



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Waste Management

New DEP-Initiated General Permit: Anaerobic Digestion at Sewage Treatment Facilities

Solid Waste Advisory Committee
March 30, 2023

Josh Shapiro, Governor

Rich Negrin, Acting Secretary

Background

- Co-digestion of sewage sludge and other high organic waste streams is becoming more prevalent at sewage treatment facilities.
 - Reduces volume of landfilled waste
 - Enhances methane/energy production
 - Economic benefit to processor
 - Provides certainty for project sponsors of co-digestion projects

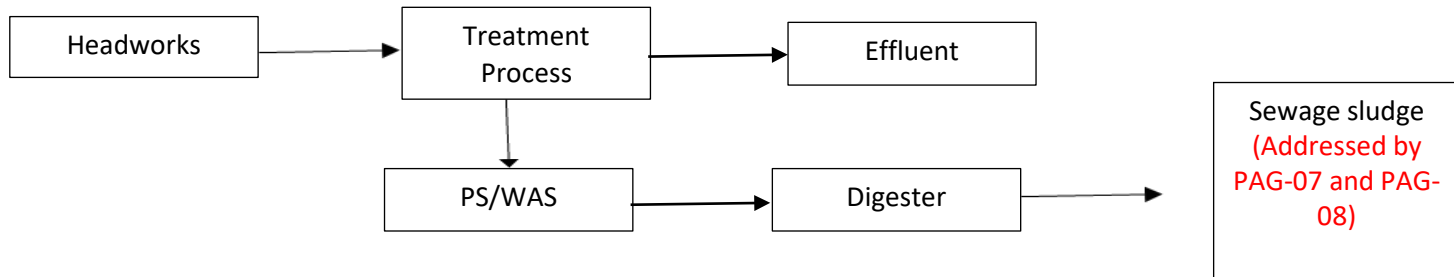
Background

Why is this new general permit necessary?

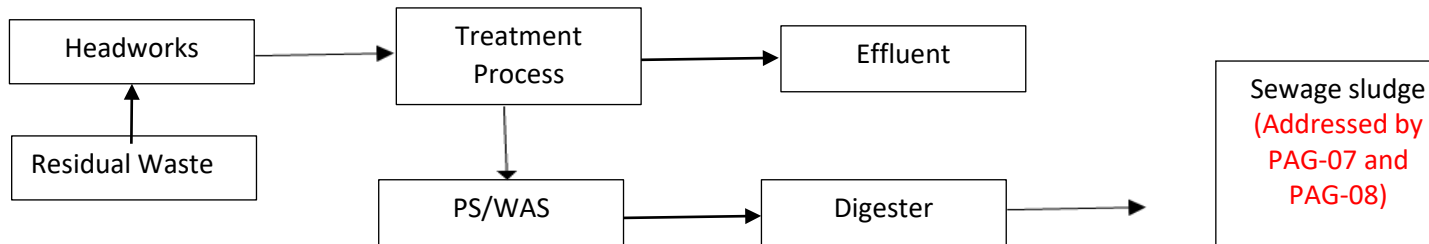
- Regulatory Permitting Framework
 - Permit type depends on material for processing beneficial use
 - Biosolids only under 25 Pa. Code Chapter 271, Subchapter J
 - Provides certainty for project sponsors of co-digestion projects

Background

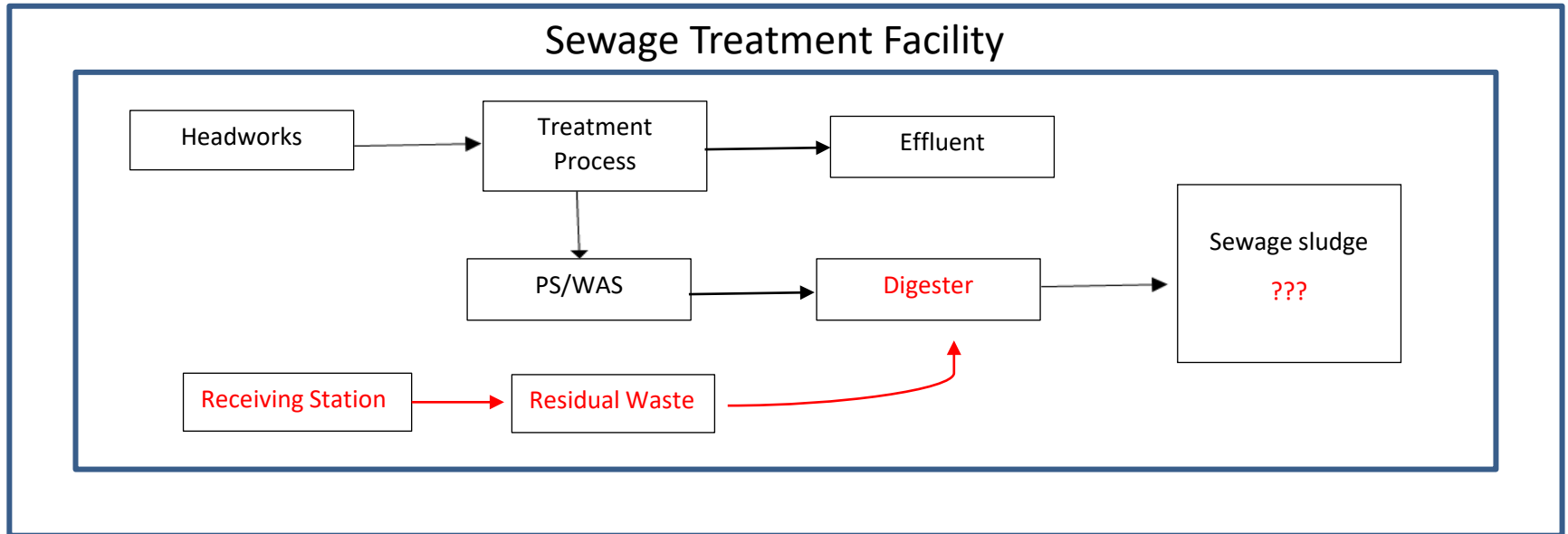
Sewage Treatment Facility



Sewage Treatment Facility



Background



Current Permitting Mechanism

- For operations actively incorporating outside sources of waste (food, fats, oils, grease)
 - Normal sewage treatment facility activities (headworks, treatment, effluent management, etc.)
 - Land application of solids post digestion
 - Receiving/depackaging, storage, and digestion

Proposed Permitting Mechanism

- DEP-Initiated General Permit (GP)
 - Authorize the processing by anaerobic digestion of combinations of sewage sludge, wastewater treatment residuals, grease trap waste (collected from restaurants or grocery stores), and pre-consumer and post-consumer food waste from commercial establishments, institutional establishments, or industrial food manufacturing operations at a permitted sewage treatment facility or commercial digester
 - Authorize the beneficial use of the solid and liquid digestate processed material as a soil additive or fertilizer

DEP-Initiated General Permit

- Storage and processing of outside sources of waste material
- Subsequent anaerobic digestion of the outside waste and sewage sludge mixture
- Beneficial use by land application
- PFAS Monitoring and Reporting

General Permit Conditions

- In addition to standard GP conditions:
 - Conditions specific to depackaging activities, including evaluation of de-packaged materials for presence of plastics
 - Pathogen and Vector attraction reduction requirements
 - Quality criteria (analytical requirements similar to those applied to sewage sludge)

Current Status

- In the drafting stage
- Major outstanding question pertains to land application authorization
 - GP
 - PAG-07/PAG-08

Next Steps

- Finalize draft GP language (program internal review and comment) and prepare routing package
- Route package through DEP for review and approval to publish for public comment
- Provide draft GP to the Agriculture Advisory Board for review and comment prior to publishing for public comment



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Questions?

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