

National Pollutant Discharge Elimination System (NPDES)

Biosolids

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Biosolids are a product of the wastewater treatment process. During wastewater treatment the liquids are separated from the solids. Those solids are then treated physically and chemically to produce a semisolid, nutrient-rich product known as biosolids. The terms 'biosolids' and 'sewage sludge' are often used interchangeably.

The biosolids program regulates the use and disposal of sewage sludge by POTWs and by other treatment works treating domestic sewage (TWTDS). EPA has developed technical standards that establish sewage sludge management practices and acceptable levels of toxic pollutants in sewage sludge for POTWs and TWTDS.

TWTDS: Facilities that generate sewage sludge, provide commercial treatment of sewage sludge, manufacture a product derived from sewage sludge, or provide disposal of sewage sludge.

Existing requirements and guidance help ensure that biosolids are processed, handled, and landapplied in a manner that minimizes potential risk to human health. Biosolids are divided into "Class A" and "Class B" designations based on treatment methods. The different classes have specified treatment requirements for pollutants, pathogens and vector attraction reduction, as well as general requirements and management practices. Treatment processes identified in 40 CFR Part 503 for Class A biosolids eliminate pathogens, including viruses. Generally, pathogens may exist when requirements are met under 40 CFR Part 503 for Class B biosolids, which is why EPA's site restrictions provide time for pathogen degradation before harvesting crops and turf, for grazing of animals, and public contact.

Each year publicly owned treatment works (POTWs) are required to summarize their management practices and provide pollutant monitoring data in Biosolids Annual Reports. These reports are submitted to the permitting authority, either the EPA or state environmental agency. Currently, the EPA receives reports from the 41 states where EPA is the permitting authority and implements the federal Biosolids Program. There are nine states (Arizona, Idaho, Michigan, Ohio, Oklahoma, South Dakota, Texas, Utah, and Wisconsin) that are authorized through the National Pollutant Discharge Elimination System (NPDES) Program to be the permitting authority for biosolids.

For more information regarding biosolids, please visit: https://www.epa.gov/biosolids/basic-information-about-biosolids#basics