



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION



Bureau of Clean Water

Update on DEP's *Manual for Land Treatment of Wastewater*

Water Resources Advisory Committee

March 16, 2023

Josh Shapiro, Governor

Richard Negrin, Acting Secretary

Land Treatment

Land treatment—The controlled application of wastewater onto the land to achieve a designed degree of treatment through natural physical, chemical, and biological processes within the plant-soil-water matrix.

Land Treatment

Methods of land treatment described in this manual includes:

- Spray irrigation;
- Drip irrigation; and
- Large volume on-lot sewage systems (including at-grade beds)

Anticipated Schedule

- Discuss with Water Resources Advisory Committee – today
- Publish notice of draft manual in the *Pennsylvania Bulletin* – 2nd Quarter 2023
- Publish notice of final manual in the *Pennsylvania Bulletin* – 4th Quarter 2023

Guidance Document Changes

- Reorganizes content in a logical progression
- Project Flowchart
 - Existing flowchart is 6 steps in ½ page.
 - Revised flowchart includes more detail
 - What information is required
 - When the information is required

Guidance Document Changes

- Added definitions
- Chapter added on planning
 - Steps required in planning phase
 - Significant field work to show that the project has adequate land application area.
 - Demonstration of feasibility of project

Guidance Document Changes

Provided detailed design information on spray irrigation.

- 1997 manual does not give detailed information on design requirements
 - Storage
 - Application methods
- Revised manual provides detailed information on process design, including
 - Storage
 - Sprinkler requirements

Guidance Document Changes

- Addition of drip irrigation technology
- Detailed design information on large volume on-lot systems

Guidance Document Changes

Elimination of systems that are not used in Pennsylvania

- Rapid Infiltration
- Moveable sprinkler systems for spray
- Flooding/Inundation systems
- Overland Flow
- Constructed Wetlands

Questions

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