

SEWAGE SLUDGE DISPOSAL IN OHIO FOR 2011

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 effluent to waters of the State. Part II of most NPDES permits requires the submittal of an annual sewage sludge report describing sewage sludge use or disposal activities for the previous year. The purpose of this requirement is to provide information on sewage sludge management trends, to identify areas where the Ohio Environmental Protection Agency 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 is a breakdown of sewage sludge beneficial use/disposal in Ohio and the number of facilities that reported for 2011.

Sewage Sludge Disposal/Use for 2011	Dry tons	Percent Use	# of facilities
Exceptional Quality (EQ) biosolids land applied or distributed for sale	45,150.86	14.8%	23
Class B biosolids land applied	69,060.10	22.6%	225
Sewage sludge disposed of in a landfill	81,727.04	26.8%	268
Sewage sludge incinerated	109,028.91	35.8%	9
Total sewage sludge disposed/beneficially used	304,966.91		525

1,801 facilities reported sewage sludge disposal to Ohio EPA in 2011. These facilities either land applied, landfilled, incinerated, transferred sludge to another permitted facility or did not remove any sludge during the year. The following table summarizes the number of facilities using each of these methods as reported by Ohio EPA district.

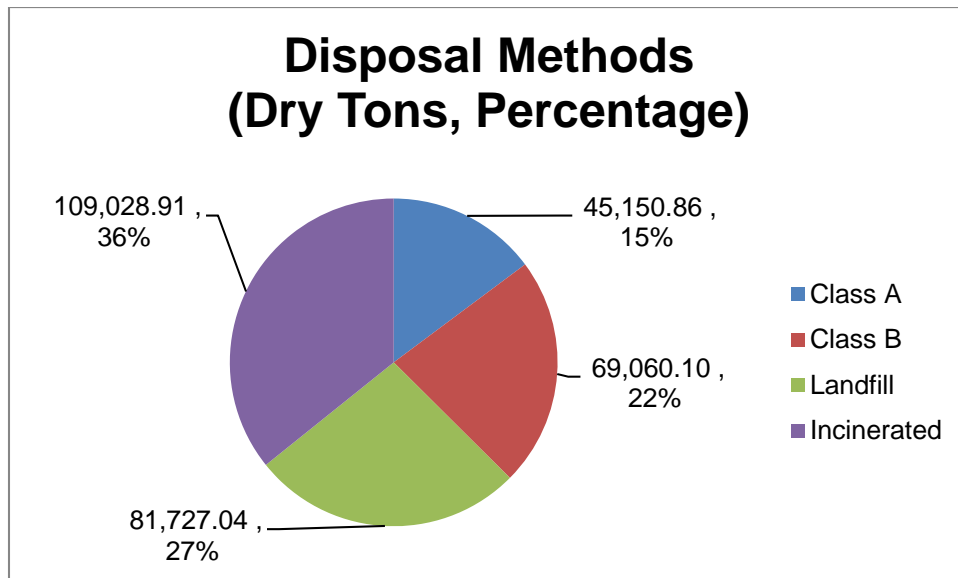
Number of Facilities Reporting in 2011 *							
District	Total	EQ Beneficial Use	Class B Beneficial Use	Landfill	Incineration	Transferred to Another Facility	No Sludge Removed
Central	193	2	27	34	2	85	58
Northeast	605	6	58	84	5	251	221
Northwest	423	9	58	38	0	123	209
Southwest	297	4	42	55	2	141	69
Southeast	274	0	39	55	0	96	97
Out of State	9	2	1	2	0	0	0
Total	1,801	23	225	268	9	696	654
* Some facilities utilize more than one sludge use/disposal method							

Dry Tons in 2011 *

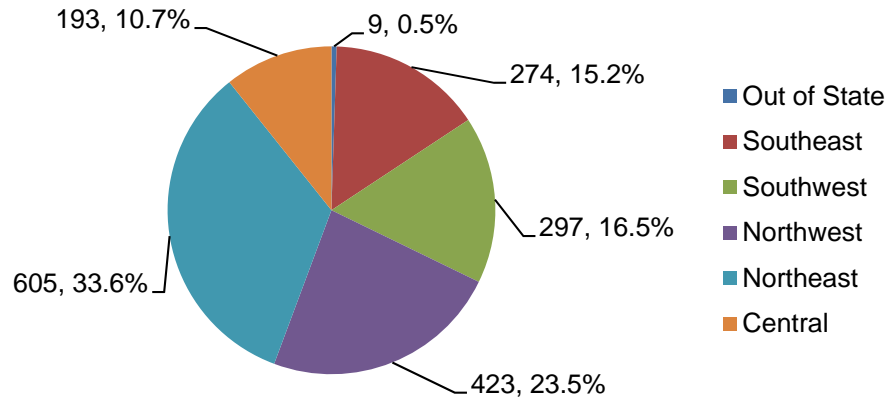
District	Total	EQ Beneficial Use	Class B Beneficial Use	Landfill	Incineration
Central	34,821.45	6,420.01	6,515.15	7,229.98	14,656.31
Northeast	116,299.71	19,490.72	20,378.43	21,820.51	54,610.05
Northwest	39,668.90	10,293.97	13,361.16	16,013.77	0.00
Southwest	83,890.89	2,717.86	22,412.37	18,998.11	39,762.55
Southeast	12,424.67	0.00	3,389.13	9,035.54	0.00
Out of State	17,861.31	6,228.30	3,003.87	8,629.14	0.00
Total	304,966.92	45,150.86	69,060.10	81,727.05	109,028.91

*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.

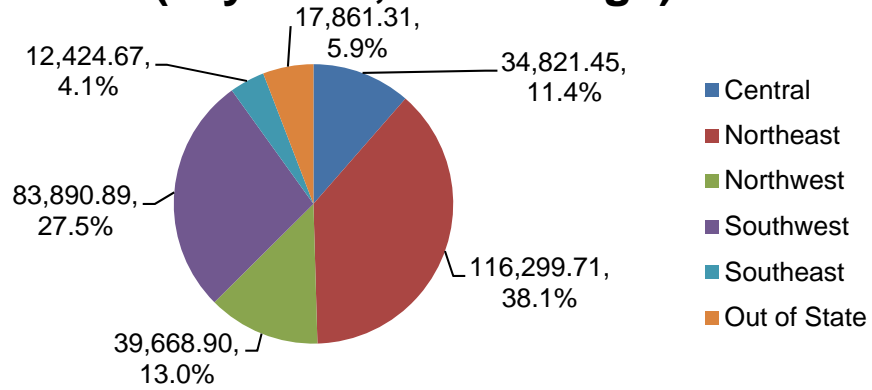
**It should be noted that colors for each data series may vary from chart to chart and district to district.



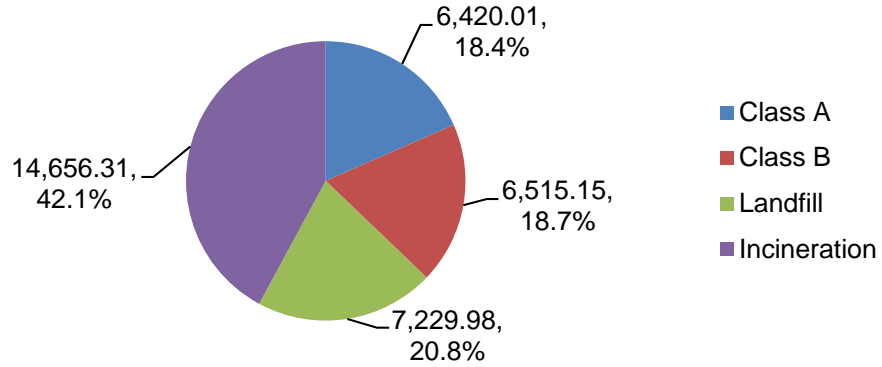
Number of Reporting Facilities (Number, Percentage)



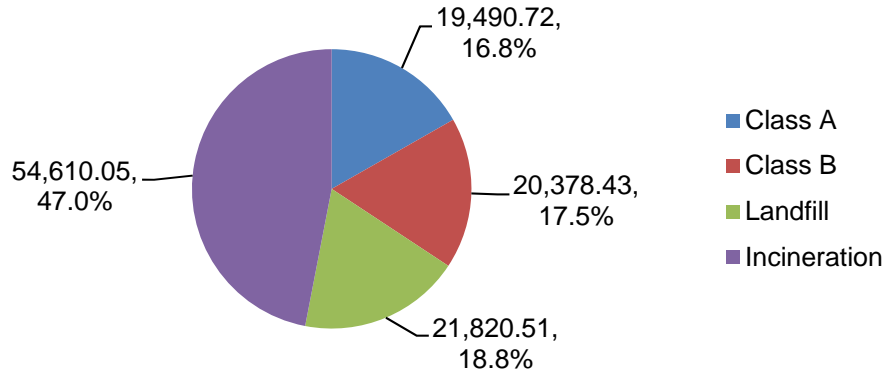
Total Sludge Disposal in Each District (Dry Tons, Percentage)



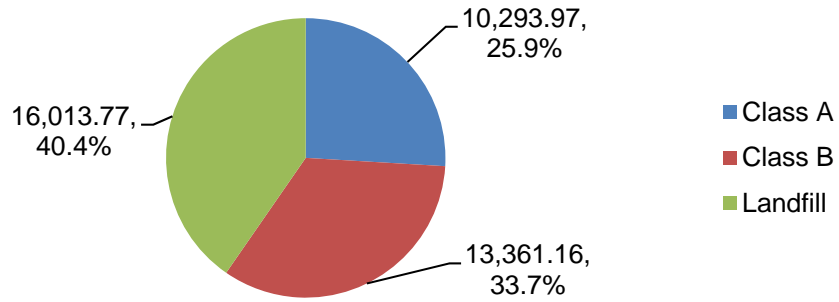
Sludge Disposal for Central District (Dry Tons, Percentage)



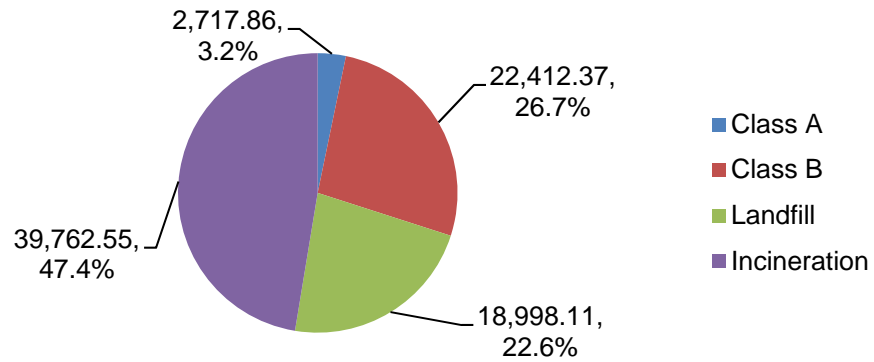
Sludge Disposal for Northeast District (Dry Tons, Percentage)



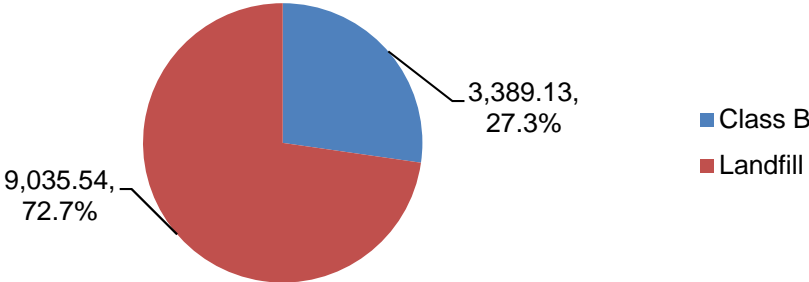
Sludge Disposal for Northwest District (Dry Tons, Percentage)



Sludge Disposal for Southwest District (Dry Tons, Percentage)



Sludge Disposal for Southeast District (Dry Tons, Percentage)



Sludge Disposal for Out of State (Dry Tons, Percentage)

