MINUTES CITIZENS ADVISORY COUNCIL MEETING April 21, 2015

CITIZENS ADVISORY COUNCIL (CAC) MEMBERS PRESENT:

Cynthia Carrow, Allegheny County
Walter Heine, Cumberland County
David Hess, Dauphin County
Burt Waite, Crawford County
Terry Dayton, Greene County
William Fink, Bedford County
Thaddeus Stevens, Tioga County
Joi Spraggins, Philadelphia County
Seth Mendelsohn, Dauphin County
John Walliser, Allegheny County
R. Timothy Weston, Cumberland County
John Hines, Lebanon County

CITIZENS ADVISORY COUNCIL STAFF PRESENT:

Michele Tate, Executive Director

CALL TO ORDER:

Chairman Terry Dayton called the meeting to order at 10:45 a.m. in Room 105 of the Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA.

APPROVAL OF MARCH 17, 2015, MEETING MINUTES:

With no corrections or additions recommended by Council, Chairman Dayton asked for a motion to approve the March 17, 2015, Council meeting minutes.

Thad Stevens moved to approve the March 17, 2015, meeting minutes as presented to Council. John Hines seconded the motion, which was unanimously approved by Council.

CHAIRMAN DAYTON'S REPORT TO COUNCIL:

Chairman Dayton announced that he has been reappointed to Council for another three-year term by House Speaker Turzai. Chairman Dayton reminded Council of its upcoming elections for Chair and Vice-Chair of the CAC, and asked that a Nominating Committee be convened to determine individuals on Council who may be interested in serving as Chair and Vice-Chair of Council. Burt Waite and Cynthia Carrow agreed to serve on the Nominating Committee, with the goal of identifying candidates for the two positions with elections to occur at Council's June meeting.

Chairman Dayton thanked John Walliser for serving as Chairperson of Council's Act 54 Hearing at DEP's California District Mining Office in Coal Center, PA, on Friday, March 27, 2015. He noted that the hearing was well attended by the public, where Council received testimony from 16 individuals.

Chairman Dayton reminded Council that the Aggregate Advisory Board will be convening its first meeting on May 13, 2015. Council's representation on this board includes Terry Dayton, Thad

Stevens, Burt Waite, and Walter Heine.

Chairman Dayton also reminded Council of three public hearings recently scheduled by DEP to receive public testimony on the draft final Chapter 78 regulations for surface activities at oil and gas well sites. He stated the hearings, which will all begin at 6 p.m., are scheduled for April 29, 2015, at the Washington and Jefferson College, April 30 at the Warren County Courthouse, and May 4 at the Pennsylvania College of Technology's Klump Academic Center in Williamsport.

Chairman Dayton asked Cynthia Carrow to share information with Council on a conference she recently attended in Pittsburgh entitled "P4 Pittsburgh". Ms. Carrow explained that P4 stands for People, Planet, Place and Performance and is a joint initiative between the City of Pittsburgh and the Heinz Endowments to support a new model of sustainable urban growth, design and development in Pittsburgh. She noted that the initiative sponsored a two-day conference in April where participants heard presentations from national and international experts on sustainable urban design, including topics on community engagement, clean technology, workforce development, energy efficiency, clean infrastructure, open space, housing, and resource conservation.

CONVENTIONAL OIL AND GAS ADVISORY COMMITTEE; SELECTION OF ALTERNATE MEMBER FOR BURT WAITE

Chairman Dayton asked Burt Waite to provide Council with an update on the first meeting of the Conventional Oil and Gas Advisory Committee (COGAC). Mr. Waite noted that COGAC met on March 26, 2015, where it began its review and discussion of the draft final Chapter 78a regulations for conventional gas operations. He noted discussion at the meeting was very robust, including the expression of a number of divergent viewpoints among committee members, which Mr. Waite indicated could lead to an arduous process in finalizing the regulations. Mr. Waite also noted that the committee discussed its bylaws, which were drafted by DEP as a starting point for discussion with the committee. He noted that as the bylaws are currently drafted, each member of COGAC may annually appoint an alternate to serve in the absence of the member, with the concurrence by the Secretary of DEP. Mr. Waite recommended to Council that it approve Jeff Walentosky, P.G. as his alternate to COGAC. Mr. Walentosky's resume was distributed to Council.

Bill Fink moved for the approval of Jeff Walentosky as Burt Waite's alternate to the Conventional Oil and Gas Advisory Committee. Tim Weston seconded the motion, which was unanimously approved by Council.

DEP REPORT TO COUNCIL:

Denise Brinley, DEP Executive Deputy Secretary, provided a report to Council where she elaborated on several topics. Ms. Brinley first discussed the Pipeline Infrastructure Task Force that DEP is planning to convene. Consistent with Governor Wolf's commitment to advancing government that works and jobs that pay, Ms. Brinley noted that Acting Secretary Quigley will convene a natural gas pipeline infrastructure task force to develop voluntary standards for the timely development of pipeline infrastructure in the Commonwealth. She noted that the taskforce will examine all stages of development and operation of pipeline infrastructure to identify measures to reduce environmental impacts, including the stages of planning, permitting, construction and operations. She stated that nearly every county in the Commonwealth will be impacted by pipeline development, as companies are looking to expand their ability to deliver natural gas to market. She stressed that the taskforce is in the early stages of formation, but that

Acting Secretary Quigley is committed to ensuring the process is collaborative and transparent.

In other topics, Ms. Brinley updated Council on comments DEP recently submitted to EPA on the federal agency's proposed National Ambient Air Quality Standards (NAAQS) for ground-level ozone. In November 2014, based on scientific evidence about ozone and its effects on people and the environment, the EPA issued a proposal for comment that would strengthen the current NAAQS for ozone from 75 ppm to a range of 65-70 ppm. The last time EPA updated its NAAQS for ozone was in 2008. In its comments submitted to the EPA, Ms. Brinley noted that DEP expressed its support for the establishment of air quality standards that are protective and based on sound science, but noted that it would be a challenge for Pennsylvania and a number of other states to meet more stringent federal air quality standards for ozone. Ms. Brinley stated that if EPA were to lower the standard to 70, approximately 18 of the state's 50 or more ozone monitoring stations would record air quality that exceeded the standard. In contrast, if EPA were to lower the standard to 65 ppm, nearly all monitors in Pennsylvania would record air quality that exceeded the standard. Ms. Brinley stated that it is expected EPA will announce its final rule in October 2015.

Ms. Brinley also updated Council on recent changes DEP made to the draft final rulemaking that establishes reasonably available control technology (RACT) for major NOx and/or VOC emitting facilities in the Commonwealth. She explained that DEP recently made changes to the draft final regulations from the version that was reviewed by AQTAC in November 2014. She noted that DEP presented the latest changes to the regulations at a recent April 16, 2015, meeting of AQTAC and that the CAC's Policy and Regulatory Oversight Committee would also be briefed on those changes by staff from the Bureau of Air Quality in the near future.

In conclusion, Ms. Brinley discussed EPA's recent assessment of Pennsylvania's CAFO Program, which was reviewed to assure the program is consistent with federal Clean Water Act mandates and is appropriate to meet obligations in the state's WIP (Watershed Implementation Plan). She noted that the report identified a number of successes and challenges associated with Pennsylvania's program, and included recommendations to further strengthen it. She also stated that the Commonwealth was disappointed that a number of recent and positive aspects of Pennsylvania's program were not recognized in the report, including Pennsylvania's adoption of amendments to its Chapter 102 erosion and sediment control regulations, revisions to the state's manure management manual, outreach to county conservation districts on the Chesapeake Bay WIP, the issuance of a model complaint response policy, the addition of manure management to PA's delegation agreement, the finalization of revisions to the CAFO General Permit, and assistance by DEP through its targeted watershed assessments. She emphasized that despite a 14% decline in agency staff, DEP has attempted to balance its available resources with program obligations, including conducting thorough CAFO inspections and providing assistance to the agriculture community in Pennsylvania through targeted assessment programs. She also noted that DEP has acknowledged that the development and implementation of a data system to track BMPs is critical so that the state can better track water quality and Chesapeake Bay improvements, but that the development of such a system will take time. In addition, Ms. Brinley noted a pilot program DEP is working on in coordination with the USDA and NRCS to better identify and track the BMPs that have already been implemented by Pennsylvania's farmers.

At the conclusion of Ms. Brinley's report to Council, CAC members inquired about the pilot project DEP is working on with the USDA and NRCS, and discussed the importance agriculture has on Pennsylvania's economy and whether the Commonwealth is planning to continue dialogue with EPA on the concerns it has with the Chesapeake Bay Model.

NATIONAL GOVERNOR'S ASSOCIATION TECHNICAL ASSISTANCE PLAN FOR STATES TO IMPLEMENT EPA SECTION 111(d) CLEAN POWER PLAN

Hayley Book, DEP Deputy Policy Director, provided Council with an overview of a recent effort Pennsylvania was selected to participate in to help states prepare for the implementation of EPA's Clean Power Rule. The initiative includes a policy academy supported by the National Governor's Association (NGA) where states, through the assistance of the NGA, will identify cost-effective strategies for meeting the potential requirements of EPA's Clean Power Plan regulations, which are expected to be finalized later this year. Pennsylvania successfully applied to participate in the academy and will join three other states – including Michigan, Missouri and Utah – that were also chosen by the NGA to participate in the effort.

Ms. Book explained that each state participating in the academy will receive tailored modeling of their electricity sector to assess compliance options for the implementation of the forthcoming regulations. States will also have access to technical assistance from NGA, including access to leading researchers in this area. At the conclusion of her remarks, Council inquired about the models that will be assembled for states participating in the policy academy, including the information that will be generated from the models and whether the models will be provided to each state at the conclusion of the policy academy so that additional refinements and adjustments can be made to the models.

PUBLIC COMMENTS:

Duane Mowery: Duane Mowery provided comments to Council in which he updated the CAC on the progress being made by the Sewage Advisory Committee in its review of a draft proposed rulemaking by DEP to allow the consideration of alternative technology in the onlot planning phase of development. He noted that the committee provided detailed comments to the Department on the rulemaking, which DEP is currently reviewing. Michele Tate noted that she would distribute to the CAC the committee's comments on the draft proposed rulemaking. Mr. Mowery also thanked Ms. Tate for her participation at the SAC's most recent meeting in March 2015, where Ms. Tate updated the SAC on Council's 2014 report on ways to increase the effectiveness of DEP's advisory committees, as well as the policy statements developed by the CAC as part of its recommendations to the Wolf Administration during its transition.

Carol Cutler: Carol Cutler provided comments to the CAC on EPA's pending Clean Power Plan regulations and DEP's pending Chapter 78 regulations. Ms. Cutler first emphasized the opportunity the proposed federal regulations have for Pennsylvania to prioritize renewable energy and energy efficiency. She emphasized that the state's current Alternative Energy Portfolio Standard and current Energy Efficiency Resource Standard need to be strengthened in order to foster Pennsylvania's commitment to achieve the maximum emission reductions possible. She also encouraged the Wolf Administration to continue to explore options for Pennsylvania to join the Regional Greenhouse Gas Initiative (RGGI) in order to facilitate a market-based approach for the Commonwealth to reduce carbon emissions and meet federal regulations in the most cost-effective way possible. Ms. Cutler also stressed that the substitution of natural gas for coal as Pennsylvania's dominant fuel source may not achieve the emission reduction targets called for in the pending federal regulations, as natural gas production involves the release of methane, which can be far more significant than carbon dioxide in heating the atmosphere. She emphasized that if electricity generation in the Commonwealth cannot be supported by 100% renewable sources, the state should develop a response to the Clean Power Plan that limits Pennsylvania's dependence on fossil fuels. As a part of that approach, she noted that DEP needs

to enact the strongest regulations possible on industry, including mandating closed loop storage of flow back fluid, scrubbers to prevent air pollution, green completion, and others. She also called upon the PA General Assembly to appropriate sufficient funds to DEP so the agency can enforce its regulations, and to the Wolf Administration to support DEP's ability to impose penalties to ensure full compliance.

Jane Popko: Jane Popko spoke to Council about the EPA's pending Clean Power Plan regulations and how the proposal provides an opportunity to the Commonwealth to invest in renewables and energy efficiency. She stressed the effects climate change is having on the health of residents in Pennsylvania and how the natural gas industry is a major emitter of methane, which is a greenhouse gas far more potent than carbon dioxide emitted from coal. She emphasized the need to be proactive and to ensure that the natural gas industry is subject to all state and federal clean air and clean water regulations. She noted approaches touted by the Citizens' Climate Lobby and the Regional Greenhouse Gas Initiative (RGGI) and suggested that market mechanisms can encourage Pennsylvania and the nation toward control of climate change.

Tom Schuster, Sierra Club: Tom Schuster provided comments to the CAC which emphasized the Sierra Club's remaining concerns with DEP's proposed RACT 2 rulemaking. He noted that while DEP recently revised the rule to lower NOx emission rates for coal-fired power plants equipped with Selective Catalytic Reduction, or SCR, technology, it did not compel one power station – PPL's Brunner Island plant – to install the SCR technology. He emphasized that the Brunner Island plant, which is located south of Harrisburg, is the largest emitter of NOx in the region and is a contributor to the significant smog problems experienced in downwind localities such as Lancaster, Philadelphia, and beyond. Mr. Shuster stressed that by not compelling Brunner Island to install SCR technology, DEP is rewarding the plant for falling behind in comparison to the six other large conventional coal-fired power plants in Pennsylvania that have all installed or are currently installing SCR technology, which can reduce NOx emissions by up to 90%. He furthered his point by stressing that DEP's RACT 2 proposal is not consistent with the concept of "Reasonably Available Control Technology" because RACT allows for the consideration of cost-effectiveness, and the Sierra Club provided data to DEP that demonstrates that SCR installation and operation at the Brunner Island facility is cost effective. In making this point, Mr. Schuster quoted the RACT regulation itself and emphasized that economic feasibility for RACT purposes is largely determined by evidence that other sources in a source category have applied the control technology in question. For this point, he emphasized that all other power plants in Brunner Island's category have installed SCR technology. Lastly, Mr. Schuster emphasized that as a result of not compelling Brunner Island to install SCR technology, DEP's RACT 2 rulemaking is subjecting millions of Pennsylvanians who live downwind of the plant to be subjected to more smog pollution than they should be.

Sierra Club Members and Supporters from the Philadelphia Region: In addition to the concerns expressed by Tom Schuster, several members of the Sierra Club from the Philadelphia Region, including a number of supporters of the organization, expressed concerns about PPL's Brunner Island power plant and the level of pollution that is emitted from the facility. Those individuals included Brandon Burnett, Cliffton Bennett, Sharia Colter, and Randolph Shear. The individuals provided separate comments to Council in which they emphasized the importance of holding the Brunner Island power plant accountable for installing SCR technology that has been or will be installed by all other power plants in Pennsylvania that are in the same source category as the Brunner Island plant. The individuals also emphasized the importance of clean air and clean water and the impact pollution has on public health, in particular the negative health consequences

that can result from living in proximity to sources.

Ralph Kisberg, Responsible Drilling Alliance of Lycoming County: Ralph Kisberg provided comments to Council where he emphasized the opportunities available to the Commonwealth to invest in and promote renewable energy through compliance with EPA's proposed Clean Power Plan regulations. He noted the large volume of natural gas that is being produced in Pennsylvania and the consequences of that production to air and water quality in the state, in particular the impacts created from compressor stations. He stated that the advancements in fracking technology will spur additional natural gas production in the state, which will create trade-offs that appear to be acceptable to the Commonwealth. He questioned whether those trade-offs are really acceptable, given the environmental impacts from the natural gas industry. He stated his support of providing additional funding to DEP, in particular the additional resources that will be allocated to the Oil and Gas Program for additional staff as he believes there is a shortage of oil and gas inspectors in the state. He referenced the importance of attracting qualified candidates to work for DEP, and noted that Ohio for example has four classes of oil and gas inspectors, while Pennsylvania only has one. He also noted the need for additional refinements in how inspection data is reported, given the fact that inspections are being conducted on all well sites permitted at a site or well pad, including wells that are permitted but not yet being drilled.

Betsy Conover: Betsy Conover provided comments to the CAC concerning EPA's proposed Clean Power Plan regulations. She prefaced her comments by identifying the changes she has witnessed that have occurred in Pennsylvania and its landscape from the time she was a child until recently when she moved back to the state. She emphasized the rural characteristics of her childhood residence, including her enjoyment of the Delaware and Susquehanna Rivers, and hiking the woods and trails of Pennsylvania. She contrasted her childhood experiences with current conditions resulting from the development of the Marcellus Shale in Pennsylvania, including impacts being felt and seen in rural and remote areas of the state. With regard to the pending federal Clean Power Plan regulations, she emphasized that Pennsylvania needs to implement a plan that focuses on energy efficiency, conservation and renewable energy. She noted that taxing carbon – including methane – will create a level playing field, enabling the state to develop a mass-based plan that addresses emissions quantitatively, while strengthening renewable portfolio standards.

League of Women Voters of Pennsylvania: A representative from the League of Women Voters of Pennsylvania could not attend the April 21, 2015, meeting of the CAC, but provided written comments to the CAC prior to the meeting, which were distributed to Council members. In their written comments, the League expressed their strong support of the EPA's proposed Carbon Pollution Standard for New Power Plants and emphasized that the nation must take aggressive action to reduce greenhouse gas emissions from all sources, with emissions reduction targets of at least 20% below 1990 levels by 2020 and 80-100% below 1990 levels by 2050. In other comments, the League expressed the importance of riparian buffers and noted their reservations about the long-term consequences of offsetting to the state's water quality, particularly in high quality or exceptional value watersheds. Last, the League stated its appreciation of the Department extending the public comment deadline for the Chapter 78 proposed regulations, including adding 3 public hearings in order to receive testimony on the draft final regulations. The League emphasized that it believes the regulations should provide transparency in all stages of gas well development and operation, including the exploration, drilling and production stages and that timelines and parameters for water testing should be extended. The League also emphasized that the regulations must balance the rights of mineral and surface owners and ensure public input

into decision-making regarding the location of facilities and related pipelines. The League also noted the importance for ensuring the Department has the resources it needs to implement and uphold compliance with the Chapter 78 regulations, as well as provisions of Article I, Section 27 of the Pennsylvania Constitution.

IMPLEMENTATION OF ACT 162 OF 2014: RIPARIAN BUFFER OR RIPARIAN FOREST BUFFER EQUIVALANCY DEMONSTRATION AND OFFSETTING

Ken Murin and Jennifer Orr, both with DEP's Bureau of Waterways Engineering and Wetlands, provided a presentation to Council on two technical guidance documents that were developed as part of DEP's implementation of Act 162, which are both currently open for public comment until May 20, 2015. Act 162 was signed into law in 2014 and amends Pennsylvania's Clean Streams Law by adding a new section 402(c), which authorizes NPDES stormwater construction permit applicants with the choice to either implement riparian buffers or riparian forest buffers or implement equivalent best management practices (BMPs) in certain cases. The law also requires offsetting buffers under certain cases.

Mr. Murin and Ms. Orr provided information on the scope of Act 162, including that the law impacts proposed individual NPDES projects located within 150 feet of certain High Quality (HQ) or Exceptional Value (EV) waters, but does not apply to or change processes in 25 Pa Code Section 102.14 concerning non-NPDES permits, nor does it affect voluntary riparian buffer programs. They also discussed the impact Act 162 has on DEP's NPDES permitting process, including that permit applicants must now conduct equivalency demonstrations of BMPs – in both quantitative and qualitative terms – if they choose not to implement a riparian buffer or riparian forest buffer for a project located within 150 feet of certain HQ or EV waters. They also discussed when riparian buffer or riparian forest buffer offsetting is required and emphasized that an equivalency demonstration may be required when offsetting is not. Their discussion concluded with the presentation of information on the step-by-step process an individual NPDES project permit applicant would need to follow to demonstrate buffer equivalency and the steps necessary during the offsetting application process.

Following the conclusion of the presentation, Council discussed the extensive Departmental resources necessary to implement Act 162, including the resources necessary to implement the permitting processes that are now necessary to implement the legislation. Council also observed the flexibility that was previously instilled in the Chapter 102 regulations before the enactment of Act 162, including that permit applicants had the ability to apply for a number of waivers and exemptions from certain permitting requirements, which Act 162 has now impacted. Council discussed the potential consequences that may ensue given that Act 162 has not simplified the NPDES permitting process, with relation to the installation of riparian buffer or riparian forest buffers, and has only made the permitting process more complex. Council indicated its desire to review the comments that DEP receives on the two technical guidance documents to learn the public's insights on Act 162 and the permitting process DEP was compelled to develop to meet the mandates of Act 162.

OIL AND GAS UPDATE; DEP DRAFT FINAL CHAPTER 78 AND 78A REGULATIONS

Scott Perry, Deputy Secretary for DEP's Office of Oil and Gas Management, provided an update to Council on a number of topics associated with the activities of his office. He first offered various data depicting industry and DEP activity since 2005, including yearly totals for the number of well permit applications received, as well as the number of unconventional shale well permits and conventional well permits issued by DEP. He also provided yearly data, dating from 2005 to

the present, on the number of unconventional shale wells and conventional wells drilled, and provided by county, the number of unconventional wells and conventional wells drilled in 2014. He also updated the CAC on the number of wells inspected by well type since 2005. He provided data also demonstrating the compliance rates of the unconventional well and conventional well industries, which indicated marked improvements by both industries in the number of compliance violations.

Deputy Secretary Perry also updated Council on a compliance and enforcement policy that was finalized by his office in January 2015, and updated the CAC on the Chapter 78 and 78a surface activities rulemaking, including the legislative action that prompted the bifurcation of the proposed rulemaking into two chapters. He discussed the Advance Notice of Final Rulemaking, which was recently advertised on the Chapter 78 and 78a proposal to allow additional public comment on the changes proposed to the regulations. He highlighted a number of changes proposed to the regulations to enhance the protection of water resources, including the elimination of waste storage pits for unconventional operators, and provisions that will require centralized wastewater impoundments to be permitted though the state's Residual Waste Regulations. Other amendments to the regulations include considerations for additional public resources such as schools, playgrounds, and DEP-approved wellhead protection areas and a new noise mitigation section for unconventional well operations that requires operators to prepare and implement a site-specific noise mitigation plan for drilling, stimulation and servicing activities. As measures to enhance transparency and data management, Deputy Secretary Perry noted that DEP has also proposed amendments to the rulemaking that add new notification requirements and provisions that mandate that all notifications must be submitted electronically to DEP. In concluding his remarks, Deputy Secretary Perry discussed the future steps to finalizing the rulemaking, including the ANFR comment period deadline, advisory committee consultation, and the projected date when the rulemaking would be submitted to the EQB for final action.

At the conclusion of the presentation, Council discussed the ANFR process, and whether DEP would accept comments on the totality of the rulemaking, or only those changes provided to the proposed rulemaking. Council also discussed future rulemakings associated with the Oil and Gas program, including the Chapter 78 Subchapter D rulemaking which will update DEP's regulations on well construction and operation, and future policy initiatives DEP plans to implement associated with data management, health and environment studies, staff and industry training and public engagement.

CAC COMMITTEE REPORTS

Act 54 Report Ad Hoc Review Committee: Chairman Dayton updated Council on the written comments the CAC received in response to the public comment period it sponsored on the Act 54 Report. He also noted the number of individual who provided testimony at the public hearings scheduled by the CAC on March 17, 2015, in Harrisburg, and on March 27, 2015, in Coal Center, PA. He noted that all comments and testimony received by the CAC will be posted on the CAC's website. Chairman Dayton also asked Ms. Tate to schedule a conference call with committee members so that they could finalize their review of all written comments and testimony received by the CAC.

Legislative Committee: Cynthia Carrow provided Council with an update on a recent meeting she and several committee members had with Senator Yudichak's office. She explained that the meeting was scheduled by the committee to ensure better coordination and communication

between the CAC and the General Assembly, including the House and Senate Environmental Resources and Energy Committees. She noted that a similar meeting is scheduled for April 22, 2015, with Senator Yaw, and that the committee hopes to schedule similar meetings with the House leadership of the Environmental Resources and Energy Committee.

NEW/UNFINISHED BUSINESS:

Chairman Dayton as well as Council noted that they did not have any new or unfinished business to discuss.

ADJOURN:

With no further business, Chairman Dayton requested a motion to adjourn the meeting. John Walliser moved to adjourn the meeting and Bill Fink seconded the motion. The April 21, 2015, meeting of the CAC was adjourned at 2:04 p.m.