



# **Draft Rulemaking Update**

Chapter 145. Interstate Pollution Transport Reduction Subchapter E. CO<sub>2</sub> Budget Trading Program

Air Quality Technical Advisory Committee
April 8, 2021

Tom Wolf, Governor

Patrick McDonnell, Secretary

# Regulatory Process



## The Regulatory Process: Step by Step

- After a need to create or change a regulation is identified, DEP develops draft regulatory language, which is shared with stakeholder groups, including DEP advisory committees.
- The (EQB) considers the draft regulation and votes to adopt it as a proposed regulation.
- Once adopted, the proposed regulation undergoes review by the Office of General Counsel, the Governor's Budget Office, and the Office of Attorney General.
- 4. The proposed regulation is published in the Pennsylvania Bulletin and opened for public comment (<a href="http://www.pacodeandbulletin.gov/">http://www.pacodeandbulletin.gov/</a>), then sent to the House and Senate Environmental Resources and Energy committees and IRRC for review. The EQB may hold public hearings on the proposed regulation as part of the public comment period.
- All public comments submitted during the public comment period to the EQB become part of the official public record.

# Regulatory Process (cont).



- 6. DEP reviews all comments and develops responses to those comments, including developing revisions to the proposed rulemaking, if needed. This new version, called the draft final regulation is again shared with stakeholder groups, including DEP advisory committees.
- EQB considers and votes whether to adopt the final regulation.
- Once adopted as final, the regulation is sent to the House and Senate Environmental Resources and Energy standing committees and IRRC for action.
- If approved by the standing committees and IRRC, the final regulation is submitted to the Attorney General's Office for approval.
- Once approved by the Attorney General's Office, the regulation is published in the *Pennsylvania Bulletin* and becomes enforceable under law.
- 11. Once the regulation is published, it is immediately effective, unless otherwise specified, and is enforced by DEP. Reference materials such as fact sheets are developed, training for staff and opportunities for stakeholders to become educated are put in place. As part of its compliance assistance efforts, DEP will work with the regulated community to ensure understanding of the new regulations and obligations for compliance.

## **Public Comment Period**

- The Public Comment Period opened on November 7, 2020 and ten public hearings were held to gather input on the proposed regulation. Two hearings were held on each of these dates:
  - December 8, 2020 82 testifiers
  - December 9, 2020 81 testifiers
  - December 10, 2020 91 testifiers
  - December 11, 2020 94 testifiers
  - December 14, 2020 101 testifiers
- The public comment period closed on January 14, 2021.
- The comment period for the <u>Independent Regulatory Review</u>
   <u>Commission (IRRC)</u> closed on February 16, 2021.

# **Availability of Public Comments**

Independent Regulatory Review Commission (IRRC) <a href="https://www.irrc.state.pa.us/regulations/find\_a\_regulation.cfm">www.irrc.state.pa.us/regulations/find\_a\_regulation.cfm</a>
Search Regulation # 3274

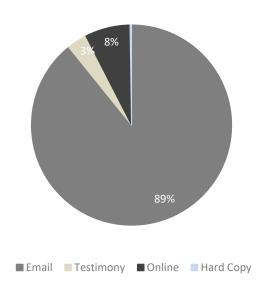
Department of Environmental Protection <a href="https://www.ahs.dep.pa.gov/eComment/">www.ahs.dep.pa.gov/eComment/</a>
"Pennsylvania CO<sub>2</sub> Budget Trading Program"

## **Public Comment Overview**



# Summary of Public Comments

Received 14,038 comments through online submission, testimony, email, and written comments across 69-day comment period.



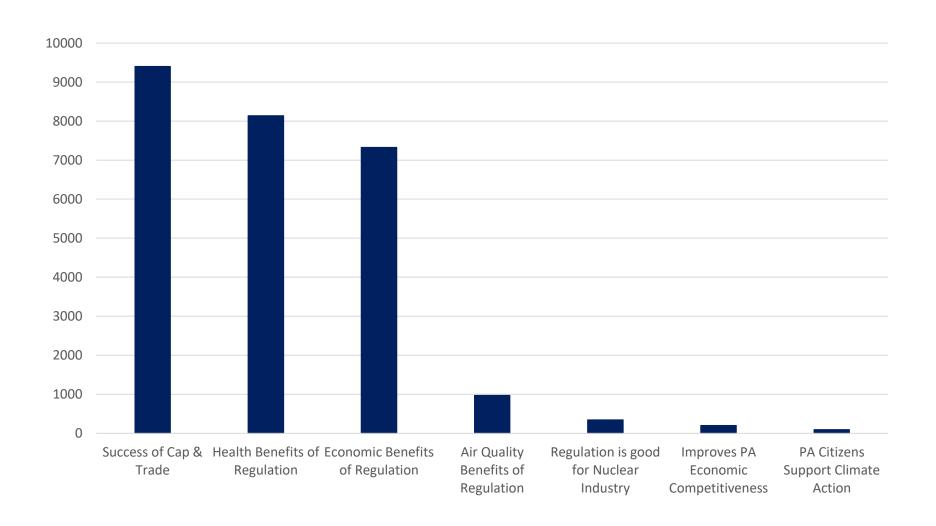
Received comments from across Pennsylvania, representing many groups and communities, including:

- PA Legislators
- Municipalities
- School Districts
- Faith-based groups
- Community groups

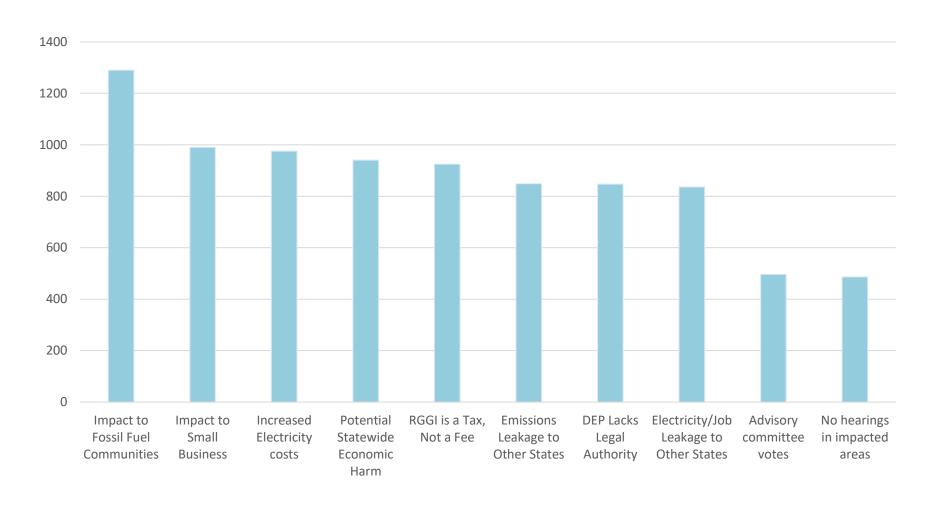
- Labor Unions
- Environmental Groups
- Industry
- Academia
- Non-profits

- Consumer Groups
- Students
- Tourism Bureaus
- Medical Community
- Building Trades

# Top Supportive Comments Topics



# Top Adverse Comment Topics



# Comments on Regulatory Language

#### Received numerous comments on specific regulatory changes, including:

- Allowance budget should be decreased if it is too high, with some recommending automatic mechanism to lower allowance budget.
- Combined Heat and Power set aside should be increased, decreased, or eliminated.
- Some commenters stated Waste Coal set aside should be decreased or removed, while others recommend an increase.
- Regulation should include Voluntary Renewable Energy set aside.
- Strategic Use set aside should remain independent of Waste Coal set aside.
- Regulation should include emissions impact monitoring.
- Air pollution permitting process should include more input.

## **Key Proposed Regulatory Changes**



## Summary of Key Proposed Changes

#### Adjust the Value of Waste Coal Set-Aside (§ 145.342)

Account for Colver's continued operation in the set-aside value

## **Expand Co-generation Set-Aside with Qualifiers (§ 145.342)**

- Expand the Set-Aside to cover all emissions for qualifying CHP units
- Establish stricter efficiency requirements for a CHP unit to qualify

#### Refine and Clarify Strategic Use Set-Aside (§ 145.342)

Clarifying objectives for qualifying projects and application process

#### Add DEP Commitment to Air Quality Impact Assessment (§ 145.306)

- Assess annual air quality data and trends resulting from the program
- DEP will publish findings and associated data annually

#### **Incorporate Equity Principles (preamble)**

 Pledge to inclusively gather public input on the rule and mitigate adverse impacts with a focus on Environmental Justice communities

## Waste Coal Set-Aside Account

A general account established by the Department for the allocation of  $CO_2$  allowances in an amount sufficient to provide  $CO_2$  allowances equal to the legacy emissions from all waste coal-fired units under § 145.342.

#### **Defining Legacy Emissions**

- The amount of CO<sub>2</sub> emissions in tons equal to the highest calendar year of CO<sub>2</sub> emissions from each unit during the 5-year period beginning January 1, 2015 through December 31, 2019 as determined by the Department. §145.342
- 2. Legacy emissions have been increased from 9,300,000 tons to 10,400,000 tons of  $CO_2$  emissions. §145.342
  - a) Colver waste coal facility has withdrawn its deactivation notice to PJM
  - b) Legacy emissions for Colver are 1.1 M tons CO<sub>2</sub>
  - c) 9.3 Million (original value) + 1.1 Million = 10.4 M tons CO<sub>2</sub>
- 3. Any remaining allowances are transferred to the Strategic Use set-aside each year.

## Combined Heat and Power Set-Aside Account

A general account established by the Department for the allocation of CO<sub>2</sub> allowances for retirement on behalf of applicable adjustment of cogeneration unit Combined

Heat and Power units. §145.342

#### **Set-Aside Eligibility Criteria for Applicable Facilities**

- 1. Units must be located in PA and be subject to the CO<sub>2</sub> Budget Trading Program.
- 2. Must meet definition of Cogeneration Unit Combined Heat and Power unit per §145.302.
  - a) An electric-generating unit that simultaneously produces both electric and useful thermal energy. from the same primary energy facility.
- 3. Useful Thermal Energy produced is at least 25% of the total energy output of the unit on an annual basis.
- 4. Overall efficiency of the unit is at least 60% on an annual basis.
- 5. Department will retire allowances for applicable CHP units.

## Strategic Use Set-Aside Account

A general account established by the Department for the distribution of  $CO_2$  allowances to a project that **implements energy efficiency measures, implement renewable or noncarbon-emitting energy, and greenhouse gas emissions abatement**. §145.302

#### **Allocation to Eligible Projects**

- 1. Department will allocate undistributed CO<sub>2</sub> allowances to the strategic use set-aside account for each allocation year from the waste coal set-aside account.
- 2. Distributions may be made from the set-aside account for the use in elimination of air pollution to eligible projects located in Pennsylvania that result in a Greenhouse Gas emission reduction benefit including:
  - a) Encourage and foster promotion <u>Implementation</u> of energy efficiency measures.
  - b) Promote <u>Implementation of</u> renewable and non-carbon emitting energy technologies.
  - c) Stimulate investment in <u>Development</u> of innovative <del>carbon emissions</del> abatement greenhouse gas emission abatement technologies with <u>significant greenhouse gas reduction potential</u>.
- 3. Established set-aside application process and requirements.

## NEW Annual Air Quality Impact Assessment

The Department of Environmental Protection is making an annual commitment to assess changes in emissions and air quality in Pennsylvania as it relates to implementation of this regulation. §145.306

- The Department will use the emissions measurements recorded and reported to the Department under Article III to determine whether areas of this Commonwealth have been disproportionately impacted by increased air pollution as a result of implementation of this subchapter.
- The Department will publish notice of the availability of a report of the emissions measurements and the determination in the *Pennsylvania Bulletin* on an annual basis.

# New RGGI Equity Principles

**Environmental justice** embodies the principles that communities and populations should not be disproportionally exposed to adverse environmental impacts.

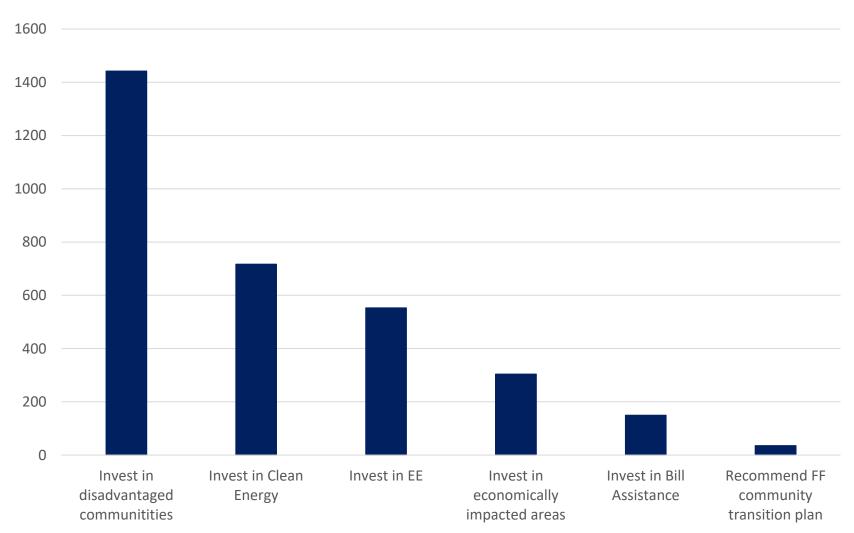
#### DEP has committed to a set of **RGGI Equity Principles** that include:

- Inclusively gathering and considering input from the public related to decisions made under RGGI.
- Protect public health and welfare, mitigating any adverse impacts on human health, especially in EJ communities.
- Work equitably and with intentional consideration to distribute environmental and economic benefits of the proceeds of allowance auctions.

## **Comments on Investment of Proceeds**



## Comments on Investment of Proceeds



## **RGGI Investment Framework**

DEP will continue to conduct robust stakeholder engagement to consider a wide range of investments that maximize program proceeds and reduce air pollution.

- Will engage with many different groups including workers, environmental justice groups, industrial groups, and many others.
- Committed to developing a draft investment plan that is posted for public comment to hear from as many Pennsylvanians as possible.
- Stakeholder engagement and plan development process will unfold throughout 2021 to allow ample time for input.



# **Traditional Energy Communities**

The Department is seeking to create investment mechanisms through RGGI revenue to support communities who are impacted by the ongoing energy sector transformation from coal.

- Hired the Delta Institute to facilitate conversations with traditional energy communities about how to economically diversify.
- The Delta Institute has extensive relevant experience working with communities on economic diversification.
- Delta Institute will create a final report and communication strategy, to help DEP guide investment opportunities.



PLANNING FOR PENNSYLVANIA'S FUTURE ECONOMIC DIVERSIFICATION THROUGH COMMUNITY ENGAGEMENT AND INVESTMENT

## Focus on Environmental Justice

- Develop and Implement Equity Principles
- Commitment to Investing in EJ Communities
- Active Participation and Engagement in Decision-making
- Conduct Annual Air Quality Assessment
- Engagement with Environmental Justice Communities

# **Power Sector Modeling- 2021 Update**



# **Updated Power Sector Modeling**

The Department is currently performing power sector modeling to ensure the most recent information available is used including updated inputs & assumptions.

#### Power Sector Modeling

- Using same, advanced modeling software, Integrated Planning Model (IPM®), as original effort.
- Includes updated data, assumptions, and inputs that will reflect changes in power sector.
- Power sector modeling only, will not include economy wide modeling.
- Results will include a reference case (without regulation) and a policy case (with regulation) going out to 2030.
- Results will be publicly available on DEP website once complete.

# **Updated Power Sector Modeling**

#### Revised Assumptions & Model Inputs

- Reference Case Scenario
  - Updated PJM Demand Forecast
  - 2021 AEO Natural Gas Prices
  - Impacts of border closure for PA AEPS Tier II generators
  - Updated list of capacity additions and retirements from PA and other RGGI states
  - Revisions to state laws & policies, technology costs
- Policy Case Scenario (RGGI)- includes all updates above AND
  - New CHP Set-Aside Amount
  - Adjusted Waste Coal Set-Aside Amount



# Questions & Answers











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Visit the RGGI website @ www.dep.pa.gov/RGGI Materiales también disponibles en español.

Email staff with additional questions @ ra-epclimate@pa.gov