



Milwaukee Metropolitan Sewerage District
260 W. Seeboth St.
Milwaukee, WI 53204-1446

Discharge Factor & Waste Strength Certification Water Balance Form

Instructions

Determining the volume of each type of wastewater discharged to combined or sanitary sewers enables the District to accurately assess sewer user charges and ensure that you receive all reductions in user charges for water losses.

The instructions below explain each of the sections on the form and the numbers correspond to the numbered lines in each section.

Certification

The person signing the certification must be the person identified in line A5. Signatures may be electronic.

Section A. General Information

1. Provide the official corporate or business name.
2. Provide a division name, if applicable.
3. Identify the location of the facility.
4. Provide a mailing address, if different from the facility address.
5. Identify the highest ranking local facility representative, such as a corporate President, Vice-President or Secretary; Plant Manager or General Manager; General Partner; or Owner.
6. If different from the person in line 5, identify someone with technical knowledge of how water is used.
7. Briefly describe the type of business.
8. Provide the facility's Standard Industrial Classification (SIC) or North American Industrial Classification System Code (NAICS). The United States Office of Management and Budget defines these codes. Classification manuals are available at public libraries. Various sites on the internet provide classification information. Various tax or census forms or U.S. Occupational Safety and Health Administration reports will show the code that your facility has used in the past.
9. Provide the number of full-time-equivalent employees. For example, count two employees each working half-time as one full time equivalent employee.
10. In brief and general terms, describe the operations that discharge process wastewater. Examples include parts washing, electroplating, and equipment cleaning.
11. In brief and general terms, describe wastewater treatment equipment. Examples include oil skimming, metals precipitation, ion exchange, and pH adjustment.
12. Identify the number of sewers that connect the facility to combined or sanitary sewer system. Sewers may combine on the facility's property before connecting to the public sewer. In this case, count the number of sewers at the point that they leave a building. Do not count sewers that connect to a storm sewer system.

Section B. Water Consumption

1. List all the sources that provide water (municipality, private well, steam, or other sources).
2. List all municipal water account numbers. Water bills or the municipal water department can provide this information.
3. Provide information for total water consumption information for the most recent four consecutive quarters for which you have information. These four quarters do not need to be in the same calendar year. Include water provided by a municipality in lines a through d. If the municipality reports water consumption to you in hundreds of cubic feet, enter this value in the center column and then multiply it by 0.748 to obtain thousands of gallons and enter this value in the right column. Sum total purchases in line e. If you obtain water from wells, steam condensate, raw materials, or other sources, enter the total annual volume in line f. Add lines e and f to get the total annual consumption and enter this result in line g and in Section E, line 1.

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Section C. Discharges to Sanitary or Combined Sewers

1. Connection number: The number of laterals leaving from the physical building out to the municipal sanitary sewer. For each connection, estimate the annual volume of each type of wastewater discharged.
2. Non-contact cooling: Water discharges from air compressors, welders, boiler blowdown and bleed-off, condensates from air conditioner, reverse osmosis permeate/concentrate, and or geothermal discharges.
3. Domestic: Domestic wastewater is from toilets, bathroom and lunch room sinks, and the cleaning of these areas. One option to calculate this flow is to use 2.3 gallons per employee-hour, 20 gallons per full-time-equivalent employee per day, or 5,120 gallons per full-time-equivalent employee per year.
4. Process: Process wastewater is the water that comes in contact with raw materials, intermediate product, final product, or waste product during manufacturing or processing.
5. The sum for each outfall.
6. The sum of all outfalls in line 5.

To obtain reasonable estimates, an iterative process may be necessary. Various sources may provide information, including, but not limited to, water meters, equipment specifications, engineering calculations, production records, or extrapolations from short-term measurements.

Section D. Losses

1. Estimate the annual volume of water NOT discharged to a combined or sanitary sewer.
2. Estimate or report using water meter data, equipment specifications, engineering calculations provide the evaporation (usually facilities with boiler, chiller and or swimming pool).
3. Lawn irrigation: Estimate or report using water meters, equipment specifications, engineering calculations to provide water volume irrigation.
4. Incorporated into product: Water used to make product, (e.g. beverages water in canned fruits, cement/concrete mixed).
5. Hauled away: Water that is hauled away from the facility. (i.e., for treatment or for irrigation).
6. Other: Water loss from broken water pipe and/or meter error.
7. Total: The sum of all losses.

Section E. Water Balance

1. Enter the value of the total consumption: This value comes from section B, line 3g.
2. Enter the value of total discharges and losses: This value is the sum section C, line 6 and section D, line 7. Total consumption must equal the sum of total discharges and total losses.