



City of Sturgis

WWTP

2011

Annual Summary of Influent and Effluent Sampling

The following table contains the annual averages of all sampling results (including the units used) taken by the POTW during the reporting period. The number of samples used to calculate the annual average is in (). The level of detection is in []. For the purpose of calculating the average , those sampling results below the level of detection are treated as zero (0).

Parameter	Reading	Loading Lbs	Max	% Removed	Number of samples used for average	Average of detection limit		
INFLUENT							FLOW, MIL GAL	
Influent BOD	224 mg/L	3,089			(365)	[2]	AVG day	1.67
Influent SS	271 mg/L	3,750			(365)	[2]	Max day	2.24
Influent Phosphorus	6.41 mg/L	88			(52)	[0.1]	TOTAL	608.34
Influent NH3	22.8 mg/L	314			(365)	[0.1]		
Influent pH	7.7 S.U.				(365)	[]		
EFFLUENT							min %	
Effluent BOD	3 mg/L	94%	10	99%	(365)	[2]	final eff flow	
Effluent SS	6 mg/L	94%	13	98%	(365)	[2]		1.60
Effluent Phosphorus	0.57 mg/L	82%	1.0	91%	(52)	[0.1]	Max day	2.12
Effluent NH3	0.36 mg/L	65%	8.4	99%	(365)	[0.1]		584
Effluent pH	8.2 S.U.		8.6		(365)	[]		
Cadmium	0.000 ug/L				(5)	[2]		
Copper	1.00 ug/L				(5)	[1]		
Lead	0.000 ug/L				(5)	[1]		
Zinc	23.00 ug/L				(5)	[15]		

Dissolved Oxygen, minimum 5.20

LBS

Fe **60,015 \$28,807**
 Cl2 **4,315 \$2,747**
 Polymer **0 \$0**

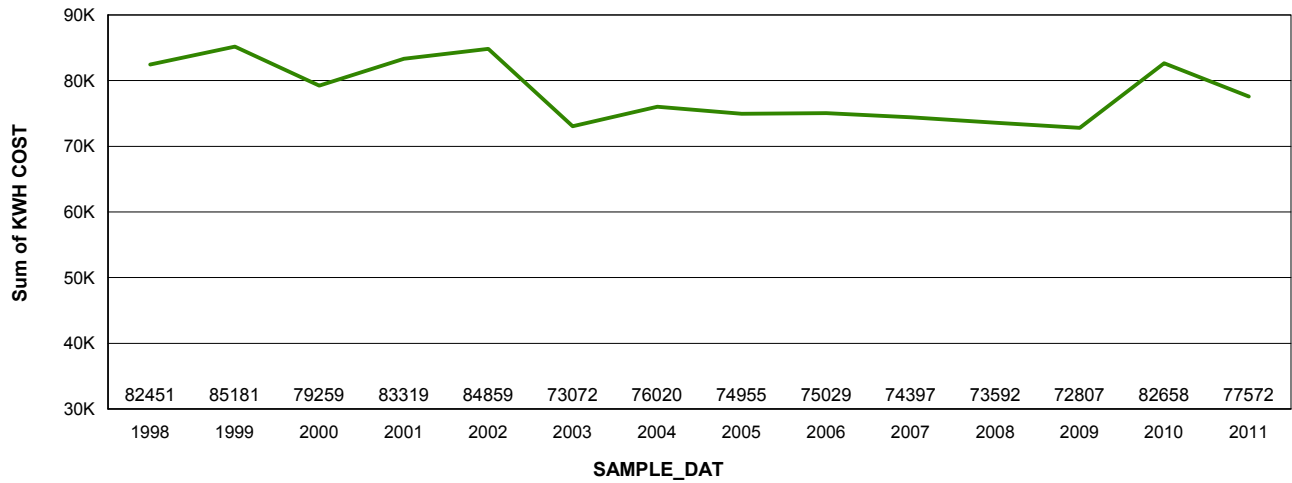
Electric **768,120 KWH \$77,572**
 Gas Produced **37,903**
 Decant gallons **542,099**
 Primary sludge TS lbs avg **1,778**
 Primary sludge VS lbs avg **1,184**



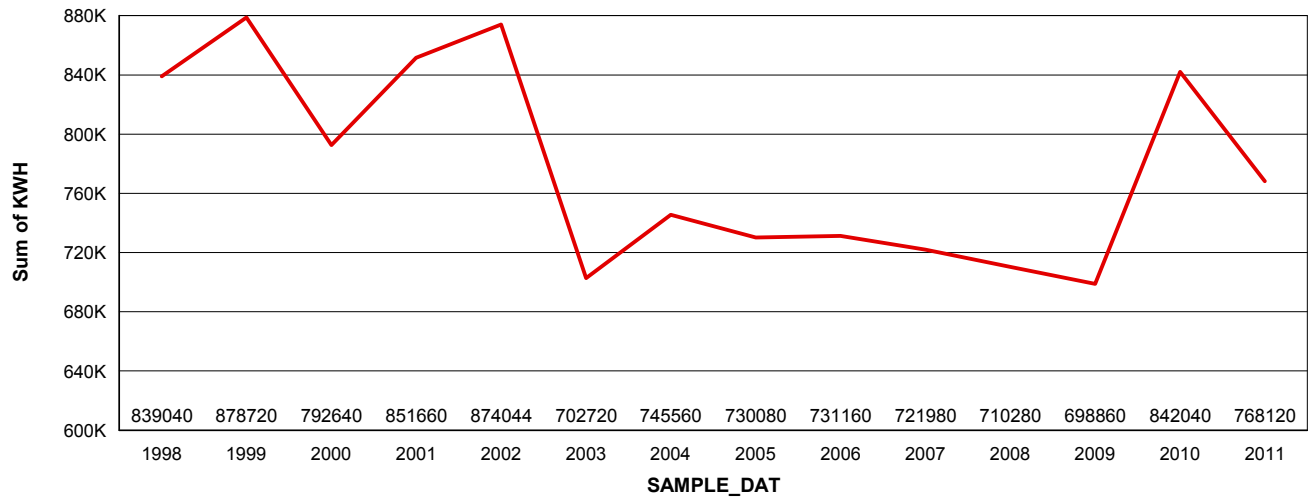
City of Sturgis

WWTP

Sum of KWH COST



Sum of KWH

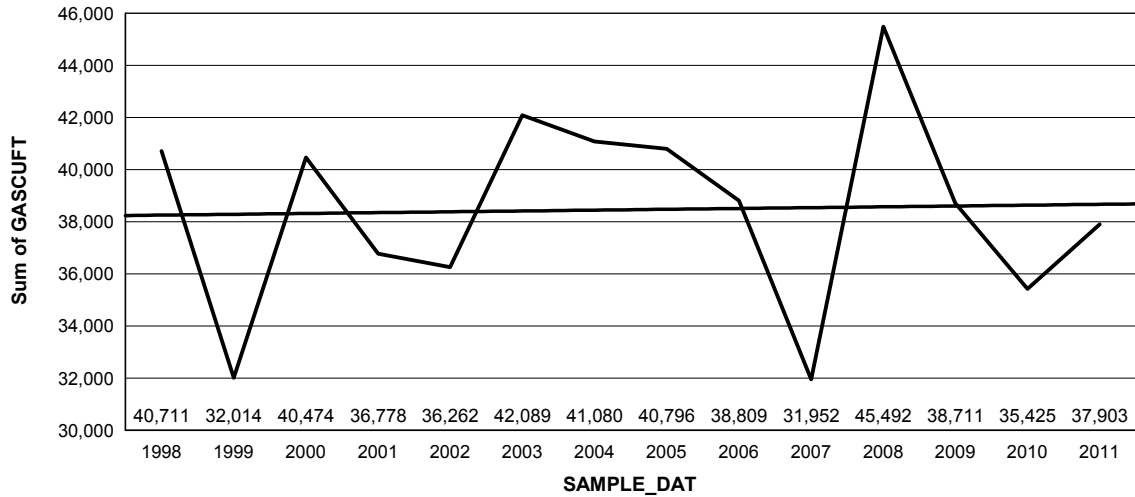




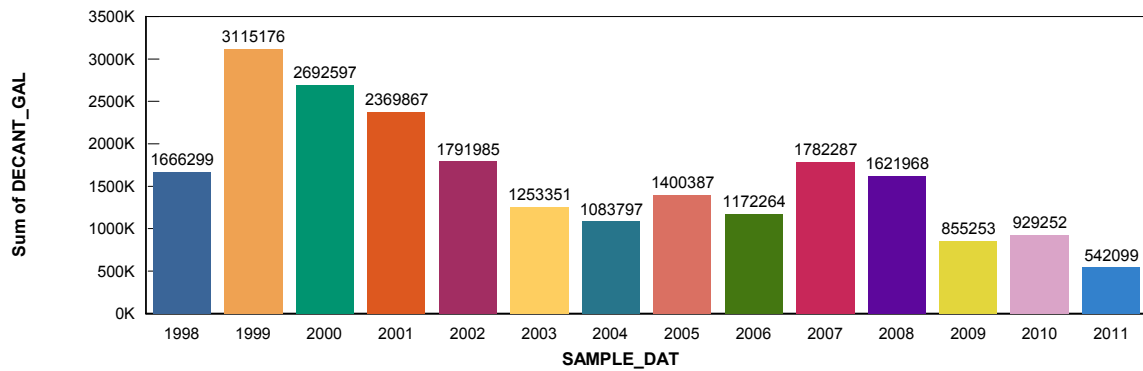
City of Sturgis

WWTP

Sum of GAS Produced CUFT



Sum of DECANT_Gallons

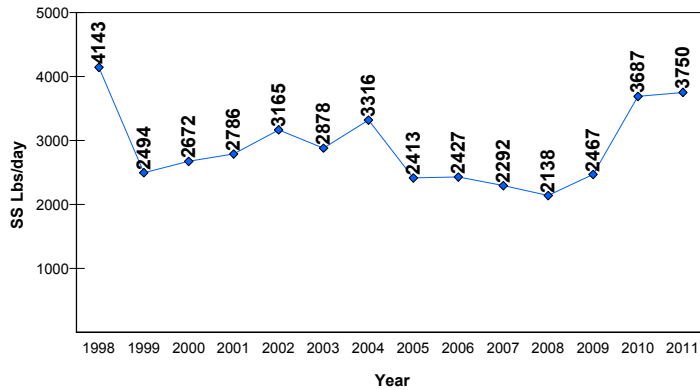




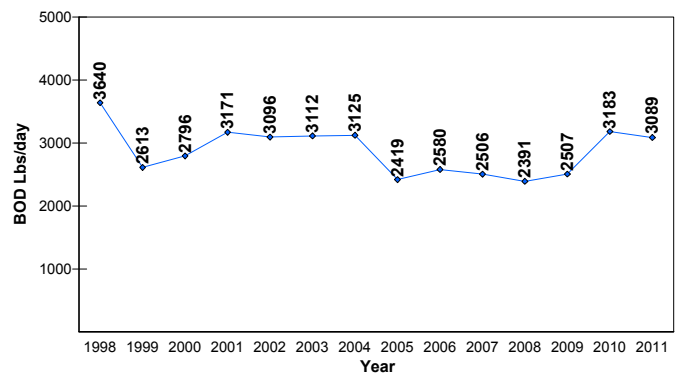
City of Sturgis

WWTP

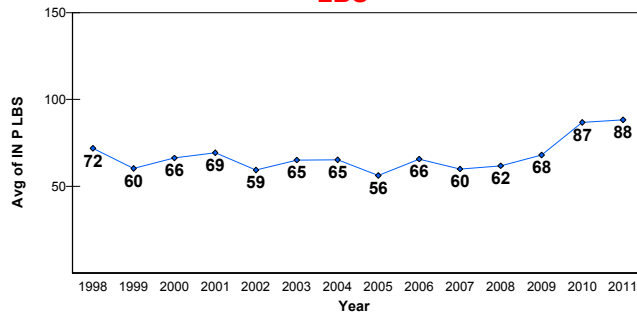
**Avg of Influent Suspended Solids
LBS per day**



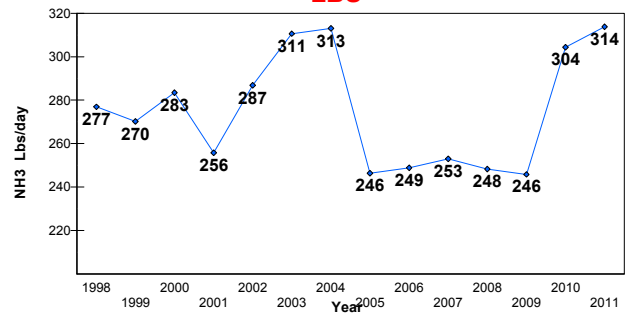
**Avg of Influent BOD LBS per day
(Biochemical Oxygen Demand)**



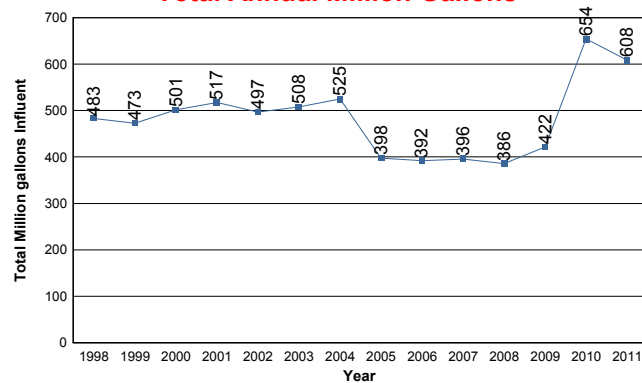
**Avg of Influent Phosphorus
LBS**



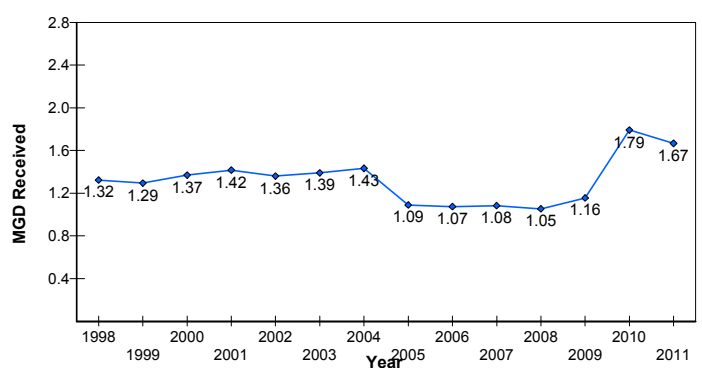
**Avg of Influent Ammonia N
LBS**



Total Annual Million Gallons



**Average Million Gallons per day
Influent**



Respectfully Submitted,

Jeannette Fenner