



# **Citizens Advisory Council**

to the Department of Environmental Protection  
of the Commonwealth of Pennsylvania

## **Pennsylvania Constitution Article I, Section 27**

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustees of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

# **2024 Annual Report**

**0940-RE-DEP5535 10/2025**

Robert Barkanic  
Chair

Ian Irvin  
Executive Director

## Council Overview

Since its inception in 1971<sup>1</sup>, the Citizens Advisory Council (“Council” or “CAC”) has been actively involved in environmental issues affecting the Commonwealth of Pennsylvania. The Council was created to establish a non-partisan body to represent citizen viewpoints and provide objective analyses of the Department of Environmental Protection’s (“Department” or “DEP”) performance on environmental issues. With the passage of legislation, the Council was given four specific charges:

- I. The Citizens Advisory Council shall review all environmental laws of the Commonwealth and make appropriate suggestions for the revision, modification, and codification thereof;
- II. The Council shall consider, study, and review the work of the Department of Environmental Protection, and, for this purpose, the Council shall have access to all books, papers, documents, and records pertaining to or belonging to the Department; and
- III. The Council shall advise the Department upon request and shall make recommendations upon its initiative, for the improvement of the work of the Department.
- IV. The Council shall report annually to the Governor and to the General Assembly and may make such interim reports as are deemed advisable.

Because of this legislation, the Citizens Advisory Council is the only legislatively-mandated advisory committee with the comprehensive charge to review all environmental legislation, regulations, and policies affecting the Department of Environmental Protection.

Additionally, the 1992 amendments to Pennsylvania’s Air Pollution Control Act require DEP to consult with the Council in developing state implementation plans and regulations developed by the Department to implement the federal Clean Air Act. The Council also can “consider, study and review department policies and other activities related to the Clean Air Act...” and provide a summary of activities every five years for the Department’s evaluation of the effectiveness of its programs to the General Assembly<sup>2</sup>.

The Council is comprised of the Secretary of the Department of Environmental Protection (ex officio), six members appointed by the Governor, six members appointed by the President Pro Tempore of the Senate, and six members appointed by the Speaker of the House of Representatives<sup>3</sup>. The term of office for each of the appointed members of the Council is three years, measured from the third Tuesday of January of the year of appointment, and may continue until a successor is appointed. All actions of the Council are by majority vote. According to the statute, the CAC shall meet quarterly; however, the Council tends to hold monthly meetings, except in August and December.

An important part of the Council’s mission is to encourage public participation and engagement from citizens of the Commonwealth. The CAC seeks to represent all people of the Commonwealth and bring a collective view of the public interest in the environment through diverse personal experiences and perspectives. The ability of the public to provide input and participate in the development of environmental regulatory and policy initiatives is vital to the Council’s ability to provide guidance and oversight to the Department.

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<sup>1</sup> The Citizens Advisory Council is an independent advisory board of the Department of Environmental Protection housed within the DEP and charged with reviewing all environmental issues, legislation, regulations, policies, and programs pursuant to Sections 448(p) and 1922-A of the Administrative Code of 1929, as amended by Act No. 1970-275 and Act No. 2016-07, 71 P.S. §§ 158(p) and 510-22.

<sup>2</sup> Act of January 8, 1960, P.L. (1959) 2119, No. 787, as amended, known as The Air Pollution Control Act (35 P.S. § 4001, et seq.).

<sup>3</sup> No more than three members nominated by each of the respective authorities may be from the same political party.

The CAC members are integrated into the oversight structure of the Department because they are also elected to serve on various boards and advisory committees within the DEP. The CAC designates five of its members to serve on the Environmental Quality Board, four members to the Mining and Reclamation Advisory Board, as well as seats on the Aggregate Advisory Board, Air Quality Technical Advisory Board, Low-Level Waste Advisory Committee, Solid Waste Advisory Committee, Oil and Gas Technical Advisory Board, Environmental Hearing Board Rules Committee, and the Radiation Protection Advisory Committee.

Within the CAC, subcommittees focus on specific areas of interest. The Legislative Committee, Policy and Regulatory Oversight Committee, Strategic Issues Committee, Public Participation Committee, Advisory Board Committee, and Executive Committee meet and report to the entire Council on topics and issues brought before their respective Committee.

Each year, the CAC summarizes its activities and provides an Annual Report to the Governor, the General Assembly, the Department, and the public. This Annual Report highlights the activities of the Council and provides an opportunity for interested stakeholders to provide feedback on the work of the CAC and offer suggestions for improvement or future areas of focus for the Council.

### **Council Membership**

Each member brings a unique perspective and wealth of knowledge on environmental issues. Diversity of experience and thought allows for a comprehensive understanding and analysis. The Council engages in thoughtful discussion before counseling the Department or alerting relevant decision-makers of necessary action to be taken.

Below is a list of CAC Members in 2024:

George Ambrose,

- Appointed by the Speaker of the House on March 11, 2024, with a term expiring on January 19, 2027.

Robert Barkanic, Lehigh County (Chair)

- Appointed by the Governor on July 9, 2020, with a term expiring on January 17, 2023.

Jacquelyn Bonomo, Luzerne County

- Reappointed by the Speaker of the House on February 20, 2024, with a term expiring on January 19, 2027. Originally appointed on April 19, 2021

Cynthia Carrow, Allegheny County

- Reappointed by the President Pro Tempore of the Senate on February 7, 2022, with a term expiring on January 21, 2025. Originally appointed on February 11, 1997.

Carol Collier, Montgomery County

- Appointed by the Governor on September 19, 2024, with a term expiring on January 19, 2027.

William C. Fink, Bedford County

- Reappointed by the Speaker of the House on January 8, 2014, with a term expiring on January 21, 2017. Originally appointed on July 18, 2012.

C. Jason Foster, Fayette County

- Appointed by the Speaker of the House on December 11, 2023, with a term expiring on January 19, 2027

Duane E. Mowery, Cumberland County

- Reappointed by the President Pro Tempore of the Senate on May 6, 2024, with a term expiring on January 19, 2027. Originally appointed on October 3, 2017.

Trisha L.R. Salvia, Esquire, Cumberland County (Vice Chair)

- Reappointed by the Speaker of the House on February 20, 2024, with a term expiring on January 19, 2027. Originally appointed on April 19, 2021.

Jerome Shabazz, Philadelphia County

- Reappointed by the Governor on July 9, 2020, with a term expiring on January 17, 2023. Originally appointed on August 29, 2017.

John St. Clair, Indiana County

- Reappointed by the President Pro Tempore of the Senate on January 24, 2023, with a term expiring on January 20, 2026. Originally appointed on February 1, 2017.

Thaddeus Stevens, Tioga County

- Reappointed by the Speaker of the House on October 6, 2020, with a term expiring on January 17, 2023. Originally appointed on April 9, 1997.

John J. Walliser, Esquire, Allegheny County

- Reappointed by the Governor on July 9, 2020, with a term expiring on January 17, 2023. Originally appointed on October 6, 2008.

James Welty, Cumberland County

- Reappointed by the President Pro Tempore of the Senate on February 7, 2022, with a term expiring on January 21, 2025. Originally appointed on August 27, 2015.

Timothy Weston, Esquire, Cumberland County

- Reappointed by the Governor on July 9, 2020, with a term expiring on January 17, 2023. Originally appointed on May 30, 2013.

Jessica Shirley, Acting DEP Secretary, ex-officio

James Schmid, of Delaware County,

- Served on the Council until September 19, 2024, when another was appointed to the Council. Mr. Schmid was originally appointed to the Council on August 29, 2017, and reappointed by the Governor on July 9, 2020, with a term expiring on January 17, 2023.

By the end of 2024, there were three vacancies on the Council, two are appointments made by the President Pro Tempore of the Senate and one appointment is made by the Governor.

The Department of Environmental Protection provides an Executive Director to serve as a liaison between the Council and the Department. The Executive Director also assists the Council with its administrative functions. The Council has the statutory authority to hire experts, stenographers, and assistants as may be deemed necessary to carry out its work. Ian Irvin served as the Executive Director of the Council since September 2023.

### **Officers**

Jerome Shabazz and Timothy Weston served as Chair and Vice Chair, respectively, between July 1, 2023, and June 30, 2024.

During the June 2024 meeting of the CAC, Robert Barkanic and Trisha L.R. Salvia were elected Chair and Vice Chair, respectively. Their terms began on July 1, 2024, and will end on June 30, 2025

### **Committees and Advisory Boards**

As members of the Council, each person is asked to serve on various committees and advisory boards to help direct activities of the CAC and provide leadership and expertise to the Department on important issues. The list of committees, and who serves on each at the end of 2024, is as follows:

Advisory Board Committee – responsible for informing the full Council of members' respective participation on, and the issues presented before, various advisory boards and committees.

Comprised of all CAC members serving on advisory boards, detailed below.

Executive Committee – responsible for representing the Council outside of its meetings, as appropriate and authorized by the Council (e.g., meetings with the Governor's Office, Legislators, and Department Executive Staff); helping set the Council's operating budget; and oversight of the Executive Director.

Robert Barkanic, Chair

Trisha Salvia, Vice Chair (starting July 2024)

George Ambrose

Jacquelyn Bonomo

Cynthia Carrow

William Fink (ending July 2024)

Jerome Shabazz

Tim Weston

Legislative Committee – tasked with evaluating existing and proposed legislation relative to current environmental issues and reaching out to legislators to provide the Council's perspective and to understand legislator concerns and priorities to ultimately shape Council's advice and recommendations to the General Assembly. The Legislative Committee is also tasked with building a closer working relationship with legislators with the goal of heightening awareness of the Council's mandate, mission, current priorities, and recent actions.

Cynthia Carrow, Chair	Thad Stevens
Robert Barkanic (ending July 2024)	John Walliser
Duane Mowery (starting August 2024)	Jim Welty
Trisha Salvia	

Policy and Regulatory Oversight Committee – tasked with appraising new policy, guidance, and regulatory proposals of the Department (all environmental media), as well as following general Department operations. This Committee is tasked with the role of reviewing DEP Air Quality Program State Implementation Plans (SIP) and regulations needed for the implementation of the Clean Air Act and providing recommendations to Council.

Tim Weston, Chair	Jerome Shabazz
Cynthia Carrow	Thad Stevens
William Fink	John Walliser
Trisha Salvia	Jim Welty

Public Participation Committee – tasked with facilitating public outreach and involvement for Department activities, as well as evaluating the Department's performance on transparency and public involvement.

George Ambrose, Chair (starting April 2024)	Jerome Shabazz
Cynthia Carrow	John Walliser
William Fink	

Strategic Issues – tasked with identifying and managing special initiatives of the CAC as necessary, including statutory review and analysis efforts. Identification of an annual strategic issue will serve as a framework for Council meeting agendas throughout the year as Council members educate themselves on the full issue, to culminate with a site visit at the annual regional meeting.

Jacquelyn Bonomo, Chair  
James Schmid (ending September 2024)  
Tim Weston

Advisory Board assignments are as follows:

#### Aggregate Advisory Board

John St. Clair	Tim Weston
James Schmid (ending September 2024)	Ian Irvin - alternate
Thaddeus Stevens	

#### Environmental Hearing Board Rules Committee

Gail Conner, Esq.

#### Environmental Quality Board

Robert Barkanic

Trisha L.R. Salvia

John St. Clair

Thaddeus Stevens

John Walliser

Carol Collier – alternate

William Fink – alternate

#### Low-Level Waste Advisory Board

Ian Irvin

#### Mining and Reclamation Advisory Board

Cynthia Carrow

John St. Clair

James Schmid (ending September 2024)

C. Jason Foster (beginning July 2024)

Ian Irvin - alternate

#### Oil and Gas Technical Advisory Board

Jeffrey P. Walentosky, PG

#### Radiation Protection Advisory Committee

Ian Irvin

#### Solid Waste Advisory Committee

James Welty

### Highlights of Council Activities

#### Anaerobic Digestion

In June 2024, Rashi Akki of the Ag-Grid Energy and the Partnership for Electric Pathways, provided information about her company and anaerobic digestion, which takes manure from a dairy farm and produces renewable natural gas that is converted to electricity. Even though Ag-Grid is based in Pennsylvania, it has not started a project in the state but has projects in Connecticut and Massachusetts because of the higher price of electricity. Additionally, because Connecticut, Massachusetts, and New York have bans on food waste, Ag-Grid gets tipping fees from those states, supporting projects there. Ag-Grid is planning to start a project in Cochranville, PA; however, the electricity prices, food waste bans, and size of Pennsylvania dairy farms have created obstacles. Other discussions revolve around wastewater lagoons on dairy farms and the remains nitrogen, potassium, and phosphorus, which can be used by farmers for crop growing.

## Critical and Rare Earth Minerals Recycling

Bernadette Lynch from the Supply Chains of Recovered Elements (SCORE) Consortium and Ned Eldridge from eLoop. SCORE's mission is to build fully capable supply chains for the domestic sourcing and product of critical minerals from waste streams, and eLoop is introducing artificial intelligence robotics in the de-manufacturing of electric scrap. SCORE is looking to:

- extract minerals like Scandium, Germanium, Gallium, Niobium, Vanadium, and Platinum
- from coal ash, bauxite residue, mine tailings, titanium dioxide, phosphogypsum
- for defense, manufacturing, fuel cells, fiber optics, pharmaceutical, and advanced technology.

eLoop began working in the electronic recycling industry in 2008 and is another organization looking to introduce artificial intelligence (AI) and robotics into de-manufacturing electronic waste. Using AI and robotics will lead to increased production capacity and speed, focus personnel on other tasks for greater efficiency while automation can complete more tedious tasks like separating plastics and metal contamination, and the creation of databases of all makes and models processed.

## Cryptocurrency

Charles McPhedran of Earthjustice discussed Cryptocurrency and its pollution with the Council. Cryptocurrency is an alternative to the dollar without central authority that governs how it is exchanged. For matters of energy use and environmental consequences, Earthjustice believes there needs to be other ways to validate cryptocurrency transactions. The current validation methods for cryptocurrency mining include underlying energy sources, greenhouse gases, combustion waste, subsidies, water impacts, e-waste considerations, air pollution, and noise pollution. Earthjustice believes that DEP and the residents of the Commonwealth have the tools to require, enforce, and improve permits; conduct new source reviews; address new fuels; and eliminate fossil incentives and noise pollution. Further discussion revolved how other states were handling cryptocurrency, including management of energy demands, operation of cryptocurrency facilities on the grid or with direct power from electricity generating plants, and the continuing energy use once the proof of work requirement for cryptocurrencies has been completed.

## Electronic Waste Recycling

Sarah Alessio Shea, Deputy Director with the Pennsylvania Resource Council (PRC), discussed Electronic Waste (e-waste) recycling with the Council. PRC is a statewide environmental nonprofit organization founded in 1939 whose vision is a Pennsylvania where nothing is wasted. Deputy Director Shea provided details on the scale of e-waste generation, illegal dumping, and access to collection sites in Pennsylvania. PRC believes that House Bill 1607 and Senate Bill 734, "Electronic Waste Recycling Modernization Act," should be expanded certain sections clarified, specifically the maximum amount of eco-deposits; whether the eco-deposits can cover collection, preparation, transportation, and the recycling of components; tracking of brands by the collector; and the manufacturer's role in e-waste. Further discussion revolved around the recovery of precious metals in devices and the need to categorize the list of equipment rather than defining by word.



In May 2024, There was brief discussion between the Council and Department on the recycling of solar panels and how the Department is addressing e-waste recycling.

Also in May 2024, Jason Linnell, the Executive Director for the National Center for Electronics Recycling (NCER) presented to the Council. NCER is a nonprofit organization located in West Virginia that is involved in federal, state, and association projects in which it conducts research and run collections programs. Executive Director Linnell provided an overview of the clearinghouse model that Illinois and South Carolina used and then specifically discussed the roles and responsibilities of each clearinghouse, which is ran by the Electronics Recycling Representative Organization and helps manufacturers collectively meet the state program requirements. Discussion also included some of the benefits (convenience, consistency, lack of limits for covered material, funding, fair allocation of costs), drawback (gaps in rural area and costs to local governments), registration of brands, definitions of what is electronic or covered device, recycling of solar panels, penalties for noncompliance, and determinations of each manufacturer's recycling obligation.

In June 2024, Sallie Williams, the Program Manager of Solid Waste Regulation Development with the South Carolina Department of Health and Environmental Control, provided the Council with a presentation on South Carolina's electronic waste recycling program. In 2011, South Carolina created an electronic waste clearing house program for counties to manage and recover televisions, monitors, computers, and printing devices. In 2022, South Carolina revised the program to establish a convenience standard for televisions and monitor manufacturers and to update requirements for collectors of covered electronic devices. In 2026, South Carolina will hold meetings with stakeholders to determine if further revisions are necessary. The program is a collaborative effort between the South Carolina Department of Health and Environmental Control, clearinghouse, manufacturers, counties, and municipalities.

### Food Processing Residuals

Larry Holley, the Director of the Bureau of Waste Management, and High Garst, the Acting Policy Director, both with the Department, discussed Food Processing Residuals (FPRs) with the Council. FPRs are material associated with the production and manufacturing of food, including potato chips, chicken parts, and liquid material derived from food processing. FPRs are used in agricultural setting, including up to 53,000 farms in Pennsylvania. The application of FPRs on farms should follow the Department's best management practices, but several concerns have risen – typically related to odor. In October 2023, a workgroup was formed to revisit DEP's best management practices, which is found in the FPR manual that was first published in 1994, revised in 2001, and provides guidance for land application, storage, and normal agricultural applications. The workgroup is made up of DEP, the Pennsylvania Department of Agriculture, the State Conservation Commission, lawmakers, and other stakeholders with a background working with FPR. This workgroup would develop a report for the Secretaries of Agriculture and Environmental Protection by summer 2024. The workgroup was focused odor, transportation, greater collaboration amongst stakeholders, and protection of ground and surface water. Other discussion revolved around transportation and recording keeping, legislative options, and how other states are handling FPR.

In September 2024, Meaghan Wright and Dorene Pasekoff of East Coventry Advocacy discussed Food Processing Residuals with the Council. The presentation provided an

overview of FPRs, best management practices outline in the current FPR manual from DEP, an explanation of how East Coventry Township has provided example of ordinances to other municipalities and the Commonwealth, and highlighted areas of consensus to build trust while keeping communities and farms safe. East Coventry Advocacy also point to the details on the Antrim Citizens for Safe Water website, including details on an FPR spill. Discussion also revolved around the East Coventry Township steering committee, local ordinances, and the progress of legislation in the General Assembly.

High Garst, DEP's Acting Policy Director, discussed the FPR Work Group Report with the Council at the October 2024 meeting. The Report identified three perceived issues:

- Odor: the Workgroup identified odor as a major concern and highlighted the need for more odorous FPR to be handled differently. The Workgroup also identified the potential for greater requirements for management of FPR in storage and land application to reduce the risk of odor.
- Transportation: The Workgroup concluded that banning the importation of FPR would pose legal and logistical challenges and limit the potential of FPR to be beneficial to agricultural operations. A potential solution is additional documentation, reporting, and clear responsibility at the generation, transportation, storage, and land application phases.
- Management: Understanding that DEP's ability to address FPR is limited to the authority given by the General Assembly, the Work Group discussed potential changes to the Solid Waste Management Act. The State Conservation Commission has an important role in collecting information and building relationships with agricultural operations, especially in nutrient management, odor management, and certified manure hauler and broker programs. FPR management is also part of the nutrient management application, when applicable.

The Work Group has proposed solutions to managing the transportation, storage, and land application of FPR regarding agricultural operations. These proposed solutions clarify liability and secure documentation; enhance training for haulers; create a clearer definition of FPR; require more stringent odor management for high-odor-risk FPR and require notification of intent to store or apply FPR; codify requirement minimums in LAS plans; reorganize internal management of FPR rules; and enhanced education around FPR rules and management.

### Hydrogen Hubs

Over the course of 2024, the Council received several presentations on Hydrogen Hubs. In October 2023, the Biden Administration announced that it would provide up to \$7.0 billion for hydrogen hubs around the United States, including \$1.6 billion to fund the creation of two hydrogen hubs partially located within Pennsylvania – the Mid-Atlantic Clean Hydrogen Hub, known as MACH2, in the southeastern corner of the Commonwealth, and the Appalachian Regional Clean Hydrogen Hub, known as ARCH2, in the southwestern corner of the Commonwealth.

In January 2024, Thomas Murphy, the Senior Managing Director of Strategy Energy Initiatives. In addition to discussing the federal funding, Director Murphy also discussed the Decarbonization network of Appalachia; blue hydrogen's suitability to Appalachia; cutting edge technologies like autothermal reforming and partial oxidation that can be used by the Hydrogen

Hubs; and carbon capture, utilization, and storage technology coupled with the Hydrogen Hubs. Other portions of the presentation focus on the creating a network of hydrogen producers, consumers, and local infrastructure connections, the need for Community Benefit Plans, and the environmental issues that the Department will need to address in the future.

In March 2024, Suzy Baker, the Stakeholder Engagement Lead with the Office of Clean Energy Demonstrations (OCED) at the U.S. Department of Energy (U.S. DOE) also provided information on Hydrogen Hubs. Ms. Baker discussed OCED's mission, mandate, and scope. Ms. Baker then briefly discussed the seven regional clean hydrogen hubs that were in the negotiation phase and the four pillars of community benefits. Ways to engage while in the negotiations stage was offered, the next steps in negotiations, and how to engage during the future phases of resources, location, communities, and project development partners. Further discussion was on whether each individual hub was moving forward on its own or are all hubs moving together, whether the timelines consider engaging or working with state regulatory agencies.

Additionally, the Council has voiced its desire to be engaged with as many of the details that are possible, the siting of infrastructure, and priorities around environmental impacts, the burden to communities with the infrastructure, and the safety of the technology.

In April 2024, Denise Brinley, the Vice President of Strategic Growth and Client Engagement at TRC Companies discussed the Appalachian Regional Clean Hydrogen Hub with the Council. ARCH2 has a mission to use the nation's lowest cost natural gas as feedstock to enable and sustain a regional hydrogen economy while ensuring that the economic benefits are shared fairly and equitably among local communities.

Additionally, discussion revolved around information regarding an outside party, contracted by U.S. DOE, doing the Environmental Impact Statement on behalf of the agency and the need to keep the public and state agencies informed about the process and impacts well in advance, vice waiting until the last minute.

In June 2024, Matt Krayton, the Communications Lead, and Manny Citron, the Vice President of Partnerships and Community Engagement, with the Mid-Atlantic Hydrogen Hub (MACH2) discussed the project with the Council. Mr. Krayton and Mr. Citron informed the Council that the MACH2 was, in October 2023, one of the seven announced winners to receive up to \$750 million in federal cost share to develop, produce, distribute, and use hydrogen as part of the United States' transition to carbon neutrality. After describing the different types of hydrogen production, MACH2 described how hydrogen is the best solution to transition industrial facilities and transportation, including partnerships between MACH2 and Philadelphia Gas Works and the Philadelphia Water Department to reduce methane emissions.

In July 2024, the Council heard from Nita Raju, a Community Liaison from the Eastern Region of the Office of Pipeline Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation. Since 1970, the Pipeline and Hazardous Materials Safety Administration (PHMSA) has regulated the transportation of hydrogen by pipeline. In March 2024, PHMSA published a notice of information gathering in the *Federal Register* to revise forms for the collection of information on the blending of hydrogen gas with natural gas in natural gas pipelines. Additionally, PHMSA regulates the transportation aspects of Carbon Capture, Utilization, and Storage (CCUS). Two research and development projects are looking

at unknown gaps in safety in carbon dioxide transportation, and those projects were expected to be completed in late 2024. Additionally, discussion was about the research and development on pipeline safety for the transportation of hydrogen, which PHMSA is also engaged in.

In September 2024, the Council heard from William Haaf, a retired Corporate Manager of Product Stewardship at DuPont. Mr. Haaf does not represent the views of DuPont, merely his own based on his research and analyses on Hydrogen. Mr. Haaf provided a detailed presentation on the production and use of Hydrogen, including what would most and least benefits from hydrogen, various technologies, and the benefits of using “turquoise” hydrogen, which is hydrogen made by splitting methane into hydrogen and solid carbon.

In October 2024, the Council hear from Rob Altenburg, the Senior Director for Energy and Climate at PennFuture. Mr. Altenburg presented on the current uses of hydrogen around the world, future worldwide demand, hydrogen’s growth potential and its challenges. Mr. Altenburg what PennFuture has seen, its ongoing questions, and its suggestions for moving forward. Further discussions revolved around whether there is sufficient funding for the two hydrogen projects in Pennsylvania, the viability of generated hydrogen vis-à-vis naturally occurring hydrogen, the viability against other electricity sources, like nuclear power, the impacts on regulatory agencies, issues with the grid, and benefits that may motivate a community to embrace hydrogen hubs.

#### Per- and Polyfluoroalkyl Substances (PFAS)

Dawn Hissner, Chief of Operations, Monitoring & Compliance Division at DEP, and Jill Anderson, Chief of the Technical Support Section at DEP discussed the background on per- and polyfluoroalkyl substances, better known as PFAS, the PFAS maximum contaminant level (MCL) rulemaking process and rule, PFAS sampling plan. This discussion also included details of a Toxicology Services Contract with Drexel University, funding for PFAS projects, U.S. Environmental Protection Agency actions to address PFAS, and a Proposed National Primary Drinking Water Regulation. Further discussion was about the need for significant infrastructure improvements in public water supplies and wastewater system to improve PFAS technologies. Discussions also took place on whether DEP has begun to develop a program to facilitate the analysis or treatment of wells should a private owner decide to do sampling, and the results of the sampling determined that the private well may have PFAS contamination.

In October 2024, Ruby Stanmyer of the Water Division of Region 3 of the U.S. Environmental Protection Agency discussed its PFAS rule and DEP’s actions regarding it. Ms. Stanmyer also discussed PFAS in general at the federal level. Additional discussion was about state standards for bottled water, the removal of other contaminants, whether the new rule from U.S. EPA on PFAS removal will put additional liability on water operators, and the potential to create hazardous substances in the PFAS treatment process.

#### Standards of Performance for New Stationary Sources

The Department was engaging in a rulemaking to amend 25 Pa. Code Chapter 122 to provide the express authority for the Department to adopt and submit for approval a State Plan to the U.S. Environmental Protection Agency (U.S. EPA). The State Plan will be developed in accordance with 40 CFR Part 50, Subparts B and Ba, and the Department will request a

delegation from U.S. EPA to implement and enforce the requirements of an applicable Federal Plan established by U.S. EPA under 10 CFR Part 62. An additional rulemaking would correct errors in the mass-equivalent basis factors in 25 Pa. Code § 129.115(c) and correct a cross reference in (d).

The rulemaking package, including the executive summary, preamble, proposed Annex A, and regulatory analysis form, will be online when the proposed rulemaking is considered by the Environmental Quality Board.

### **Updates from the Department**

Acting Secretary Shirley started 2024 by discussing the Department's continuing its 2023 initiative, but with a greater focus on feasibility. Additionally, the permitting plan initiative remained a top initiative of the Department, and a significant technology overhaul/modernization in 2024. Acting Secretary Shirley, in November 2024, also discussed the vision for the future of DEP; its new core values; moving at the speed of business; the importance of returning to the objectives and values of the agency; and the methods to externally share DEP's new values, mission, and vision with the public.

#### **Budget**

Deputy Secretary for Administration Ian Harlow and Executive Deputy Secretary Ramez Ziadeh provided updates on the 2024-25 budget, including:

- \$10.5 million to hire 40 additional permitting staff in regional offices and to upgrade, improve, and modernize permitting systems;
- \$11 million to continue finding and plugging abandoned wells and other associate activities;
- \$1.5 million for new capabilities to test for PFAS contamination at the Department's Harrisburg Lab, including funding for two additional staff members;
- \$1.1 million to improve the monitoring capabilities of the Bureau of Air Quality for conducting intensive, long-term air studies; and
- \$2.5 million to support experts within the Energy Programs Office, focusing on transmission planning and environmental justice.

Further discussion focused on eliminating the requirement of a four-year college degree, working with the Office of Administration regarding hard-to-fill positions, and managing grants focused on energy programs.

#### **Climate Pollution Reduction Grants Program Outreach**

In November and December of 2023, DEP performed outreach and engagement on the Climate Pollution Reduction Grants (CPRG) Program. The outreach and engagement were spearheaded by the Energy Program Office with help from the Office of Environmental Justice. Feedback from this outreach and engagement will be used to inform the Priority Climate Action Plan (PCAP) and programs proposed for funding eligibility under the CPRG Implementation Grants. DEP also held two interagency meetings to coordinate state government activities and held two outreach sessions to local governments and target stakeholders, which included targeted workshops for the industrial sector. DEP also held five community outreach sessions,

which highlighted transportation challenges, environmental education, weatherization, improving housing stock, and repairing government trust. These outreach sessions are important because only climate pollution reduction strategies included in the PCAP will be eligible for Phase II competitive Implementation Grant funding.

### Critical Mineral Industry in Pennsylvania

As society continues making technological advancements, the demand for critical materials that would make these advancements possible will continue to rise. Critical minerals are seen in consumer electronics; electric vehicle batteries; and energy, medical, and defense applications. Some of the prices for these critical minerals is up 500% year over year, with Australia, Chile, and China producing about 90 percent of the world's \$8 billion in lithium. Recently, researchers from the National Energy Technology Laboratory and University of Pittsburgh identified fracking wastewater from Marcellus Shale gas wells as a significant source of lithium; concluding that Pennsylvania could supply 38-40% of current domestic consumption. Often treated and recycled for use in ongoing fracking operations, the fracking byproduct could be beneficially reused by extracting the critical minerals contained within. Lab results demonstrated that lithium could be extracted from the wastewater with up to 90% efficiency. Additionally, researchers at Penn State have explored critical mineral reclamation processes from resources such as acid mine drainage/sludge, coal refuse, and conventional oil and gas well produced waters. The Department has been involved with these efforts, particularly Penn State's research, and is preparing to make Pennsylvania an industry leader. To that end, our internal focus has and will continue to focus on regulatory regime, permitting, cost, efficiency, environmental harms and consequences, royalty issues.

### Enforcement and Compliance Policy

The Department is looking at its enforcement and compliance work by revisiting the 2004 policy, "Standards and Guidelines for Identifying, Tracking, and Resolving Violations." The Department has developed new processes for multimedia inspection, site selection, ranking strategy and developed new electronic tools and weighted matrices for regional programs to use when discussing multimedia site prioritization.

### Erosion and Sediment Control General Permit

The Oil & Gas program is working on the Erosion and Sediment Control General Permit-4, which was presented to the Oil & Gas technical Advisory Board in June 2024.

### Governor's Energy Strategy

Acting Secretary Shirley provided updates on the Governor's Energy Strategy, which includes the Pennsylvania Climate Emissions Reduction Act, or PACER, and the Pennsylvania Reliable Energy and Sustainability Standard, or PRESS. PACER is a Pennsylvania specific cap and invest program that would determine the cap on the amount of carbon and direct 70 percent of the generated revenue back to Pennsylvanians as an electricity bill rebate. PACER would replace the Regional Greenhouse Gas Initiative, frequently known as RGGI.

PRESS is a second piece of legislation, which continues the successful aspects of the Alternative Energy Portfolio Standard (AEPS). However, PRESS includes other energy

generating technologies to ensure reliability. These technologies include nuclear power and next generation technologies like fusion, advanced fission and includes clean forms of natural gas.

The Governor's Energy Strategy also includes the two hydrogen hubs partially located in Pennsylvania. The final piece of the strategy is the continued plugging of abandoned oil and gas wells. DEP was talking with the U.S. Department of the Interior to draw down the next round of funding, which is called Formula One and is about \$79 million. DEP will be creating a grant program specifically targeting smaller operators to be able to access a well-plugging rebate program. The Methane Emissions Reduction Plan, discussed *infra*, will also plug some of the lower producing conventional wells.

Further discussion was around the higher cost of plugging wells, which is related to a focus on plugging wells with higher environmental impacts. Additionally, DEP has been looking at educating the public on the hydrogen hubs but has, up until the time of the update, has been facing difficulty because of the pace and newness of the information.

#### Methane Emissions Reduction Plan

The U.S. Department of Energy (U.S. DOE) announced the availability of \$350 million from the federal Inflation Reduction Act for formula grant funding to help monitor and reduce methane emissions from the oil and gas sector. The goal of the Methane Emissions Reduction Plan (MERP) is for oil and gas well owners to voluntarily and permanently reduce methane emissions from leaks and daily operations of low-producing conventional wells on non-federal lands.

Based on numbers from December 15, 2023, Pennsylvania was allocated about \$44 million of the available monies. DEP, however, believes that the formula miscalculated the number of applicable wells in Pennsylvania by almost half and plans to engage U.S. DOE on a greater monetary allocation. By February 2024, DEP must submit a Community Benefits Plan and an amended budget to address the supplemental dollar amount that is reflected in the final grant award. These EMPRS funds must be obligated by September 2028.

#### National Pollutant Discharge Elimination System General Permit

The Department updated the PAG-02 permit, which is renewed every five (5) years. The draft permit was published for public comment, and the Department evaluated, responded, and worked with stakeholders to resolve public comments by June 2024. The Department published a notice of the final permit at the end of August 2024.

The Department reissued a version of the PAG-02 General Permit was implemented in December 2024 with several procedural updates. Site inspections will be conducted by personnel who have completed qualified site inspector training and will have written approval before conduction inspections. Additionally, the updated permits require proof of instrument recording before the pre-construction meeting.

## PAYback

The PAYback program seeks to improve the efficiency of permitting programs. Since PAYback went into effect in November of 2023, the Department received 21,106 authorization requests and disposed of 22,728 authorization requests. The Department has not had to refund any fees so far despite 16 PAYback application, of which 14 permits were eligible.

Additionally, with a backlog prior to starting PAYback, the Department dispositioned about 47% of those backlogged authorizations by May 2024 and 56% near the end of June 2024, which is slightly behind the goal of reducing the backlog by 10% each month.

## Pre-Application Meetings

On May 1, 2024, DEP launched a new pilot program for Chapter 102 in 10 participating conservation districts. As part of the new program, DEP is requiring two pre-application meetings with applicants to improve the quality of submissions on the front-end. At the second meeting, the applicant is expected to provide draft final plans and specifications. With these pre-application meetings, DEP is hoping to do one comprehensive review of the formal submission and cut review timeframes by 73 business days. DEP will provide updates on how the program is going in the future.

## Regional Greenhouse Gas Initiative

Acting Secretary Shirley also provided an update on the Regional Greenhouse Gas Initiative (RGGI) decision from the Commonwealth Court. The Administration has appealed the decision to the State Supreme Court to protect and preserve important executive authority for the current and future gubernatorial administrations. Governor Shapiro is ready to implement the recommendations of the RGGI Working Group and is ready to work with legislative leaders regarding an alternative.

## Solar Development on Previously Impacted Mine Lands

DEP has released an assessment on solar development on previously impacted mine lands to demonstrate the opportunities and challenges associated with solar development. Based on the assessment, there are 169,000 acres of abandoned mine lands in Pennsylvania. However, only 27,000, or 16 percent, has been reclaimed. The remaining 142,000 acres is still awaiting reclamation. Five percent, or about 9,000 acres, of these abandoned mine lands could produce 1.5 gigawatts of solar capacity if used for solar development - enough electricity to power 140,000 Pennsylvania homes or every household in Pittsburgh and then some. Siting on Abandoned Mine Lands brings about additional environmental benefits by taking pressure off other areas and preserving agricultural land, forest land, and valuable habitat.

In addition, the Inflation Reduction Act, through a U.S. Department of Energy program, encourages clean renewable energy development on sites that previously housed fossil fuel energy.



## Solar for All

Acting Executive Deputy Secretary Ramez Ziadeh provided an update on Solar for All. In April 2024, the U.S. Environmental Protection Agency announced that the Pennsylvania Energy Development Authority (PEDA) is the recipient of \$156 million for a statewide Solar for All program. The Solar for All program aims to develop and expand low-income solar programs throughout the state and is the largest investment focused on low-income solar in the state's history. Solar for All's goal is to install 70 megawatts of solar on 14,000 low-income disadvantage community households over a five-year period. PEDA will use this funding opportunity to attract banks, credit unions, and Community Development Financial Institutions (CDFIs) to catalyze new financing products to allow low-income homeowners to deploy solar energy systems and realize savings from day one. Over a 20-year period, these systems are expected to avoid over 43 million short tons of CO<sub>2</sub> and put over \$192 million into the pockets of low-income households. To be successful, this program will require a broad coalition of partners from across the state to bring together Pennsylvania's diverse communities. PEDA and the DEP Energy Programs Office are taking the next steps to engage utility and community group stakeholders and begin the process for a Request for Proposal to solicit the support of a program design and implementation partner.

## Streamlining Permits for Economic Expansion and Development (SPEED) Act

Passed on July 11, 2024, as part of the 2024-25 state budget, SPEED is a staff augmentation program allowing permit applicant to use external, Department-approved qualified professionals to conduct the initial review of certain permits. The permitting entity will make the final determination on the permit application based on the approved professional's review of the applications.

Eligible permits include Air Quality Plan Approvals under Chapter 127, Earth Disturbance Permits under Chapter 102, and Water Obstruction and Encroachment Permits under Chapter 105.

The Department will have a list of qualified contractors that meet certain criteria based on expertise and professional licensing. Once receiving the recommendation from this professional on the permit application, the Department will conduct a final review according to DEP's regulations and procedures to issue or deny the permit or send a technical deficiency letter to the applicant.

## Trenchless Technologies

Andrew Foley of the Department's Bureau of Waterways Engineering and Wetlands discussed updated guidance from the Department. Trenchless methods are often picked by applicants because it is less environmentally impactful than other construction methods. The updated guidance outlines the steps and options to be considered when the use of a trenchless technology construction methodology is proposed. The level of analysis recommended by the guidance is expected to be commensurate with the level of environmental risk. DEP has accepted, reviewed, and considered all public comments, and members of the Oil and Gas industry were represented on the guidance workgroup because they are the main industries using trenchless technology.

## Turtle Creek Delisting

In April 2024, DEP, U.S. EPA, the Pennsylvania Department of Agriculture, the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Fish and Boat Commission, Senators Gene Yaw and Scott Martin, the Northern Pennsylvania Conservancy, and the Chesapeake Bay Conservancy celebrated the delisting of the Turtle Creek watershed in Southeastern Union County from the federal Clean Water Act's Impaired Waters list. According to DEP's 2024 Integrate Water Quality Report, approximately 967 miles of streams and 28,727 acres of public lakes have been restored. To accomplish this delisting, DEP Growing Greener grants were utilized through a block grant funding model, which provided flexibility and enabled local decision-making to 34 counties to tailor conservation projects to their needs.

### **Actions Taken**

Throughout the year, the Council undertook several actions. Below is a list of specific actions taken by the CAC in 2024:

- Executive Director Irvin created, and the Council approved, a Citizens Advisory Council Handbook, which combined dispersed pieces of information into a single, convenient location for Council members and members of the public. The information in the Handbook includes:
  - o The Council's Bylaws
  - o Future Meeting Dates
  - o The current and past Secretaries of the Department of Environmental Resources and Environmental Protection
  - o Historic lists of the Council's membership, Chairpersons, and Executive Directors
  - o Primer on the Council's committees and all advisory boards, committees, and commission that have Council members on
  - o Compilation of the pertinent statutes regarding the Council
  - o A primer of Roberts Rules for use during Council meetings
  - o Important events of the Council between 1971 and 1991
  - o Information on the very first meeting of the Council
  - o A short primer on budgetary review of the Department, including the various funds.
- The Council's Legislative Committee and Strategic Issues Committee explored issues related to Electronic Waste Recycling, including exploring House Bill 1603 and Senate Bill 734 of the 2023-24 Legislative Session, discussion with the Department, and the aforementioned presentations. Additionally, the Legislative Committee explored issues related to cryptocurrency mining in House Bill 1476, Food Processing Residuals, and PACER (HB 2277) and PRESS.
- With changes to the Department's guidance on Advisory Committee Meetings, the Council began to incorporate changes to its bylaws to align the Council's bylaws and practices with the Department.
- The Council made appointments to the various advisory boards, committees, and commission, as needed

In 2025, the Council will be exploring ways to better and more frequently communicate with stakeholders regarding the various environmental issues, including federal representatives in the legislative and executive branch, members of the public, businesses and industry, environmental and other non-profit organizations, the Department and Administration, and members of the General Assembly

### **Public Participation**

As part of its mission, the Council seeks to represent all people of the Commonwealth and bring a collective view of the public interest in environmental protection and natural resources through diverse personal experiences and perspectives. A regular part of the Council meetings is the public comment period, which allows residents of the Commonwealth to provide written or oral testimony to the Council on various concerns involving the Commonwealth's environmental resources. Minutes of the CAC meetings list anyone who offers public comments for the Council and a web link for any written comments submitted by the commenter or summary of the comment. Comments from concerned citizens help to inform the Council members on issues and allow the Council to follow up with the Department if necessary.

In early 2024, the Council developed small initiatives to facilitate public participation during the monthly meetings, including revitalizing the Public Participation Committee of the Council, now chaired by Mr. George Ambrose. Other initiatives include:

- Earlier publication of the monthly CAC agenda so members of the public are aware of topics that the Council is discussing.
- Adjusting pre-meeting registration procedures, allowing more time and people to register to make public comments during CAC monthly meetings.
- Highly encouraging members of the public to submit written comments prior to the CAC monthly meetings, facilitating more depth in the comments and active discussion between CAC members and members of the public.

During the Council's meeting in 2024, the Council received approximately three dozen written and/or oral comments – a 500 percent increase in the comments received when compared to 2023. Written comments and summaries of oral comments when written comments were not provided are available at: [Citizens Advisory Council Meeting Schedule 2024](#).

With the increase in comments, the Council began tracking comment trends, which helped informed topics of discussion for future Council meetings. In 2025, the Council is considering ways to further address public comments, including providing ways that the public can obtain additional information on discrete issues from the Department or, in cases where the Council and the Department may not be able to address the issue, serve as an intermediary to the correct point of contact.

For more information, please go to: [www.pa.gov/agencies/dep/public-participation/citizens-advisory-council.html](http://www.pa.gov/agencies/dep/public-participation/citizens-advisory-council.html) or contact Ian Irvin, Executive Director, at [iirvin@pa.gov](mailto:iirvin@pa.gov).