



Wastewater Solids and Biosolids Annual Report
Part I: Wastewater solids production and disposition

Part I: Must be completed by all domestic wastewater facilities.

A. REPORTING PERIOD

1. This report is for biosolids produced during the calendar year:

B. PERMIT INFORMATION

1.	Permit Type (select one): <input type="checkbox"/> NPDES or <input type="checkbox"/> WPCF	DEQ File No.:
	DEQ Permit No.:	EPA Permit No.:

C. FACILITY INFORMATION

1. Legal name of facility:

Physical address

2. Street Address:

City:	State:	Zip code:
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Mailing address Same as physical address.

3. Mailing Address:

City:	State:	Zip code:
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Facility Type (check all that apply)

4. Major or Tier 1 facility (design flow of 1 mgd or greater, or serving a population of 10,000 or greater)
 Minor or Tier 2 facility (design flow less than 1 mgd or serving a population less than 10,000)
 Class I wastewater treatment facility (i.e., facility with a pre-treatment program)
 Biosolids only facility
 Lagoon treatment system
 Other, please specify:

D. CONTACT INFORMATION

Responsible official

1. Name: Title:
 Email Address: Telephone:
 Mailing Address:
 City: State: Zip code:

Biosolids contact Same as responsible official

2. Name: Title:
 Email Address: Telephone:
 Mailing Address:
 City: State: Zip code:

E. WASTEWATER SOLIDS RECEIVED

Please indicate if you received wastewater solids or hauled from other facilities for processing.

Did you receive wastewater solids or hauled waste from other facilities? Yes No

If you received unprocessed wastewater solids, please list sources below. All weight values should be reported in US tons. (US ton= 2,000 lbs) Attach additional pages if necessary.

1.	Name	Type	Quantity	Units (choose one)	% solids
		<input type="checkbox"/> septage <input type="checkbox"/> sludge		<input type="checkbox"/> gallons <input type="checkbox"/> wet tons <input type="checkbox"/> dry tons	
		<input type="checkbox"/> septage <input type="checkbox"/> sludge		<input type="checkbox"/> gallons <input type="checkbox"/> wet tons <input type="checkbox"/> dry tons	
		<input type="checkbox"/> septage <input type="checkbox"/> sludge		<input type="checkbox"/> gallons <input type="checkbox"/> wet tons <input type="checkbox"/> dry tons	
		<input type="checkbox"/> septage <input type="checkbox"/> sludge		<input type="checkbox"/> gallons <input type="checkbox"/> wet tons <input type="checkbox"/> dry tons	
		<input type="checkbox"/> septage <input type="checkbox"/> sludge		<input type="checkbox"/> gallons <input type="checkbox"/> wet tons <input type="checkbox"/> dry tons	

F. WASTEWATER SOLIDS TREATMENT PROCESSES

Please indicate the solids treatment processes used at your facility (mark all that apply)

1.	Thickening technology	Stabilization Technology	Dewatering technology
	<input type="checkbox"/> Gravity <input type="checkbox"/> DAF <input type="checkbox"/> Centrifugation <input type="checkbox"/> Other:	<input type="checkbox"/> Aerobic digestion <input type="checkbox"/> Anaerobic digestion <input type="checkbox"/> Lime stabilization <input type="checkbox"/> ATAD <input type="checkbox"/> Composting <input type="checkbox"/> Thermal <input type="checkbox"/> Lagoon <input type="checkbox"/> Other:	<input type="checkbox"/> Belt press <input type="checkbox"/> Plate and frame press <input type="checkbox"/> Screw press <input type="checkbox"/> Centrifuge <input type="checkbox"/> Vacuum filter <input type="checkbox"/> Drying beds <input type="checkbox"/> Heat drying <input type="checkbox"/> Other:

$$\text{Dry tons} = \text{wet tons} \times \% \text{solids} \qquad \text{Dry tons} = \frac{(\text{gal} \times \% \text{solids} \times 8.34)}{100} \times 0.0005$$

G. WASTEWATER SOLIDS DISPOSITION

Please indicate how wastewater solids were managed at your facility. Please specify reporting units. All weight values should be reported in US tons. US ton.= 2,000 lbs

1.	Disposition of wastewater solids	Quantity (choose one)			% solids
	<input type="checkbox"/> Treated and land applied, sold, or given-away as biosolids or biosolids-derived products	Gallons	Wet tons	Dry Tons	
	<input type="checkbox"/> Sent to landfill. Name:	Gallons	Wet tons	Dry Tons	
	<input type="checkbox"/> Sent to another permitted facility for treatment. Name:	Gallons	Wet tons	Dry Tons	
	<input type="checkbox"/> Long-term storage at treatment facility (e.g., lagoon, drying bed, etc.)*	Gallons	Wet tons	Dry Tons	
	<input type="checkbox"/> Other. Please specify:	Gallons	Wet tons	Dry Tons	

* If you operate a lagoon system and do not have accurate data on the quantity of solids in your lagoon, please check the box for long-term storage, but you may leave the quantity and other information blank.

H. LAGOON SYSTEM OPERATION and MAINTENANCE

The following section is required for facilities that operate wastewater treatment lagoons.

1. A survey of wastewater solids have been completed within the last year: Y N

2. In what year were solids last removed from the lagoon:

3. When do you estimate the next solids removal? Select only one of the following:

- Within the next calendar year
 Within the next 5 years
 Greater than 5 years from present

I. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE

I certify that the information in this report is true and correct to the best of my knowledge and belief. Information and records used or referenced with this report will be maintained and made available to the Oregon Department of Environmental Quality on request.

Seth Kelly

Signature

Title

Date

Print Name:



Wastewater Solids and Biosolids Annual Report
Part II: Biosolids production and quality

Part II: Must be completed by facilities that produced Class A or Class B biosolids for land application, or sold or gave away biosolids derived products for distribution and marketing.

J. BIOSOLIDS PRODUCTION and DISPOSITION

Please specify quantity (in dry US tons) of finished biosolids stored or produced at your facility.			
		Class A	Class B
1.	Produced during reporting period		
	Total biosolids production		
Please indicate how finished biosolids were managed (i.e., land applied, sold, stored, or other).			
		Class A	Class B
2.	Land applied in bulk to agricultural land		
	Land applied in bulk to forest land		
	Land applied in bulk to reclamation site		
	Land applied in bulk to a public contact site (e.g., park, roadside golf course)		
	Sold or given away as feedstock for a biosolids-derived product		
	Sold or given away in bags or other containers		
	Carried-over into next year (i.e., onsite storage)		
	Sent to landfill		
	Other, please specify:		
Total biosolids disposition (add above lines)			

K. BIOSOLIDS SAMPLING

Select your facility's minimum regulatory monitoring frequency (select only one box):				
Monitoring frequency	<input type="checkbox"/> Once per year	<input type="checkbox"/> Once per quarter (four times per year)	<input type="checkbox"/> Once per 60 days (six times per year)	<input type="checkbox"/> Once per month (12 times per year)
Metric tons	<290	290 > 1,500	1,500 > 15,000	≥ 15,000
US Tons	<319	319 > 1,650	1,650 > 16,500	≥ 16,500

Provide details on compliance sampling.						
Sample type - Annual - Quarterly - 60 days - Monthly	Class	Processes (select all that apply)			Sampling date	
					Pollutants	Nutrients
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		
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	<input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Aerobic dig. <input type="checkbox"/> Anaerobic dig. <input type="checkbox"/> Compost	<input type="checkbox"/> Air-dried <input type="checkbox"/> Heat dried <input type="checkbox"/> Lagoon	<input type="checkbox"/> Alkaline stabil. <input type="checkbox"/> Soil prod/blend <input type="checkbox"/> Other		

L. BIOSOLIDS POLLUTANT MONITORING

Report pollutant monitoring data from collected samples. Express results in mg/kg (ppm) based on dry wt. Please attach laboratory reports for results only. No lab QA/QC.

Biosolid Type: Class A Class B

Sample type	Average Pollutant Concentrations								
- Annual - Quarterly - 60 days - Monthly	As (mg/kg)	Cd (mg/kg)	Cu (mg/kg)	Pb (mg/kg)	Hg (mg/kg)	Mo (mg/kg)	Ni (mg/kg)	Se (mg/kg)	Zn (mg/kg)
Annual Mean									
Table 1¹ Ceiling conc.	75	85	4300	840	57	75	420	100	7500
Table 3² Pollutant conc.	41	39	1500	300	17	N/A	420	100	2800

¹ 40 CFR § 503.13 Table 1 – Ceiling concentrations. Samples with pollutant concentrations that exceed the Table 1 limits are not eligible for land application and must be disposed by other means.

² 40 CFR § 503.13 Table 3 – Pollutant Concentrations. Samples with pollutant concentrations that exceed the Table 3 limits are subject to cumulative pollutant loading rates in 40 CFR § 503.13 Table 2. Annual and cumulative pollutant additions to land application sites must be submitted with the annual report.

M. BIOSOLIDS NUTRIENT MONITORING

Report nutrient monitoring data from collected samples. Express results in mg/kg (ppm) based on dry weight, except where otherwise noted. *Please attach laboratory reports for results only. No lab QA/QC.*

Biosolid Type: Class A Class B

1.

Sample type	Average Nutrient Concentrations							
- Annual - Quarterly - 60 days - Monthly	TKN (mg/kg)	NO ₃ -N (mg/kg)	NH ₄ -N (mg/kg)	P (mg/kg)	K (mg/kg)	pH (S.U.)	Total solids (%)	F. coli MPN <input type="checkbox"/> CFU <input type="checkbox"/>
Annual Mean								

N. BIOSOLIDS PATHOGEN REDUCTION MONITORING and RECORDS

**Identify alternative(s) used to meet Class A or Class B pathogen reduction (PR): 40 CFR §503.32
Attach documentation on pathogen reduction.**

	Class A Alternatives	Class B Alternatives
1.	<p>Biosolids have been tested for (select one or both):</p> <p><input type="checkbox"/> fecal coliform</p> <p><input type="checkbox"/> salmonella</p> <hr/> <p><input type="checkbox"/> Alternative 1: Thermally treated biosolids</p> <p><input type="checkbox"/> Alternative 2: Biosolids treated in a high pH-high temperature process</p> <p><input type="checkbox"/> Alternative 3: Biosolids treated in other processes that meet enteric virus and helminth ova criteria.</p> <p><input type="checkbox"/> Alternative 4: Biosolids treated in unknown processes that meet enteric virus and helminth ova criteria.</p> <p><input type="checkbox"/> Alternative 5: Use of a Process to Further Reduce Pathogens (PFRP) (select all that apply)</p> <p><input type="checkbox"/> (a) Composting</p> <p><input type="checkbox"/> (b) Heat drying</p> <p><input type="checkbox"/> (c) Heat treatment</p> <p><input type="checkbox"/> (d) Thermophilic aerobic digestion</p> <p><input type="checkbox"/> (e) Beta ray irradiation</p> <p><input type="checkbox"/> (f) Gamma ray irradiation</p> <p><input type="checkbox"/> (g) Pasteurization</p> <p><input type="checkbox"/> Alternative 6: Use of a Process equivalent to a PFRP.</p> <p style="padding-left: 20px;">Identify:</p>	<p><input type="checkbox"/> Alternative 1: Monitoring of fecal coliform as the geometric mean of the density of fecal coliform of seven representative samples (select option met):</p> <p><input type="checkbox"/> < 2 million Most Probable Number (MPN) per gram of solids (dry wt. basis)</p> <p><input type="checkbox"/> < 2 million Colony Forming Units (CFU) per gram of total solids (dry wt. basis)</p> <p><input type="checkbox"/> Alternative 2: Biosolids treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described below:</p> <p><input type="checkbox"/> (a) Aerobic digestion</p> <p><input type="checkbox"/> (b) Air drying</p> <p><input type="checkbox"/> (c) Anaerobic digestion</p> <p><input type="checkbox"/> (d) Composting</p> <p><input type="checkbox"/> (e) Lime stabilization</p> <p><input type="checkbox"/> Alternative 3: Biosolids treated in a process that is equivalent to a PSRP.</p> <p style="padding-left: 20px;">Identify:</p>

O. BIOSOLIDS VECTOR ATTRACTION REDUCTION and RECORDS

Identify option(s) used to meet vector attraction reduction (VAR): 40 CFR §503.33
Attach documentation demonstrating compliance.

In-plant options:

1. Option 1: 38% reduction in volatile solids content. Select method used for determining volatile solids reduction:
- Full mass balance equation
 - Approximate mass balance equation
 - Van Kleeck equation
 - Volatile solids loss across all sewage sludge treatment processes
- Option 2: Bench-scale anaerobic digestion for 40 additional days at 30 °C to 37 °C.
- Option 3: Bench-scale aerobic digestion for 30 additional days at 20 °C.
- Option 4: SOUR at 20 °C. (Only for material <2% solids with no dilution.)
- Option 5: Aerobic treatment for at least 14 days over 40 °C with an average temperature of over 45 °C.
- Option 6: Alkali addition to raise pH to at least 12 at 25 °C and maintain a pH ≥ 12 for 2 hours and a pH ≥ 11.5 for 22 more hours.
- Option 7: Drying with no unstabilized (primary) solids to at least 75% solids.
- Option 8: Drying with unstabilized (primary) solids to at least 90% solids.

Site management options:

- Option 9: Injection with no biosolids present on land surface 1 hour after injection. (Class A biosolids only: Injection within 8 hours of pathogen reduction.)
- Option 10: Incorporation within 6 hours of application. (Class A biosolids only: Incorporation within 8 hours of pathogen reduction.)

If VAR was met through Option 1, a 38% reduction in volatile solids, report the average reduction percentage found.

	Biosolid Type	Average Volatile Solid Reduction
2.	Class A	
	Class B	

P. VIOLATIONS OF 40 CFR §503 or OAR CHAPTER 340 DIVISION 50

Did any violations of 40 CFR §503 or OAR Chapter 340 Division 50 occur during the reporting period?

- No.
- Yes. Provide a detailed description of the violation(s) and remedial actions taken to prevent reoccurrences in the future. If this was a spill, please include the OARS report #.

Q. SUMMARY OF PART II ATTACHMENTS

Information DEQ requests with all annual reports:	
1.	<input type="checkbox"/> Analytical laboratory reports for pollutant monitoring. <u>No lab QA/QC</u> <input type="checkbox"/> Analytical laboratory reports for nutrient monitoring. <u>No lab QA/QC</u> <input type="checkbox"/> Documentation to demonstrate compliance with pathogen reduction requirements. <input type="checkbox"/> Documentation to demonstrate compliance with vector attraction reduction requirements.
Information required if pollutants in Section L exceed Table 3 values:	
2.	<input type="checkbox"/> Annual and cumulative pollutant additions to land application sites, if any pollutant concentration exceeds the Table 3 values.
Optional and supplemental information:	
3.	<input type="checkbox"/> Other information on changes to solids handling or land application site management. <input type="checkbox"/> Other information on biosolids violations and remedial actions. <input type="checkbox"/> Other. Please specify:

R. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE

	<p>I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in 40 CFR §503.32 (identified in Section P of this report) and the vector attraction reduction requirements in 40 CFR §503.33 (identified in Section Q of this report) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.</p>		
	_____	_____	_____
	Signature	Title	Date
	Print Name: _____		



Wastewater Solids and Biosolids Annual Report
Part III: Biosolids land application site information

Part III: Must be completed by facilities that land applied Class B biosolids during the reporting period.
Add additional pages as needed.

S. LAND APPLICATION SITE INFORMATION

	Site ID	Owner (Last Name)	Location, PLSS (Township, Range, Section, Tax Lot)	Crop(s)	Appl. rate (lbs N/ac)	Total applied (DT/site)*	Total area applied (acres)	Was site applied to the previous year?	Soil test**
1.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
2.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
3.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
4.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
5.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
6.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
7.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
8.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
9.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
10.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
11.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
12.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
13.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
14.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>
15.								<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>

Attach additional pages as required to report on all sites that received class B biosolids during the reporting period.

* Please report in units of dry US tons (US ton = 2,000 lbs)
 ** Please attach laboratory report showing sample results only. No lab QA/QC.

T. SUMMARY OF PART III ATTACHMENTS

	Information required with some annual reports:
1.	<input type="checkbox"/> Additional copies of Table S for additional land application. <input type="checkbox"/> Analytical results from soil testing
	Example of documentation held by the permittee and available upon request:
2.	<input type="checkbox"/> Additional land application site information. <input type="checkbox"/> Figures showing where biosolids were applied. <input type="checkbox"/> Nitrogen loading calculations

U. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE

	<p>I certify, under penalty of law, that the information that will be used to determine compliance with the site restrictions in Sec. 503.32(b)(5) for each site on which Class B sewage sludge was applied was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.</p>		
	Signature	Title	Date
	Print Name:		