need to be allowed to keep documentation of records offsite in an electronic manner that can be provided to inspectors as needed rather than keeping paper copies at stores. He added that low perm hoses and eco nozzles provide small increases in efficiency of gasoline delivery to customer vehicles and encouraged the Department to look into regulations under 25 Pa. Code Sections 129.59 and 129.60 on improving emissions during transfer from underground tanks to trucks and racks.

Vince Brisini from Olympus Power encouraged the Department to provide model inputs and engage in meaningful discussions on the modeling results as previous discussions were canceled. The Department needs to assess unit specific price allowance adders and the prices at each unit in PA. Natural gas units are at risk due to PJM pricing. Increased emissions leakage will occur if you replace a PA plant with one in OH, you have same CO2 emissions, but because OH is not part of ozone transport region, and no there are no strict SO2 limits you can actually have increases in fine particulate matter and precursors. RGGI is not cap and trade, it is cap and buy. He stated that more transparency and truthful representation needed.

BUSINESS / OPEN DISCUSSION

Patrick O'Neill opened the meeting for other AQTAC business/open discussion.

The need to brief speakers and commentators on the technical focus of AQTAC was discussed.

The AQTAC meeting on RGGI modeling will be May 17th at 9:15 am. Mr. Landis indicated that any specific questions from the Committee could be submitted to him prior to the May meeting.

A request for agenda items for the June 10th meeting was made. The permit protocol update will be included in the next agenda.

The request for a presentation of oil and gas health effects from DOH from the last meeting was repeated. The Department has requested and is waiting for confirmation.

New Items to follow up for next meeting:

- Rob Altenburg will provide a contact to speak about renewable energy generation dispatch to speak at the next meeting. *(Mr. Altenburg provided a contact to the AQTAC liaison on 4/8/21.)*
- Jennie Demjanick will provide IRRC comments on CO₂ budget rulemaking. *(IRRC press release emailed to AQTAC on 4/14/2021.)*

Previous follow up items still open:

- Jesse Rodriguez will provide lifecycle emissions and onsite waste storage information on Nuclear power. *(Docs from Mr. Rodriguez sent to AQTAC members on 3/29/21.)*
- DEP will reach out to the DOH for a presentation on the Oil and Gas health effects. *(DEP asked DOH for availability to present on this item on 2/17/21 and is awaiting a response.)*
- Request to Lucas Hershey concerning information on HFC alternatives' downside analysis. *(Because the federal regulations to be developed by the EPA in accordance with the AIM Act will be more comprehensive, DEP is suspending the development of a Pennsylvania-specific HFC rulemaking until EPA finalizes their rules. At that time, DEP will evaluate whether development of a Pennsylvania-specific HFC rulemaking would fill any gaps left by EPA's rules.)*
- The technical support document related to the proposed RACT III rulemaking should be provided to the group when it is ready. *(AQTAC will be notified when/where information is publicly available.)*
- The public comments and DEP responses to RACT III issues (from the May 7th meeting) were requested to be provided to AQTAC, specifically to address comments from Sierra Club and Maryland. *(AQTAC will be notified when/where information is publicly available.)*

Next Meeting:

A special AQTAC meeting is scheduled for 9:15 AM on Monday, 5/17/2021 as a Webex Meeting.

The next regular AQTAC meeting is scheduled for 9:15 AM on Thursday, 6/10/2021, as a Webex Meeting.

MOTION TO ADJOURN

Made by Kevin Stewart. Seconded by Rob Altenburg.

With no further business before AQTAC, Patrick O'Neill adjourned the meeting at 1:00 PM, EST.

Minutes prepared by Rebecca Day and Deborah Wehr, Air Quality Program Specialists (AQPS). For additional information about AQTAC, please contact the AQTAC Liaison (RA-EPAQTAC@pa.gov) or by visiting the AQTAC Web page at: <http://www.dep.pa.gov/Business/Air/BAQ/AdvisoryGroups/Air-Quality-Technical-Advisory-Committee/Pages/default.aspx>