pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Understanding Biosolids Land Application in the Community

An Information Sheet for Adjacent Landowners

Quick Facts

- Biosolids are not raw sewage.
- Biosolids must meet quality standards prior to land application.
- Land application of biosolids is regulated by DEP.
- Treatment facilities and application sites are inspected by DEP staff to ensure compliance.

Why Would a Landowner Receive a Biosolids Notification Letter?

As part of the regulatory requirements for land applying biosolids in Pennsylvania, each adjacent landowner must be notified that biosolids will be used as an alternative nutrient source or soil amendment on adjacent properties. This notification is to be sent at least 30 days before the very first time biosolids are used at a site.

What are Biosolids?

Biosolids are not raw sewage.

In Pennsylvania, an estimated 400,000 dry tons of wastewater treatment solids are generated each year by more than 700 municipal wastewater treatment facilities serving nearly 9 million citizens across the state. Pennsylvanians produce approximately 605 million gallons of sewage solids, or residential septage, annually through the use of onlot sewage treatment systems. This material must be managed properly to protect public health and the environment. One method available is to recycle wastewater solids through reuse as biosolids.

Biosolids are those wastewater solids that have been treated to produce fertilizers or soil amendments. Typically, biosolids are used in areas such as agriculture, landscaping and mine reclamation to promote plant growth and soil regeneration.

Where do Biosolids Come From?

Once wastewater from homes and businesses reaches a treatment facility or a septic tank, it goes through a number of physical, chemical and biological processes that clean it and remove the solids. The collected solids then undergo further treatment to produce biosolids.

Solids treatment can include such processes as digestion, lime addition, pasteurization and composting. These processes change the pH, organic matter, moisture content or temperature of the solids to reduce odors, pathogens (disease-causing organisms) and vector attraction (the characteristics of wastewater solids that attract rodents, flies, mosquitoes, etc.).

Who Regulates the Land Application of Biosolids?

The Department of Environmental Protection (DEP) regulates the land application of biosolids in Pennsylvania. Biosolids coordinators located in each of DEP's regional offices oversee various aspects of the biosolids program for their region. The coordinators collect biosolids samples and inspect both the treatment facilities and land application sites as part of their approval and oversight activities.

Is the Application Site Regulated?

In addition to quality standards, DEP provides further protection by mandating that certain management practices and restrictions must be followed at the application site, depending on the particular biosolids product being applied. These requirements may include, but are not limited, to the following:

- Each landowner of the site where the activity is to occur must give written permission before biosolids can be applied.
- Biosolids may not be applied to the land if it is likely to adversely affect a federal or Pennsylvania threatened or endangered species, or its designated critical habitat.

- Biosolids may not be applied to agricultural land, forest, a public contact site or a reclamation site that is flooded, frozen or snow-covered, except as permitted by DEP.
- Biosolids may not be applied to agricultural land, forest or a reclamation site that is:
  - Within 100 feet or less of a perennial stream or within 33 feet of an intermittent stream;
  - Within 100 feet of the edge of a sink hole;
  - Within 300 feet from an occupied dwelling unless the current owner has provided a written waiver consenting to activities closer than 300 feet;
  - In an area without an implemented erosion and sedimentation control plan or a farm conservation plan;
  - Within 300 feet of a water source unless the current owner has provided a written waiver consenting to the activities closer than 300 feet;
  - Within 100 feet of an exceptional value wetland; and/or
  - Within 11 inches of the seasonal high water table, nor within 3.3 feet of the regional groundwater table.
- Biosolids may not be applied to agricultural land on slopes that exceed 25 percent or to land reclamation sites on slopes that exceed 35 percent unless otherwise approved by DEP.
- Biosolids may not be applied unless the soil pH is 6.0 or greater prior to land application or the biosolids application will create a soil pH of 6.0 or greater, unless otherwise approved by DEP.
- Prior to the first application, the generator or applier must obtain a representative soil analysis for the regulated pollutants for each field on which biosolids will be land applied.
- Biosolids may not be applied at a rate that is greater than the agronomic rate, unless approved by DEP for land reclamation activities.
- Biosolids may not be applied to agricultural land, forest, a public contact site, or a reclamation site if the maximum amount of a regulated pollutant has been applied to that area of land.

How is the Public Notified About Land Application Activities?

The generator must notify adjacent landowners, DEP and the appropriate county conservation district at least 30 days prior to the first time the site is used for land application.

When DEP receives this notice, the biosolids coordinator will evaluate the site to see if it is suitable for biosolids application. If the site is suitable, DEP will publish a notice in the *Pennsylvania Bulletin* (www.pabulletin.com) and will notify the local municipality. The generator may start land applying after 30 days. However if, upon evaluation, the site is found to be unsuitable, application may not begin or may be suspended until the problems are corrected.

Will a Land Application Site Next to Me Impact my Property Value?

DEP has found no documentation from the real estate industry that indicates land values are negatively impacted by the land application of biosolids. On the contrary, the use of biosolids on a neighbor's farmland supports that neighbor's continued success at farming. By contributing to successful farm operations, land application of biosolids supports the economic stability of the farming community. Recent data indicates that successful land reclamation projects using biosolids recycling have raised land values at and around surface mine sites.

For more information, visit www.dep.state.pa.us, keyword: Biosolids.