



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Safe Drinking Water

Safe Drinking Water PFAS MCL Rule

Environmental Justice Advisory Board

August 18, 2022

Tom Wolf, Governor

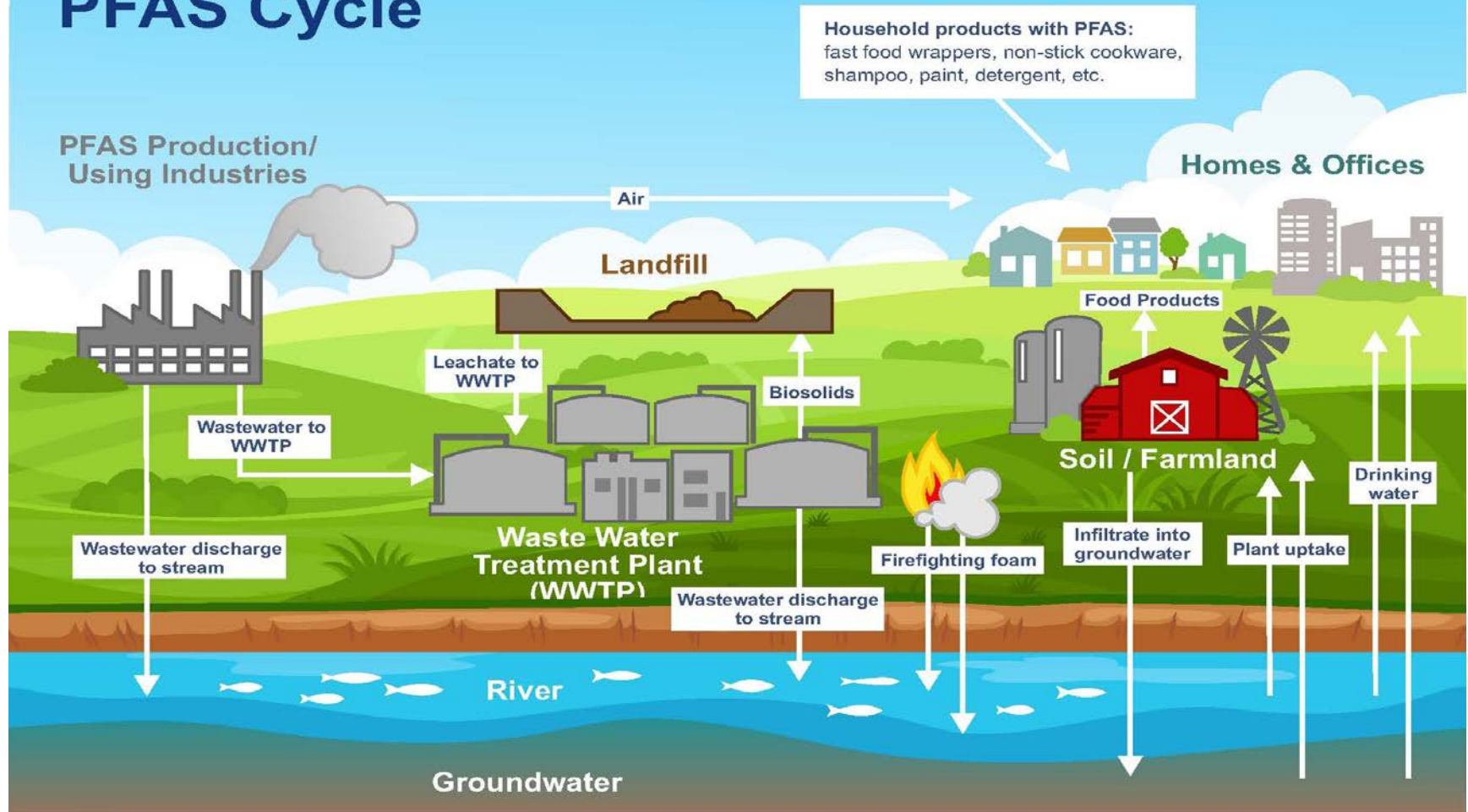
Ramez Ziadeh, Acting Secretary

PFAS Background

- Per- and polyfluoroalkyl substances (PFAS) are a class of synthetic chemicals that have been manufactured and in use since the 1940s.
- PFAS are used to make products resistant to water, heat and stains and are found in industrial and consumer products such as clothing, carpeting, food packaging, non-stick cookware, firefighting foam, personal care products, adhesives, metal plating, wire manufacturing and many other uses.
- PFAS have unique chemical properties because they readily dissolve in water and are mobile, are highly persistent in the environment, and bioaccumulate.

PFAS Background

PFAS Cycle



State Actions to Address PFAS

The Wolf Administration has made it a priority to address PFAS contamination and worked to improve safety for residents and visitors by:

- Signing an Executive Order on Sept. 19, 2018, to establish a PFAS Action Team to develop a comprehensive response to identify and eliminate sources of contamination, ensure drinking water is safe, manage environmental contamination, review gaps in data and oversight authority, and recommend actions to address those gaps.
- Taking the unprecedented step of setting an MCL for drinking water.

Due to these efforts, Pennsylvania is at the forefront of states taking proactive steps to address PFAS. More information on Pennsylvania's efforts to address PFAS can be found at this webpage: www.dep.pa.gov/PFAS

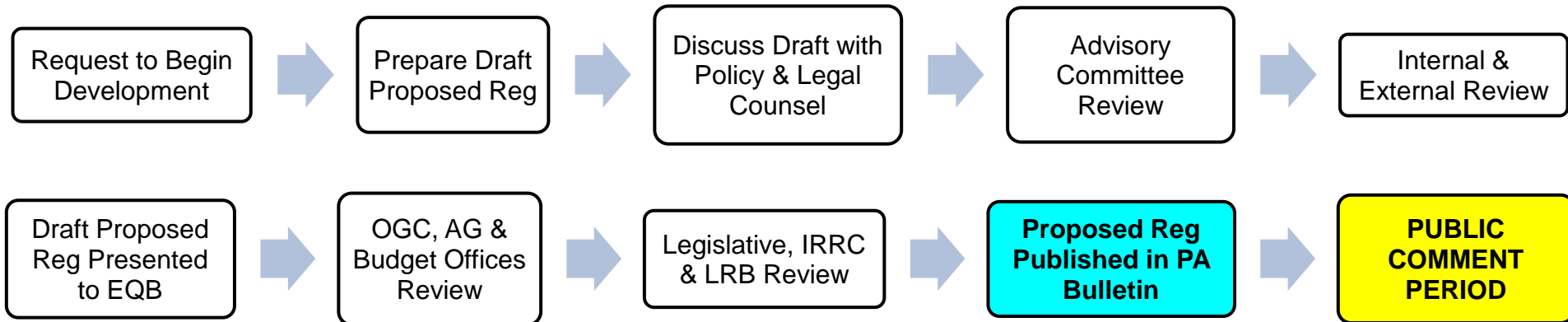
MCL Rulemaking Process

The PFAS MCL rule is based on available data, studies, and science, and considers all factors as required by the Federal Safe Drinking Water Act (SDWA) and Pennsylvania's Regulatory Review Act (RRA), including:

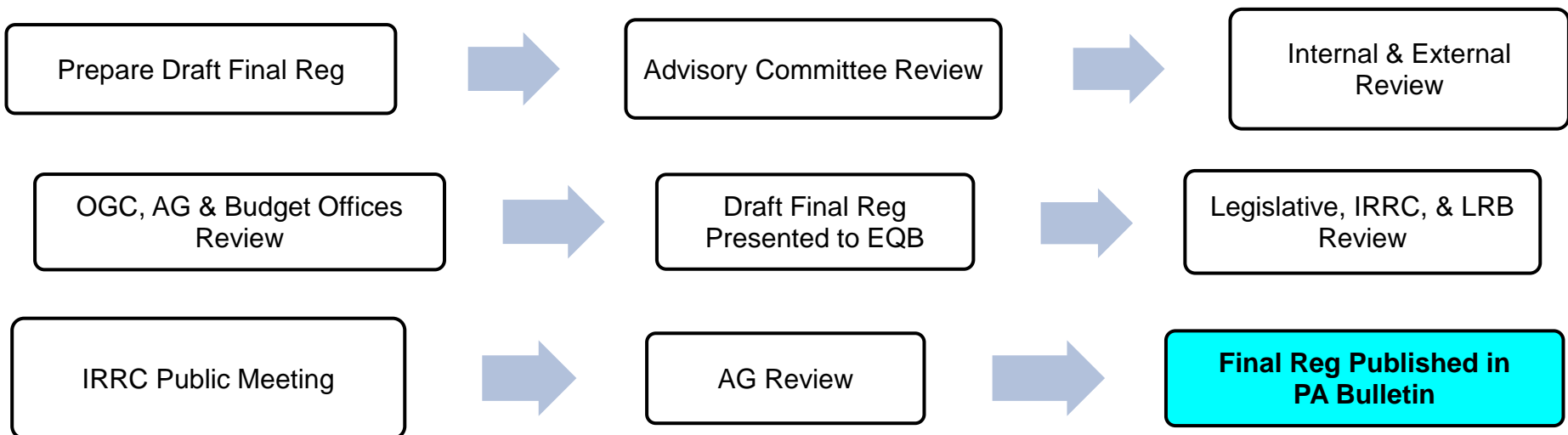
- Health effects (as determined by Drexel University)
- Occurrence data (from UCMR3 and PFAS Sampling Plan)
- Technical limitations such as available analytical methods and detection and reporting limits
- Treatability of the contaminant and available treatment technologies
- Costs and benefits

MCL Rulemaking Process

Proposed Regulation Development



Final Regulation Development



Proposed PFAS MCL Rule

DEP's Proposed PFAS MCL Rule:

- Approved by the SDW advisory committee on July 29, 2021, to move forward as a proposed rulemaking.
- Approved by the EQB in Nov 2021 to move forward as a proposed rulemaking.
- Published in the *PA Bulletin* on Feb 26, 2022, for a 60-day public comment period that included five public hearings.
- Comments were submitted by more than 3,500 commentators, the House Environmental Resources and Energy Committee and IRRC. Most are based on a few form letters.

Purpose of PFAS MCL Rule

- Establish Maximum Contaminant Levels Goals (MCLGs) and Maximum Contaminant Levels (MCLs) for PFOA and PFOS to be protective of adverse developmental and immune system effects.
- Set MCL compliance provisions for monitoring, reporting and public notification.
- Specify analytical methods, reporting limits and acceptable treatment technologies.

Key Provisions of PFAS MCL Rule

- PFOA: MCLG of 8 ng/L; MCL of 14 ng/L
- PFOS: MCLG of 14 ng/L; MCL of 18 ng/L
- MCL Compliance:
 - Based on a running annual average (RAA) for each EP
 - If any quarterly result causes the RAA to exceed the MCL, a violation is generated for that quarter

ng/L = nanograms per liter = parts per trillion (ppt)

EP = entry point

Key Provisions of PFAS MCL Rule

- Tier 2 public notice (PN) is required for MCL violations.
- Results must be reported in the Consumer Confidence Report.
- Analysis:
 - Samples must be analyzed by an accredited lab using an approved method.
 - Labs must achieve reporting limit of 5 ng/L.
- Treatment:
 - Approved technologies are Granular Activated Carbon (GAC), Ion Exchange or Reverse Osmosis.
 - Other technologies approved by DEP.

Benefits of the PFAS MCL Rule

- The MCLs represent a 90% and 93% improvement in health protection for PFOA and PFOS, respectively. These benefits arise from a reduction in adverse human health effects from exposure to PFOA or PFOS:
 - PFOA is associated with adverse developmental effects (including neurobehavioral and skeletal effects).
 - PFOS is associated with adverse immune system impacts (including immune suppression).
- Economic Benefits:
 - PFAS contamination in drinking water may account for 2-3% of the total annual health care costs in Pennsylvania.
 - The PFOA MCL is estimated to result in health care cost savings of \$53 million annually.

Schedule and Next Steps

- The draft-final rulemaking was presented to SDW advisory committee on July 14, 2022.
- The draft-final will be presented to the EQB for consideration and adoption as a final-form rulemaking.
- If EQB adopts the final-form rulemaking, the final-form rulemaking would be delivered to the House and Senate Environmental Resources and Energy committees and to Pennsylvania's Independent Regulatory Review Commission (IRRC) for consideration.
- Link for more info: https://www.dep.pa.gov/Citizens/My-Water/drinking_water/PFAS/Pages/default.aspx



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