Sewage Sludge Disposal in Ohio for 2007

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 2007.

62465.81 tons of Class A Biosolids land applied or distributed for sale.

87998.20 tons of Class B Biosolids land applied.

73488.42 tons of sewage sludge disposed of in a landfill.

106029.96 tons of sewage sludge incinerated.

329982.39 total tons of sewage sludge disposed of in 2007.

45.6% of sludge was land applied/distributed for sale, 32.1% was incinerated, and 22.2% was landfilled.

1,684 total facilities reported sewage sludge disposal to Ohio EPA in 2007. These facilities either land applied, landfilled, incinerated, took their sludge to another permitted facility, or they did not remove any sludge.

Of the 1,684 total facilities, 11 were out of state facilities, 180 facilities in Central District, 560 facilities in Northeast District, 402 facilities in
Northwest District, 302 facilities in Southwest District, and 229 facilities in Southeast District.

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

251 facilities reported land application of Class B sludge.

190 facilities reported sludge disposal via landfill.

8 facilities reported sludge disposal via incineration.

Out of State Facilities

12831.89 dry tons of Class B sludge land applied.
7179.03 dry tons of sludge disposed in a landfill.
20010.92 total dry tons of sludge disposed of.

Southeast District Facilities

4977.10 dry tons of Class B sludge land applied.
6770.33 dry tons of sludge disposed in a landfill.
11747.42 total dry tons of sludge disposed of.

Southwest District Facilities

8178.48 dry tons of Class A sludge land applied.
24738.72 dry tons of Class B sludge land applied.
16049.05 dry tons of sludge disposed in a landfill.
33108.00 dry tons incinerated.
82074.25 total dry tons of sludge disposed of.

Northwest District Facilities

17429.61 dry tons of Class A sludge land applied.
17772.64 dry tons of Class B sludge land applied.
9828.40 dry tons of sludge disposed in a landfill.
45030.64 total dry tons of sludge disposed of.
Northeast District Facilities

25001.29 dry tons of Class A sludge land applied.
20215.72 dry tons of Class B sludge land applied.
25612.42 dry tons of sludge sent to landfill.
48047.86 dry tons of sludge incinerated.
118877.29 total dry tons of sludge disposed of.

Central District Facilities

10119.20 dry tons of Class A sludge land applied.
7462.13 dry tons of Class B sludge land applied.
8049.20 dry tons of sludge sent to landfill.
24874.10 dry tons of sludge incinerated.
50504.63 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)

- 87998, 27%
- 62466, 19%
- 73488, 22%
- 8029.9, 32%
- 6029.9, 32%

Number of Reporting Facilities
(Number, Percentage)

- 319, 18%
- 301, 17%
- 401, 23%
- 11, 1%
- 179, 10%
- 559, 31%
Total Sludge Disposal in Each District
(Dry Tons, Percentage)

- Central: 50504.63 (15%)
- Northeast: 20010.92 (6%)
- Northwest: 82074.25 (25%)
- Southeast: 11747.42 (4%)
- Southwest: 45030.64 (14%)
- Out of State: 118877.3 (36%)

Sludge Disposal in Central District (Dry Tons)

- Class A: 10119.2 (20%)
- Class B: 24874.1 (49%)
- Landfill: 7462.13 (15%)
- Incineration: 8049.2 (16%)
**Sludge Disposal in Southeast District**
(Dry Tons)

- Class B: 4977.1, 42%
- Landfill: 6770.33, 58%

**Sludge Disposal in Southwest District**
(Dry Tons)

- Class A: 33108, 40.3%
- Class B: 24738.7, 30%
- Landfill: 8178.5, 9%
- Incineration: 16049, 19.5%
Sludge Disposal in Northeast District (Dry Tons)

- Class A: 25612.4, 22%
- Class B: 20215.7, 17%
- Landfill: 48047.9, 40%
- Incineration: 25001.3, 21%

Sludge Disposal in Northwest District (Dry Tons)

- Class A: 17772.64, 39%
- Class B: 17429.6, 39%
- Landfill: 9828.4, 22%