

Biosolids Beneficial Use Program Update

Clean Water Program
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JOSH SHAPIRO, GOVERNOR | JESSICA SHIRLEY, SECRETARY



Pennsylvania
Department of
Environmental Protection

Agenda

- Why DEP is proposing revisions
- Areas of focus
- Next Steps

Biosolids Stakeholder Outreach

- Concern from various stakeholders and the public in general
- PFAS affects all DEP programs
- PFAS Data Gathering Team
- Biosolids Stakeholder Work Group

How Did We Get Here?

- 2021 Permit Revision Proposal and Previous Stakeholder Outreach efforts
- HR 149 of 2021 → 2023 LBFC Report
- Current State of PFAS
 - Drinking Water MCLs
 - EPA Draft Risk Assessment of PFAS and Biosolids

Focus Areas of Concern

- Managing Biosolids with consideration of PFAS
- Managing Biosolids with consideration of phosphorus
- Clarifying in-field storage requirements of biosolids
- Clarifying requirements for processing and beneficial use of biosolids and residual waste at sewage treatment facilities

PFAS Monitoring

- Biosolids Monitoring Requirements
 - I. The frequency of monitoring yet to be decided.
 - II. Monitoring results will be provided with the submission of the Recordkeeping and Reporting Form or at the request of the Department.
 - III. Monitoring results must be obtained from a properly accredited lab using the most current version of EPA Method 1633.

Proposed PFOA and PFOS Limits

- Add PFOA/PFOS requirements (PAG-07 & PAG-08)
 - I. Sources of PFAS in sewage sludge includes industrial (e.g., electroplating plants), commercial (e.g., car washes), residential (e.g., cosmetics), and landfill leachate
 - II. Generally utilized State of Michigan as a model for tiered application limits
 - III. Tiered limit strategy will help mitigate risks and better inform generators/farmers/landowners

Proposed PFOA and PFOS Limits

- Biosolids Land Application Limits for PFOA/PFOS:
 - I. <20 ppb ($\mu\text{g}/\text{kg}$) PFOS and PFOA – Land application can occur.
 - II. ≥ 20 ppb - ≤ 100 ppb PFOS or PFOA – Reduce application rate to 1.5 dry ton/acre maximum.
 - III. > 100 ppb PFOS or PFOA – Land application is prohibited

Phosphorus Reduction Strategy

- Option 1: Use of P-Index based land application requirements
 - I. Treatment Facilities Nutrient Reduction Requirements
 - II. CAOs and CAFOs currently utilize for management of manure application
 - III. 2-year phase in for existing land application sites
 - IV. New land application sites would be immediately subject to requirement
 - V. Utilize Penn State's Pennsylvania Phosphorus-Index tool
- Option 2: Use of an agronomic soil test threshold
- Option 3: Use of an environmental soil test threshold

Storage & Wet Weather Issues

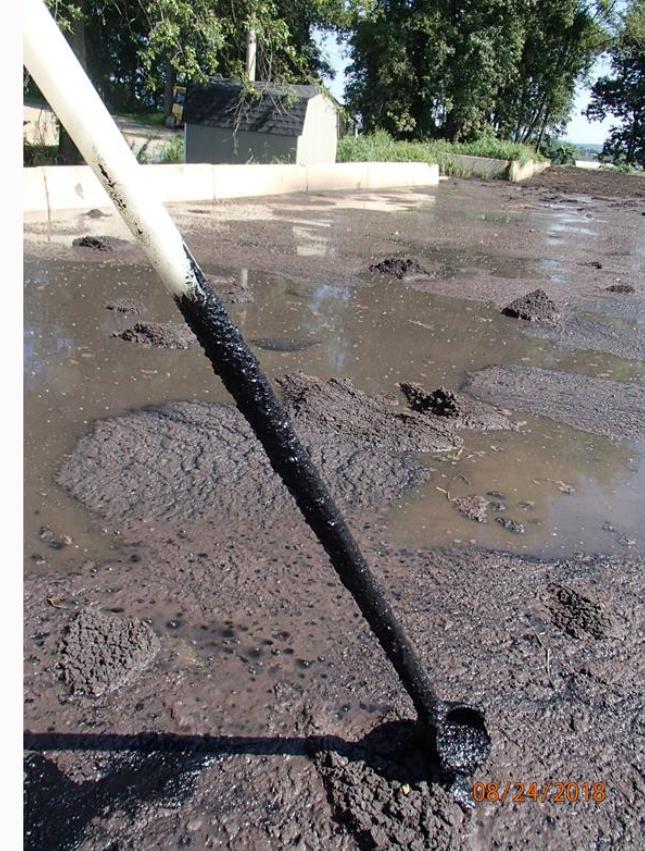


- Liquefaction
- Movement of Liquified Material
- Regulatory/Compliance Issues

Storage & Wet Weather Issues



Storage & Wet Weather Issues



Storage and Wet Weather Issues

- Biosolids storage requirements will mirror the manure stacking requirements outlined in the *Manure Management Manual* (332-0300-002)
 - I. Stack to shed water
 - II. Observe isolation distances
 - III. Manage run-on and run-off

Biosolids/Residual Waste at STPs

- Allow for the mixing of high strength organic waste with sewage sludge
- Currently, if not incorporated into head of plant, the resulting biosolids is a mixture and cannot be land applied under PAG-07 and PAG-08
- Will require the incorporation of 25 Pa Code Chapter 271 Subchapter I requirements

Next Steps

- Finish pre-draft with input from Stakeholders Working Group
- Draft permits anticipated to be published for public comment in Q2 2026



Get In Touch

**Richard Wright, P.E.
Bureau of Clean Water**

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(717) 772-4059 / riwright@pa.gov

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