Sewage Sludge Disposal in Ohio for 2005

Publicly owned treatment works and semi-public treatment works (hereinafter collectively referred to as POTWs) in Ohio are required to have an effective National Pollutant Discharge Elimination System (NPDES) permit to discharge treated effluent to waters of the State. Included in Part II of most NPDES permits is a requirement that an annual sewage sludge report, describing sewage sludge use or disposal activities for the previous year, be submitted to the Ohio Environmental Protection Agency (EPA). The purpose of this requirement is to provide information on sewage sludge management trends, to identify areas where Ohio EPA should focus its technical and compliance assistance efforts, and to provide data to support public education and outreach activities.

There are several means by which POTWs in Ohio use or dispose of sewage sludge. The most common are land application for agronomic benefit, incineration, and disposal in a landfill. The following information is a breakdown of sewage sludge disposal/use in Ohio for 2005.

61,666 tons of Class A Biosolids land applied or distributed for sale.

83,193 tons of Class B Biosolids land applied.

63,471 tons of sewage sludge disposed of in a landfill.

115,149 tons of sewage sludge incinerated.

323,478 total tons of sewage sludge disposed of in 2005.

45% of sludge was land applied/distributed for sale, 36% was incinerated, and 19% was landfilled.

1,595 total facilities reported sewage sludge disposal to Ohio EPA in 2005. These facilities either land applied, landfilled, incinerated, took their sludge to another permitted facility, or they did not remove any sludge.

Of the 1,595 total facilities, 8 were out of state facilities, 175 facilities in Central District, 547 facilities in Northeast District, 343 facilities in
Northwest District, 304 facilities in Southwest District, and 218 facilities in Southeast District.

27 facilities reported land application/distribution for sale of Class A sludge.

256 facilities reported land application of Class B sludge.

158 facilities reported disposal via landfill.

9 facilities reported incineration.

Out of State Facilities

5,441 dry tons of Class A land applied/distributed.
7,842 dry tons of Class B sludge land applied.
8,657 dry tons of sludge disposed in a landfill.
21941 total dry tons disposed of.

Southeast District Facilities

5,916 dry tons of Class B sludge land applied.
5,618 dry tons of sludge disposed in a landfill.
11,534 total dry tons disposed of.

Southwest District Facilities

7,607 dry tons of Class A sludge land applied.
26,839 dry tons of Class B sludge land applied.
10,709 dry tons of sludge disposed in a landfill.
33,815 dry tons incinerated.
78,969 total dry tons disposed of.

Northwest District Facilities

12,709 dry tons of Class A sludge land applied.
18,163 dry tons of Class B sludge land applied.
10,057 dry tons of sludge disposed in a landfill.
40,929 total dry tons disposed of.
**Northeast District Facilities**

26,014 dry tons of Class A sludge land applied.  
16,387 dry tons of Class B sludge land applied.  
21,452 dry tons of sludge sent to landfill.  
53,583 dry tons of sludge incinerated.  
117,435 total dry tons of sludge disposed of.

**Central District Facilities**

9,895 dry tons of Class A sludge land applied.  
8,046 dry tons of Class B sludge land applied.  
6,978 dry tons of sludge sent to landfill.  
27,751 dry tons of sludge incinerated.  
52,670 total dry tons of sludge disposed of.

*For the pie charts below, Class A means sewage sludge treated to Class A pathogen levels distributed for sale or bulk land applied. Class B means sewage sludge treated to Class B pathogen levels and bulk land applied.*
Disposal Methods
(Dry Tons, Percentage)

- 115149, 35%
- 61666, 19%
- 83193, 26%
- 63471, 20%

Number of Reporting Facilities
(Number, Percentage)

- 304, 19% Central
- 218, 14% Northeast
- 343, 22% Northwest
- 175, 11% Southeast
- 547, 33% Southwest
- 8, 1% Out of State
Total Sludge Disposal by Each District
(Dry Tons, Percentage)

- Central: 52670, 16%
- Northeast: 21941, 7%
- Northwest: 78969, 24%
- Southeast: 117435, 36%
- Southwest: 11534, 4%
- Out of State: 40929, 13%

Sludge Disposal by Central District (Dry Tons)

- Class A: 27751, 53%
- Class B: 8046, 15%
- Landfill: 9895, 19%
- Incineration: 6978, 13%
Sludge Disposal by Southeast District (Dry Tons)

- 5618, 49%
- 5916, 51%

Sludge Disposal by Southwest District (Dry Tons)

- 10709, 14%
- 33815, 42%
- 7607, 10%
- 26839, 34%
- 10709, 14%
Sludge Disposal in Northeast District (Dry Tons)

- Class A: 53,583 tons (46%)
- Class B: 26,014 tons (22%)
- Landfill: 16,387 tons (14%)
- Incineration: 21,452 tons (18%)

Sludge Disposal in Northwest District (Dry Tons)

- Class A: 12,709 tons (31%)
- Class B: 10,057 tons (25%)
- Landfill: 18,163 tons (44%)