

State of Oregon Department of Environmental Quality

700 NE Multnomah St. Suite 600, Portland, OR 97232

Wastewater Solids and Biosolids Annual Report Instructions

National Pollutant Discharge Elimination System (NPDES) and Water Pollution Control Facility (WPCF) permittees are required to report to the Department of Environmental Quality (DEQ) on the production, use, disposal or storage of domestic wastewater solids. DEQ requests the permit holder submit information on activities during the previous year by **February 19**. You must submit 2 copies of the report as directed below and Class I facilities must complete EPA's online NeT reporting.

The annual report is in three parts:

- Part I: Wastewater solids production and disposition. Required for all facilities.
- Part II: Biosolids production and quality. Required for facilities that produced Class A or Class B biosolids for land application, or sold or gave away biosolids derived products for distribution and marketing.
- Part III: Biosolids land application site information. Required for facilities that land applied Class B biosolids.

Depending on your facility's wastewater solids handling during the previous calendar year, your facility may be required to submit one, two, or all three parts of the report.

If your facility:

- Is a lagoon system and has not removed solids during the previous year
- Transferred solids to another wastewater facility for processing
- Transferred solids to a landfill, incinerator, or energy production facility
- Put solids into long-term storage

Then you must submit:

• Part I of the report

If your facility:

- Processed wastewater solids for beneficial use on the land as a soil amendment or fertilizer
- Processed and distributed wastewater solids (by sale or given away) for use as feedstock for a biosolids-derived product (e.g., compost, derived-soil, etc.)
- Sold or gave away biosolids or a biosolids-derived product

Then you must submit:

- Part I of the report
- Part II of the report

If your facility:

• Land applied Class A or Class B biosolids in bulk (including application using agricultural equipment such as a manure-spreader, irrigation cannon, sideslinger, etc.) to agricultural land, forest land, reclamation site, or public contact site (e.g., park, roadside, golf course)

Then you must submit:

- Part I of the report
- Part II of the report
- Part III of the report

Copy 1: Send a copy of the completed report to your regional **DEQ office**:

Copy 2: Send an electronic copy of the report to the DEQ Headquarters (heins.pat@deq.state.or.us) or hard copy:

ATTN: Biosolids Program Coordinator DEQ Water Quality Division 700 NE Multnomah St. Suite 600 Portland, OR 97232

Copy 3: If you are a Class I facility, your treatment facility has a design flow of 1 MGD or more, or you serve a population of 10,000 or more, complete EPA's online NeT reporting.



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Wastewater Solids and Biosolids Annual Report

Instructions for Part I: Wastewater solids production and disposition

Required for all domestic wastewater treatment facilities.

A. Reporting Period

1. The annual report is due to DEQ by February 19th and provides information on solids management activities during the previous calendar year. Enter the calendar year for which the report is being submitted.

B. Permit Information

- 1. Provide information on your permit:
 - a. Identify the type of permit, WPCF or NPDES. Choose only one.
 - b. DEQ File No. This information is located on the cover page of your DEQ-issued permit.
 - c. DEQ Permit No. This information is located on the cover page of your DEQ-issued permit.
 - d. EPA Permit No. Applies to NPDES permits only.

C. Facility Information

The facility information clarifies what should be included in the report and who should receive copies of the report. It expedites DEQ review of the report and ensures that you have submitted a report that complies with the conditions in your permit.

- 1. Provide the name of your facility.
- 2. Provide the physical address of the facility, including street, city, state, and zip code.
- 3. Provide the mailing address for the facility. If the mailing address is the same as the physical address, you may check the box "Same as physical address."
- 4. Identify the type of facility. Check all boxes that apply. If an important identifier has not been listed, please provide the information under "Other:" If you have checked any of the first three items *and land applied biosolids*, please report to EPA's online NeT reporting.

D. Contact Information

DEQ uses the contact information for correspondence with the facility on their wastewater solids/biosolids program.

- 1. Provide full contact information for the responsible official at the treatment facility. The responsible offices is typically a supervisor, manager, or other person who is accountable for ensuring operations comply with the conditions in the permit. Any official correspondence on the report or the facility's compliance with requirements in the permit will be communicated to the responsible official.
- 2. Provide full contact information for the biosolids contact at the facility. If the biosolids contact is the same as the responsible official, check the box "Same as responsible official." Some facilities have a staff person who maintains primary responsibility for the solids handling operations. This person often has the most direct knowledge of information in the report. DEQ will contact the biosolids contact if there are questions on the technical content of the report.

E. Wastewater Solids Received

DEQ uses information on wastewater solids received to track statewide solids management. This information may also be available to provide technical assistance to communities or businesses (e.g., septage pumpers) that are seeking treatment facilities.

1. Please indicate if your facility received wastewater solids or hauled waste for from another facility (or facilities) for processing. If you received unprocessed wastewater solids or hauled waste, please identify the source of material, the type of material (septage or sludge), the quantity received and the reporting units. If you have information on the percent solids (for quantities reported in gallons or wet tons), please provide that information. If the information is unavailable, this value may be left blank. Please attach additional pages as necessary.

F. Wastewater Solids Treatment Processes

In addition to helping DEQ provide technical assistance to your program, information on wastewater solids treatment processes supports efforts to identify national and regional trends in solids management and improve beneficial reuse operations. Organizations, such as the Northwest Biosolids Management Association (NBMA) and the Water Environment Federation (WEF), often request this type of information when developing technical reports. Research organizations, such as Oregon State University, may use this information to develop best management practices for biosolids land application programs.

1. Identify the various solids treatment technologies at your facility, whether used or unused. If a technology is not listed, please check "other" and identify the type of technology used. Check as many as apply. If you operate a lagoon system, please check "Lagoon"; other boxes may be left unchecked.

G. Wastewater Solids Disposition

DEQ uses the information in this section to understand how wastewater solids are managed by wastewater treatment facilities statewide. Wastewater disposition includes reuse, disposal, storage, and transfer to other facilities. When answering these questions, please check the box for all solids management methods that were used during the reporting period. Please attach additional pages as needed.

- 1. Treatment to Class A or B biosolids standards for subsequent use on the land as a fertilizer or soil amendment. Please report the quantity of *untreated sludge* that was introduced for treatment. The quantity of finished biosolids produced by your facility will be reported in Part II of this report.
- 2. Disposal at a landfill facility. Please list the name of the facility receiving wastewater solids.
- 3. Transfer of solids to another wastewater facility for further treatment. Please list the name of the facility or facilities receiving wastewater solids.
- 4. Long-term storage at the treatment facility, including sludge lagoons, tanks, drying beds, or other storage units. *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.
- 5. Other uses or disposal of wastewater solids, such as but not limited to: transfer to a sewage sludge incinerator, feedstock for biogas generation or other energy project, or feedstock for another product or process. Please identify the other use or disposal methods.

H. Lagoon System Operation and Maintenance

The following section is required only for facilities that operate wastewater lagoons or biosolids storage lagoons. DEQ uses this information to provide technical assistance and for planning purposes. *Please respond to all three of the following:*

- 1. Was a survey of wastewater solids in the lagoon completed within the last year?
- 2. In what year were wastewater solids last removed from the lagoon?
- 3. When do you estimate wastewater solids will next be removed from the lagoon? Select only one of the options.

I. Signature

The report must be signed by a person legally authorized to represent your treatment facility.

DEFINITION OF LEGALLY AUTHORIZED REPRESENTATIVE Please also provide the information requested in brackets [].

- **Corporation:** president, secretary, treasurer, vice-president, or any person who performs principal business function; or a manager of one or more facilities that is authorized in accordance to corporate procedure to sign such documents.
- Partnership: General partner [list of general partners, their addresses, and telephone numbers]
- **Sole Proprietorship:** Owner(s) [each owner must sign the application]
- City, County, State, Federal, or other Public Facility: Principal executive officer or ranking elected official
- Limited Liability Company: Member [articles of organization]
- Trusts: Acting trustee [list of trustees, their addresses, and telephone numbers]



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Wastewater Solids and Biosolids Annual Report

Instructions for Part II: Biosolids production and quality

Required for all 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

DEQ requires a summary of biosolids production and use from all facilities that produce biosolids for land application, or sell or give away biosolids derived products for distribution and marketing. The information in this section should summarize the quantity of finished biosolids produced at the facility during the reporting period as well as how those finished biosolids were managed. "Finished biosolids" refers to biosolids that have been sufficiently treated and are ready for use on the land or public distribution. Finished biosolids includes product that has been placed in storage, but does not include material that is unfit for use or distribution. (For example, a batch of biosolids compost that is curing on December 31 is not yet finished and should be reported in the next annual report.) DEQ uses this information to determine compliance with your permit as well as track trends in biosolids production and management around the state.

- 1. Please provide the quantity of finished biosolids that were produced or stored onsite at your facility during the reporting period. If finished biosolids were produced and stored during the *previous* reporting period, please report the quantity of material *stored at the treatment facility* that was carried-over from the previous year. Carried-over material *does not* include biosolids that are being staged or stored in the field at a land application site. Please report the quantity of biosolids in dry tons under the appropriate column for Class A or Class B biosolids. Provide the total annual biosolids production by adding together the quantity of "carried-over" biosolids and new biosolids produced during the reporting period.
- 2. Please indicate how finished biosolids were managed during the reporting period using the categories provided on the report (i.e., rows). Report the quantity in dry tons under the appropriate column for Class A or Class B biosolids. If finished biosolids were in onsite storage at the treatment facility on December 31, please reporting the quantity as "Carried-over into next year." If *finished biosolids* are managed in another manner, such as disposal at a landfill or transfer to another facility, please specify how the biosolids were managed and the quantity. Provide the total annual biosolids disposition (under Class A or Class B) by adding together the various biosolids management practices.

K. Biosolids Sampling

Biosolids must be sampled and monitored to demonstrate compliance with your permit. The sampled biosolids must be representative of the treatment process(es) and characterize the quantity and quality of biosolids produced. The minimum sampling frequency is based on the total quantity of biosolids produced; however, additional samples may be required to adequately characterize different treatment processes. For example, a facility that produces 250 US dry tons of biosolids must sample only once per year; however, if the facility produces biosolids by more than one process (e.g., alkaline stabilized biosolids in the winter, air-dried biosolids in the summer), additional samples may be required to meet the requirement that samples be representative. You will report both types of information in this section.

- 1. The minimum biosolids sampling frequency is based on the total quantity of finished biosolids produced for application to the land, including both bulk land application and biosolids produced for sale or distribution (e.g., biosolids compost sold to the public). Please select the appropriate testing frequency based on the quantity of biosolids produced at your facility during the reporting period.
- 2. Please provide information on the biosolids sampling that occurred during the reporting period. For each sample, please provide the following information:
 - a. Select either Class A or Class B biosolids
 - b. Identify the treatment processes that were used to produce the biosolids. More than one selection may be made for each sample type. For example, if biosolids were anaerobically digested then composted, select both "Anaerobic dig." and "Compost." This information is used to characterize how different biosolids

- processes affect biosolids characteristics. Oregon State University uses this type of information when updating their biosolids publications.
- c. Please provide the date the sample(s) was taken. If sampling for pollutants and nutrients occurred on different days, different dates should be reported.

L. Biosolids Pollutant Monitoring

A report on pollutant concentrations in biosolids is required to demonstrate compliance with the pollutant limits specified in OAR 340-050-0035(2)(a). *Please attach analytical laboratory reports for pollutant monitoring*.

1. For each of the collected samples identified in the previous section, report the concentration for the nine regulated pollutants. Please report all concentrations as mg/kg on a dry weight basis. If a pollutant concentration is non-detect, please report the value using the less-than symbol followed by the reporting limit. For example <0.050 should be reported for a parameter that is non-detect where the reporting limit is 0.050 mg/kg. The 40 CFR §503.13 pollutant limits are provided as a reference. If the concentration of any pollutant exceed the Table 1 Ceiling Concentration, the biosolids may not be applied to the land and must be disposed in another manner, such as landfill or incineration. If the concentration of any pollutant exceeds the Table 3 Pollutant Concentration, the annual and cumulative pollutant additions to specific land application sites for all nine metals must be submitted with the annual report¹.

M. Biosolids Nutrient Monitoring

DEQ requires biosolids be monitored for nutrients and other chemical parameters [OAR 340-050-0035(2)(a)]. Data on nutrient concentrations, specifically nitrogen, is used to determine compliance with agronomic loading rates. *Please attach analytical laboratory reports for nutrient monitoring.*

1. For each of the collected samples identified in Section K, report the concentration for the eight nutrients and other parameters listed. Please report all concentrations as mg/kg on a dry weight basis. If a pollutant concentration is non-detect, please report the value using the less-than symbol followed by the reporting limit. For example <0.0010 should be reported for a parameter that is non-detect where the reporting limit is 0.0010.

N. Biosolids Pathogen Reduction Monitoring and Records

DEQ requires data to determine compliance with pathogen reduction [OAR 340-050-0035(6)(c)]. *Please attach supplemental data on pathogen reduction*.

1. Please identify the pathogen reduction alternatives used to produce Class A or Class B biosolids. If more than one alternative was used, multiple selections may be made. For Class A biosolids, identify whether biosolids were monitored for fecal coliform or salmonella as well as the Class A pathogen reduction alternative.

O. Biosolids Vector Attraction Reduction and Records

DEQ requires data to determine compliance with vector attraction reduction [OAR 340-050-0035(6)(c)]. *Please attach supplemental data on vector attraction reduction*.

1. Please identify the options used to achieve vector attraction reduction. If more than one option was used, multiple selections may be made.

P. Violations of 40 CFR §503 or OAR Chapter 340 Division 50

OAR 340-050-0035(6)(e) requires the permittee to provide "a detailed description of any violation of 40 CFR §503 or OAR Chapter 240, Division 50 and remedial actions to prevent the recurrence of similar violations in the future.

1. Please indicate (Y/N) if any violation of 40 CFR §503 or OAR 340-050 occurred during the reporting period. If you received a Warning Letter or other enforcement action from DEQ on your biosolids management program during the reporting period, you should answer "Yes" and provide a detailed description. Please attach additional documentation as necessary.

Q. Summary of Part II Attachments

- 1. DEQ requests the following information be submitted with Part II of this report:
 - a. Analytical laboratory reports for pollutant monitoring showing results. No lab QA/QC documents

¹ A report on the annual and cumulative pollutant loading rates is required for as long as the facility continues use any site that has received biosolids exceeding the Table 3 values—even if future pollutant concentrations fall below the Table 3 values.

- b. Analytical laboratory reports for nutrient monitoring showing results. No lab QA/QC documents
- c. Documentation on demonstrate pathogen reduction
- d. Documentation on Vector Attraction Reduction (VAR)
- 2. The following information is required if pollutant concentrations in land applied biosolids exceed the Table 3 concentrations in 40 CFR §503.13:
 - a. Annual and cumulative pollutant addition to land application sites
- 3. The following information may be submitted with this report:
 - a. Additional documentation on biosolids production or disposition
 - b. Additional documentation of biosolids sampling
 - c. Additional information on changes to solids handling or land application site management
 - d. Additional information on biosolids violations and remedial actions
 - e. Other information. Please identify.

R. Signature of Legally Authorized Representative

OAR 340-050-0035(3) and 40 CFR §503.17 require the biosolids preparer to maintain records with a certification statement that biosolids were prepared as required by law. The report must be signed by a person legally authorized to represent your treatment facility. See definition of Legally Authorized Representative under Section L.



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Instructions for Part III: Biosolids production and quality

Required for all facilities that land applied Class B biosolids.

S. Land Application Site Information

DEQ requires information be submitted in the annual report that is adequate to demonstrate that solids were applied within agronomic loading rates and other required site management practices.

- 1. For each site on which biosolids were land applied during the reporting period, please provide the following information. If needed, please attach additional sheets to include all land application sites. You may provide any additional information on land application activities at the sites to demonstrate that land application was in compliance with all permit requirements.
 - a. The site ID. This should generally correspond to the site name on your DEQ site authorization approval letter.
 - b. The location of the site by the Public Land Survey System, which uses the township, range, section, and tax lot. This information should correspond to that on your DEQ site authorization approval letter.
 - c. The crop or vegetation grown on the property.
 - d. The quantity of nitrogen applied to the site as biosolids in lbs N/ac.
 - e. The total quantity of biosolids land applied in dry tons/ac.
 - f. The total area of the site receiving biosolids in acres.
 - g. Indicate if biosolids were applied to the field during the previous year.
 - h. If soil testing was done, please check the box "Soil test" and attach results to the report.

T. Summary of Part III attachments

- 1. If Part III of the report is completed in full and all land application sites have been reported, no additional information is required.
- 2. When necessary, DEQ requests the following additional information be submitted with the report:
 - a. Reporting forms for additional sites
 - b. Analytical results from soil testing
- 3. The following information may be submitted with this report:
 - a. Additional information necessary to demonstrate that land application occurred as required under your permit, including the land application plan and site authorization letters.
 - b. Other information, as appropriate. If other information is submitted, please identify.

U. Signature of Legally Authorized Representative

OAR 340-050-0035(3) and 40 CFR §503.17 requires the biosolids land applied to maintain records with a certification statement that Class B biosolids were land applied as required by law. The report must be signed by a person legally authorized to represent your treatment facility. See definition of Legally Authorized Representative under Section L.