

## IWPP Microbrewery & Brewpub Program

### Standard and General Permit Comparison

The Industrial Waste & Pollution Prevention (IWPP) Section issues Standard, General, Liquid Waste Hauler, and Special Discharge Permits to industrial users of the Metropolitan Disposal System. Microbreweries and brewpubs are subject to either a Standard or General Permit. The following chart compares Standard and General Permit requirements and conditions.

| Permit Types:  | Standard Industrial Permit  | General Discharge Permit  |
|--|---|---|
| Need for permit based on:  | <ul style="list-style-type: none"> <li>Discharge volumes</li> <li>Wastewater characteristics</li> <li>Treatment requirements</li> <li>Compliance with local and federal pretreatment standards</li> </ul> | <ul style="list-style-type: none"> <li>Beer production; 500 BBLs/year or more</li> <li>Annual discharge volume less than 1,000,000 gallons</li> <li>Compliance with local pretreatment standards (pH and metals)</li> </ul> |
| Annual Permit Fee  | Standard annual permit fee*   | General annual permit fee*  |
| Reporting Requirements   | 1 - 4 times per year  | 1 time per year   |
| Best Management Practices  | Required to meet conditions specified in permit   | Required to follow best management practices specified in permit  |
| Sampling & Analytical Requirements: <ul style="list-style-type: none"> <li>Specified in Permit</li> <li>Conducted &amp; paid for by Permittee</li> </ul> | Minimum of 2 samples/hour over the course of a normal operating day, 1 - 4 times per year or more when deemed necessary due to wastewater variability and/or compliance issues                            | Not required (Optional)   |
| Sampling Points  | Must meet requirements specified in permit  | Must meet requirements specified in permit  |
| Strength Charge Based on:  | Sampling and volume data input into the Strength Charge formula (See p. 2)  | Production-Based Strength Charge (See p. 2)   |
| Strength Charge Determined:  | Each reporting period   | Once per year   |
| Strength Charge Invoices Issued:   | Following reporting period due dates: January 31, April 30, July 31, and October 31   | Once per year following report due date: January 31   |
| Sewer Availability Charge (SAC)  | SAC volume review done once every reporting period. Every 1,000 gallons discharged over the SAC baseline is subject to an Industrial Capacity Charge.   | SAC volume review done once per year. Every 1,000 gallons discharged over the SAC baseline is subject to an Industrial Capacity Charge.   |

\*For current permit fees see:

<https://metro council.org/Wastewater-Water/Services/Industrial-Waste/Industrial-Waste-Rates-Fees.aspx>

## Strength Charge Formula

Strength Charge is based on the volume of wastewater from the Permittee and the concentration of COD and TSS above the strength charge threshold (COD=500 mg/L and TSS=250 mg/L). Standard strength charge is calculated using the formula below. The Strength Charge formula only affects COD and TSS above domestic values.

|                          |  |
|--------------------------|--|
| <b>Formula</b>           | Strength Charge = $[V \times (TSS - 250) \times (8.34) \times (TSS \text{ Rate}^*) + V \times (COD - 500) \times (8.34) \times (COD \text{ Rate}^*)]$  |
| <b>Strength Charge</b>   | = Strength Charge in dollars   |
| <b>V</b>                 | = Volume in million gallons per reporting period   |
| <b>TSS</b>               | = Total suspended solids (TSS) >250 in mg/l. If TSS is <250 mg/l, use 250 mg/l.  |
| <b>COD</b>               | = Chemical oxygen demand (COD) > 500 in mg/l. If COD is < 500 mg/l, use 500 mg/l.  |
| <b>250</b>               | = TSS threshold value in mg/l  |
| <b>500</b>               | = COD threshold value in mg/l  |
| <b>8.34</b>              | = Conversion factor for converting mg/l and gallons to pounds  |
| <b>TSS and COD Rates</b> | For current TSS and COD rates, see <a href="https://metro council.org/Wastewater-Water/Services/Industrial-Waste/Industrial-Waste-Rates-Fees.aspx">https://metro council.org/Wastewater-Water/Services/Industrial-Waste/Industrial-Waste-Rates-Fees.aspx</a> |

## Production-Based Strength Charge

The Production-Based Strength Charge was developed in 2015 using volumes, TSS and COD data gathered over an 11-year period from the two largest craft breweries in the seven-county metro area. The average data from each brewery was entered into the strength charge formula to determine an average strength charge for each. The average strength charges were then divided by the average annual production for the same time period as measured in beer barrels (bbls). The two calculated production-based strength charges were then averaged to determine the production-based rate.

The Microbrewery Production-Based Strength Charge was implemented in 2016 and is adjusted annually based on the percentage increase in TSS and COD rates.