

State of Oregon Department of Environmental Quality 700 NE Multnomah St. Suite 600, Portland, OR 97232

Recycled Water Annual Report

Instructions for Part I: Recycled water production and disposition

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 and use of recycled water. DEQ requests the permit holder submit information on activities during the previous year by the date identified in your permit. You must submit two copies of the report as directed below.

The annual report is in two parts:

- Part I: Recycled water production and disposition.
- Part II: Recycled water sampling and monitoring.

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 (<u>heins.pat@deq.state.or.us</u>) or hard copy:

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

A. Reporting Period

1. The annual report is due to DEQ by the date identified in your permit and provides information on recycled water 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. This is also on the cover page of your permit.

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:"

D. Contact Information

DEQ uses the contact information for correspondence with the facility on their recycled water program.

1. Provide full contact information for the responsible official at the treatment facility. The responsible official 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.

Instructions for Recycled Water Annual Report (last updated:10/26/2018)

2. Provide full contact information for the recycled water contact at the facility. If the recycled water 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 recycled water operations. This person often has the most direct knowledge of information in the report. DEQ will contact the recycled water contact if there are questions on the technical content of the report.

E. Recycled Water Treatment Processes

In addition to helping DEQ provide technical assistance to your program, information on recycled water treatment processes supports efforts to identify national and regional trends in recycled water management and improve beneficial reuse operations. Organizations, such as the Association of Clean Water Agencies (ACWA) 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 recycled water land application programs.

1. Identify the various recycled water treatment technologies at your facility. If a technology is not listed, please check "other" and identify the type of technology used. Check as many as apply.

F. Recycled Water Sampling and Production

Recycled water must be sampled and monitored to demonstrate compliance with your permit. The sampled recycled water must be representative of the treatment process(es) and characterize the quantity and quality of recycled water produced. The minimum sampling frequency is based on the quality of recycled water produced; however, additional samples may be required to adequately characterize different treatment processes. For example, a facility that produces class C recycled water must sample a minimum of once per week; however, if the facility produces more than one class of recycled water, additional samples may be required to meet the requirement that samples be representative. You will report both sets of information in this section.

- 1. The minimum recycled water sampling frequency is based on the quality of recycled water produced. Please select the appropriate testing frequency based on the class of recycled water produced at your facility during the reporting period. Mark all that apply.
- 2. Please provide the volume of each class of recycled water produced by your facility during the reporting period.

G. Summary of Attachments

- 1. DEQ requests the following information be submitted with this report:
 - a. Additional copies of the tables in Part II of the report to present the summary data for all recycled water produced at your facility during the reporting period.
 - b. Analytical laboratory reports from recycled water monitoring showing results. No laboratory QA/QC documents.
- 2. Example of documentation held by the facility and made available upon request:
 - a. Additional land application site information (irrigation schedule, maintenance issues, crop harvest data)
 - b. Daily irrigation notes and records
 - c. Field nitrogen loading calculations
 - d. Daily or hourly sampling results

H. 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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Recycled Water Annual Report Instructions for Part II: Sampling and Monitoring Summary

I. Recycled Water Classification

Recycled water must be sampled and monitored to demonstrate compliance with your permit. The sampled recycled water must be representative of the treatment process(es) and characterize the quality of recycled water produced. The minimum sampling frequency is based on the class of recycled water produced; however, additional samples may be required to adequately characterize each of the classes of water produced. For example, a facility that produces Class B water must sample for total coliform three times a week; however, if the facility also produces Class A recycled water, additional samples are required to meet the minimum sampling frequency (daily coliform and hourly turbidity). You will report both sets of sampling data in this section. Use additional copies of these tables to report data for each class of recycled water produced at your facility.

Provide the summary of the data collected in the appropriate field in the table. If you do not sample for an identified parameter leave the field blank. For example if you only produce Class C recycled water provide the summary data for total coliform but you do not need to provide hourly turbidity or *E. coli* data. *Be sure to attach analytical laboratory reports showing the sampling results. Do not include the laboratory's QA/QC documentation.*

J. Recycled Water Characterization

Your permit or site authorization may identify additional monitoring requirements for your recycled water characterization. This table is provided to summarize this data. Leave the columns blank if you do not sample for a given parameter.

K. Recycled Water Nutrient Monitoring

If your recycled water is used for irrigation, it is critical to ensure you are not over applying nutrients to the soil. To verify your application rates, nutrient monitoring is necessary. Your permit may require specific nutrient monitoring. This table provides the locations to report your recycled water nutrient monitoring. *Please attach analytical laboratory reports for nutrient monitoring showing the results only. Do not include the laboratory's QA/QC documentation.*

L. Recycled Water Application

DEQ requires information be submitted in the annual report that is adequate to demonstrate that recycled water was used as specified in the recycled water use plan. If the recycled water was used for irrigation, the information needs to verify it was applied within agronomic loading rates and other required site management practices.

- 1. For each site on which recycled water was used during the reporting period, please provide the following information. If needed, please attach additional sheets to include all recycled water use 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 name. This should generally correspond to the site name on your DEQ site authorization approval letter or your recycled water use plan.
 - b. The class of recycled water used at this site.
 - c. The use the recycled water was applied. If the recycled water was used to irrigate a crop identify the vegetation grown on the property. Such as "wheat", "grass seed" "pasture" for animal grazing, or "ornamental" for lawns and general landscape vegetation.
 - d. If the recycled water was used for irrigation identify the area irrigated in acres. If the recycled water was used for other purposes leave this blank.
 - e. If the recycled water was used for irrigation identify the agronomic rate for nitrogen (quantity of nitrogen needed for productive crop growth as identified in OSU fertilization guide) in lbs N/ac. If the recycled water was used for other purposes leave this blank.

- f. If the recycled water was used for irrigation identify the method used for soil moisture monitoring to ensure the recycled water is not over applied. Such as soil block, tensiometers, piezometers, hand method. If the recycled water was used for other purposes leave this blank.
- g. If the recycled water was used for irrigation identify all additional nitrogen sources. These would include; commercial fertilizer, biosolids, manure, nitrogen in groundwater used for supplemental irrigation, residual nitrogen remaining in the soil profile. If the recycled water was used for other purposes leave this blank.
- h. Identify the total number of days the recycled water was used for each month at the identified site.
- i. Identify the total volume of recycled water used (in gallons) at the identified site.
- j. If the recycled water was used for irrigation, provide the average daily loading for each month. The daily loading is calculated using the formula below. If the recycled water was used for other purposes leave this blank.
- k. If the recycled water was used for irrigation, provide the maximum daily loading for each month. The daily loading is calculated using the formula below. If the recycled water was used for other purposes leave this blank.
- 1. Provide the annual values in the bottom row of the table.

 $Daily \ Loading \ (inches) = \frac{\text{Volume Applied (gallons)}}{\text{Area (acres) } x \ 27,152 \ (\frac{gallons}{acre \ inches})}$