

# Oregon Association of Clean Water Agencies

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## Septage Survey Results – Conducted in January, 2013

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March, 2013



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## Background

ACWA’s Biosolids & Recycled Water Committee conducted a survey request additional information on the acceptance of septage, treatment, and fee schedules at Oregon wastewater treatment plants (Plant) that are ACWA members. Septage is the partially treated waste stored in a household or commercial septic tanks. The survey results will allow Oregon wastewater utility managers to compare their practices, and to review fee schedules to determine if this might be an area of additional revenue. The report is not meant to provide an analysis of the results in terms of treatment trends or reasons for the answers.

The survey was deployed electronically in January, 2013. It was distributed to the more senior members of each ACWA member organization, along with the Biosolids and Recycled Water Committee members.

Forty-six (46) responses were received. Not all respondents answered every question in the Survey.

## Response Summary for Each Question in the Survey

### Flow and average volume of Septage Accepted

The table below summarizes the average dry weather flow of the twenty-one (21) Oregon wastewater treatment plants accepting septage and the average amount of septage accepted at the Plant:

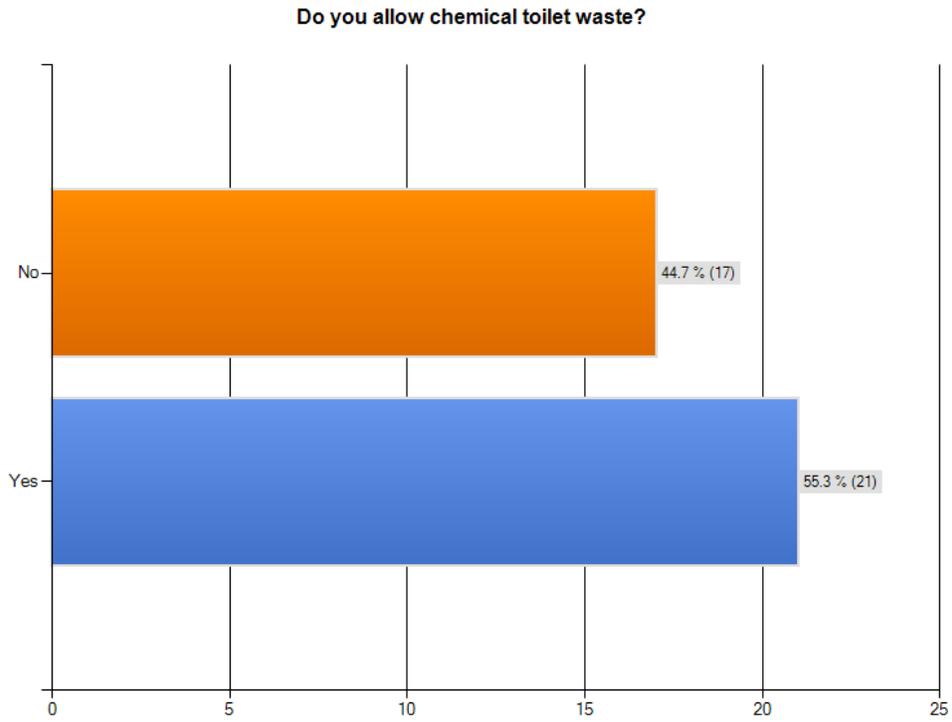
Treatment Plant – Average Dry Weather Flow (Million Gallons Per Day)	Average Amount of Septage Accepted		
	<i>Gallons per day</i>	<i>Gallons per month</i>	<i>Gallons per year</i>
0.34	2,000 gallons		
0.55			2,000 gallons
1.0	2 MGD		
1.0		85,000 gallons	
1.5			632,201 gallons
1.9			646,900 gallons
2.0	2,100 gallons		
2.2	1,000 gallons		
2.8		48,000 gallons	
3.2			32,800 gallons
4.2		8,000 gallons	
5.4		183,00 gallons (Filtrate)	
6		163,150 gallons	
7.73		75,867 gallons	
11.1		40,000 gallons	
17			
20.3	9,188 gallons		
24.5			2.34 million gallons
27.4	3,214 gallons		
35			3.527 million gallons
35			3.5 million gallons

Sixteen (16) of the 46 Plants that responded indicated that they did not accept septage at their Plant.

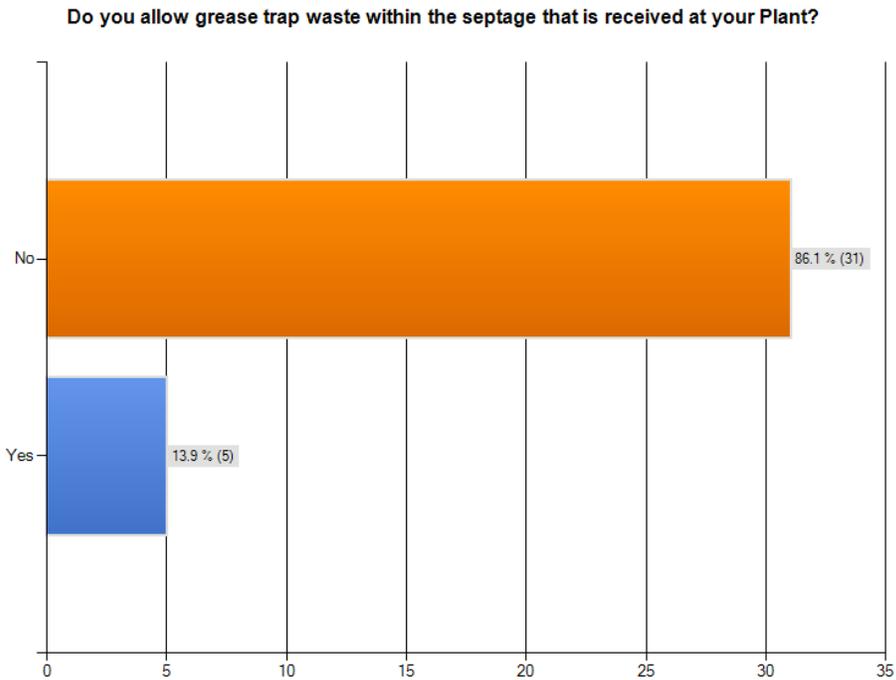
### Months When Septage Not Accepted

Of the communities indicating that they restricted septage in certain months, each community restricted septage in January, February, March and April. No reason was provided for these restrictions.

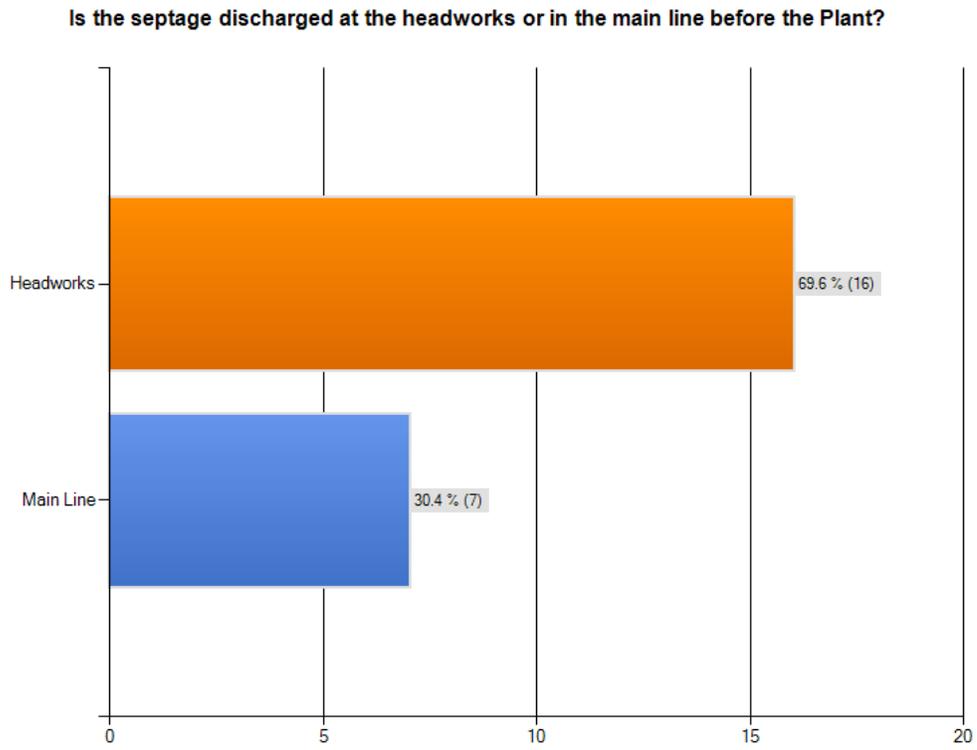
## Do You Accept Chemical Toilet Waste?



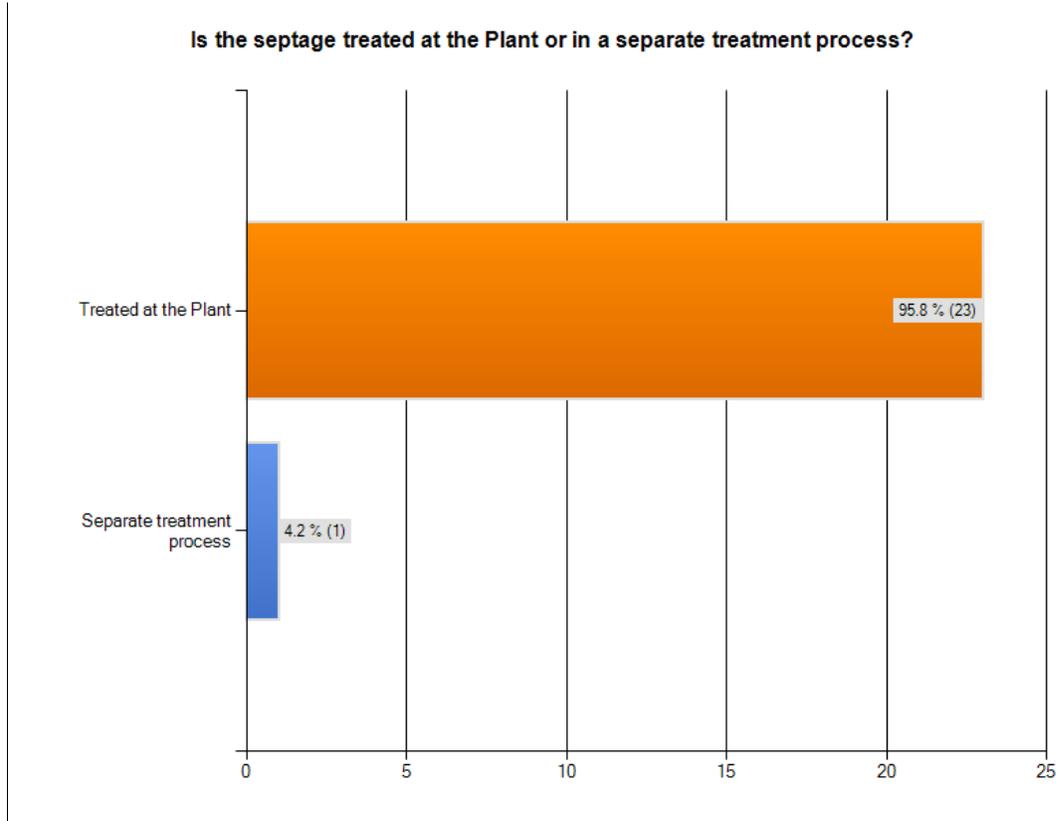
## Grease Trap Waste



## Discharge Point

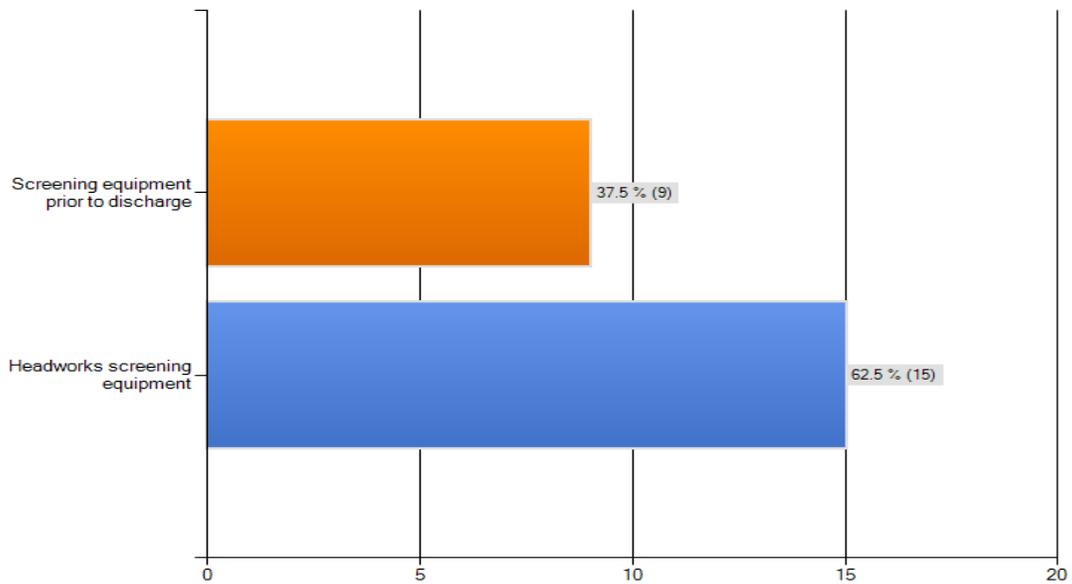


## Treatment at Plant or Separate Process



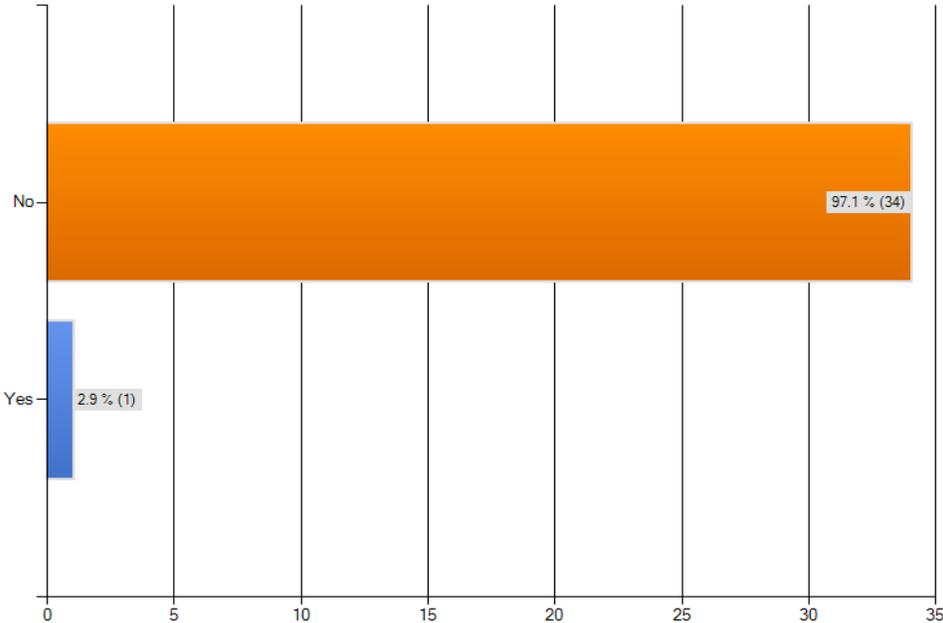
## Separate Screening Equipment or Standard Headworks Screening Equipment

Is there separate screening equipment used prior to discharge to the Plant or is the headworks screening equipment used only?



# Chemicals to Enhance Treatment

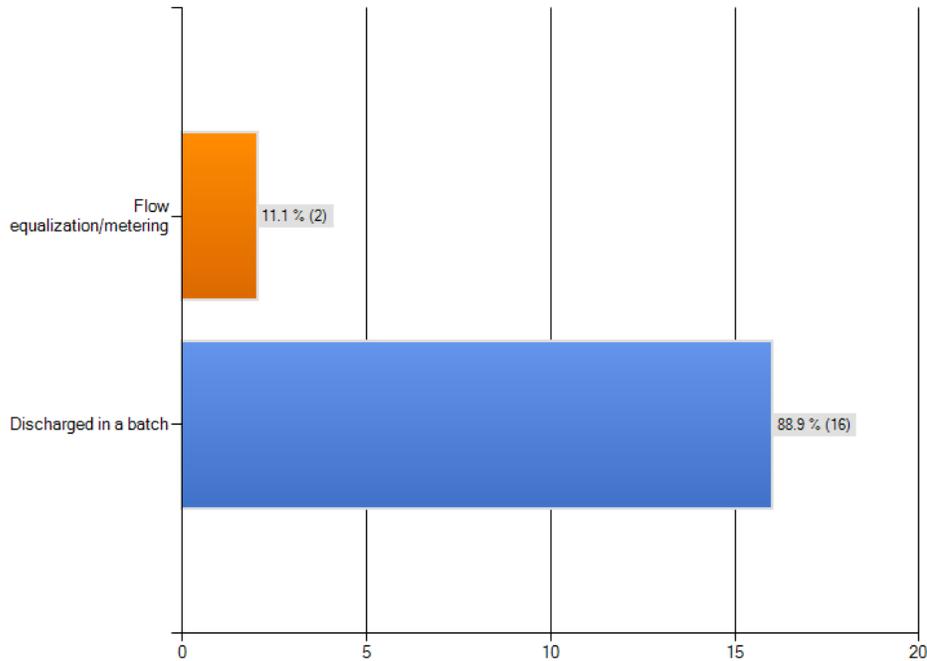
Are chemicals incorporated to enhance treatment of the waste?



The only facility that uses chemicals uses chlorine dioxide.

## Flow Equalization or Batch Discharge

Is there flow equalization/metering of the septage or is it discharged in a single batch?



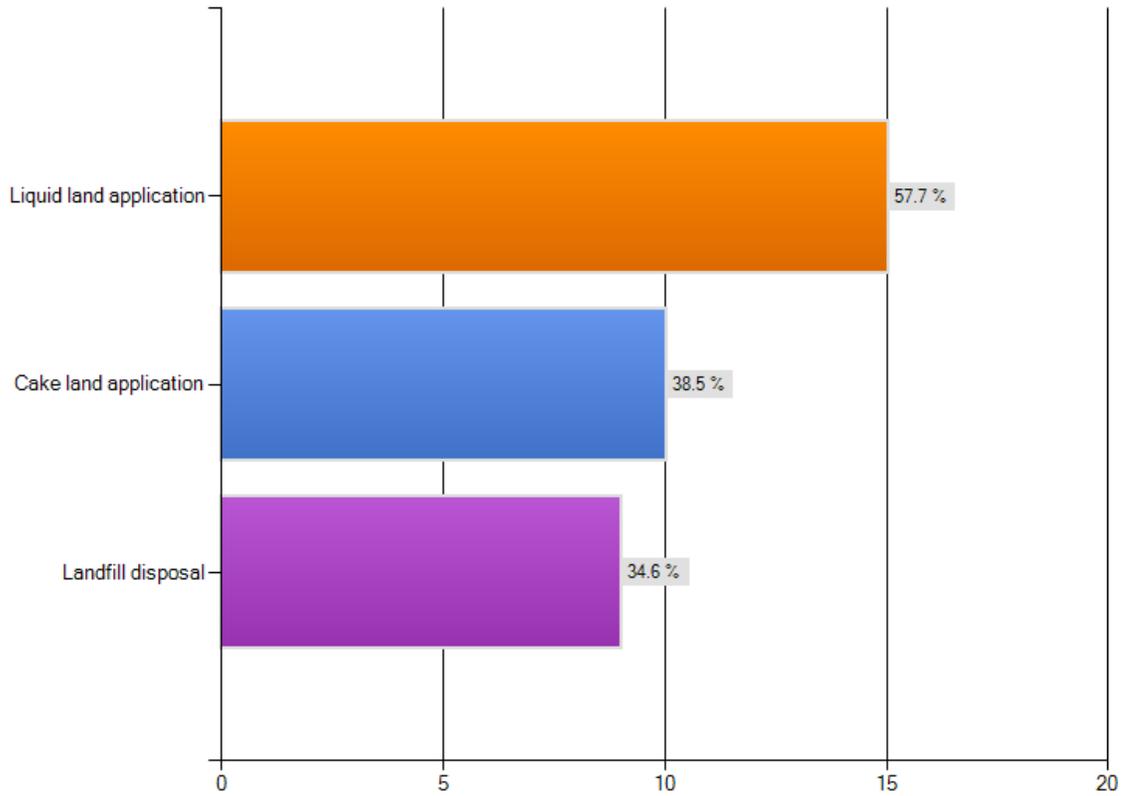
12. What type of solids stabilization process is used at the Plant (e.g. anaerobic, aerobic, or lime stabilization)?

Anaerobic digestion	46% (11)
Aerobic digestion	34% (8)
Lagoons	8% (2)
Lime stabilization	8% (2)
In vessel composting	4% (1)
<i>Some responses included more than one type</i>	

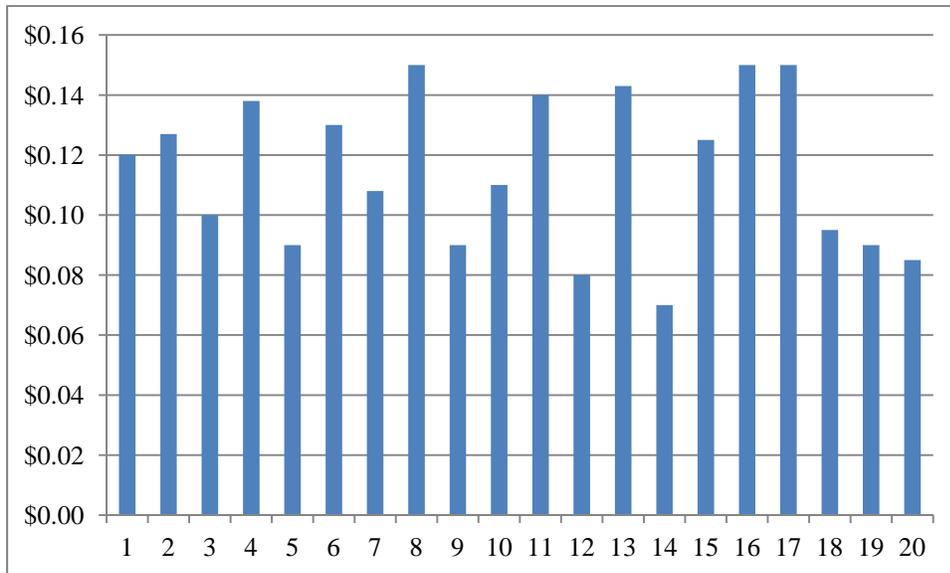
## Biosolids Beneficial Use or Disposal

Sixteen (16) Plants responded to this question. Some Plants used more than one method of biosolids beneficial use or disposal.

**What is your method of biosolids - beneficial use or disposal? (Check all that apply)**



**Fees Charged:** The chart below summarizes the price charged per gallon of septage from the 20 respondents that included this information:



## Additional Specific Fees

Additional specific fees charged for septage include:

- *Out-of-county is an additional \$0.01/gallon. For this facility, in each of the next three years, the plan is to raise the rates \$.005/gallon/year so in 2016 the rates will be \$0.11/gallon for septic tanks and chemical toilets and \$.09/gallon for holding tanks.*
- *\$10 lab test fee*
- *Initial permit fee is \$478; Renewal Permit fee = \$159. Permit is valid for two years. Franchise fee may be imposed in 2014.*
- *No. The only time a fee is charged is if the ammonia levels are too high (over 250 mg/L) then we assess an extra fee. The fee is based on severity of the ammonia content. Typical household ammonia ranges from 35-150 mg/L. Vault toilet and chemical toilets run much higher due to lack of dilution water. We only accept household septage and checking the loads for ammonia content is a way of keeping the haulers honest.*
- *Permit fee \$50.00/year*

## Laboratory Analysis

The survey asked respondents if laboratory analyses were completed prior to allowing the septage to be discharged into the Plant. Of the respondents, fourteen (14) checked for pH, one (1) for oxygen demand, two (2) for BOD/TSS, and one for ammonia. One facility has the septage receiving station as a Significant Industrial User (SIU). One facility viewed the septage under a microscope to determine if the bacteria were alive.