# Overview

## Purpose

This application is to be used for new industrial discharge permit applicants or for modifications and renewals to existing industrial discharge permits.

The purpose of this application is to gather information from industrial users (IU) who plan to discharge process wastewater to the Fort Collins Publicly Owned Treatment Works (POTW). The information will be used by the City of Fort Collins Industrial Pretreatment Program (IPP) to understand the nature of the business and characteristics of process wastewater generated from the IU’s business activities.

IPP staff will determine, based on the application process, if an Industrial Discharge Permit is necessary. Permits are issued in accordance with Fort Collins Municipal Code (Code), under Chapter 26. ARTICLE IV. Division 5, and federal regulations under 40 CFR, Chapter 1, Subchapter N.

Discharge of wastewater to the POTW from a Significant Industrial User (SIU) without an Industrial Discharge Permit is a violation of Code and federal regulations.

## General Application Requirements

This application must be completed in its entirety, reviewed, and signed by an authorized representative as being true, accurate, and complete. This application requires a significant amount of information regarding the business and its waste generation and disposal activities, therefore information provided shall be gathered and reported by a party qualified to accurately complete the application.

All questions/blanks must be filled out completely and all additional documentation must be included. Incomplete applications may be returned. If you do not have an answer for a specific question or field, indicate as “Unknown” or “To Be Determined”. If a section does not apply to the business operations, indicate as “Not Applicable”. If you need more space for any of the sections contained in this application, attach additional pages as necessary.

If the applicant claims that information provided in this application are entitled to protection as trade secrets and are confidential, it must adhere to Section 26-321 of Fort Collins Municipal Code.

## The Permitting Process

Once the completed Industrial Discharge Permit Application has been received, the application will be reviewed by IPP staff. You will be notified if any additional information is necessary.

The actual time required to process a permit application depends on the completeness of the information provided, level of detail that has been included, timeliness of follow-up communication, and compliance with any additional requirements.

If there are any questions regarding the completion of this application, email IndustrialPretreatment@fcgov.com.

### New Applicants

The application must be submitted at least 90 days prior to commencement of anticipated discharge. Any new categorical industrial user (CIU) must also submit a Baseline Monitoring Report (BMR) at least 90 days prior to commencement of anticipated discharge. This Industrial Discharge Permit Application includes information that may be used in the BMR but shall not be considered as a substitute. It is the applicant's responsibility to ensure that all requirements of the BMR are met.

An inspection of the facility will be performed by IPP staff to confirm the information supplied in the permit application is accurate.

### Renewal or Modification Applicants

For existing industrial discharge permit holders, applications must be submitted 60 days prior to the permit expiration date or the anticipated start-up of proposed modification.

# Definitions and Acronyms

**Authorized Representative** – person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g. the plant manager, superintendent or person of equivalent responsibility. 40 CFR Part 403.12.l. defines signatory requirements for Industrial User reports, also described in Appendix A of this application.

**Baseline Monitoring Report** – a requirement of new categorical industrial users to submit 90 days prior to discharge. Requirements are listed at 40 CFR 403.12(b)(1)-(5).

**Batch Discharge –** a discharge of process wastewater that is a controlled discharge of a discrete, contained volume of process wastewater.

**Categorical Industrial User (CIU)** – an industrial user that operates in a specific industrial category as defined by the United States Environmental Protection Agency. Categorical industrial users are defined in 40 CFR Parts 405-471.

**CDPHE** – Colorado Department of Public Health and Environment. The regulatory agency for the State of Colorado.

**Continuous Discharge –** a discharge of process wastewater that occurs without interruption during the operating hours of a facility, except for infrequent shutdowns for maintenance, process changes, or similar activities.

**Effluent** – treated, partially treated, or untreated process wastewater that is discharged from the premises into the POTW.

**Industrial Pretreatment Program** – the Industrial Pretreatment Program controls the discharge of wastewater pollutants from industrial and commercial sources to: protect the quality of receiving water and biosolids, prevent interference with wastewater treatment and infrastructure, and protect worker health and safety.

**Industrial User (IU)** – a user who discharges to the POTW.

**Influent** – process wastewater that is flowing into a wastewater treatment system.

**NAICS/SIC** – North American Industrial Classification System/ Standard Industrial Classification

**Non-process wastewater** – wastewater that does not come into direct contact with the products manufactured or produced. *For example: cooling tower water, boiler blowdown, sanitary, etc.*

**NPDES Permit** – National Pollutant Discharge Elimination System Permit means a permit issued pursuant to Section 402 of the Clean Water Act.

**Outfall** – a physical location(s) where wastewater is discharged and where limits and monitoring requirements may be applied.

**POTW** – Publicly Owned Treatment Works in the scope of this permit is the City of Fort Collins sewage collection system and water reclamation facilities designed to treat domestic sewage.

**Process wastewater** – water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

**Significant Industrial User (SIU)** – is one or a combination of the following:

* any industrial user that is a categorical industrial user;
* any industrial user that discharges on average 25,000 gallons per day or more of process wastewater to the POTW or contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW;
* any industrial user as designated by the control authority as having a reasonable potential for adversely affecting the POTW’s operation or for violating any pretreatment standard or requirement.

**Zero Discharge –** process wastewater that is prohibited from being discharged to the sanitary sewer.

# Table of Contents and Completion Checklist

Use the Table of Contents below as a checklist to verify that all information and documentation is provided. Include this checklist when submitting the completed application.

**I. Facility and General Information 6** [ ]

 A. Industrial User Contact Information [ ]

 B. Application Type [ ]

 C. Exterior Site Layout Diagram [ ]

 D. Interior Site Layout Diagram…… [ ]

**II. Business Activities 8** [ ]

 A. Business Activity Selection – Table 1 [ ]

 B. Narrative Description [ ]

 C. Other Environmental Permits [ ]

 D. Facility Operation Schedule [ ]

**III. Industrial Process and Pretreatment Information 10** [ ]

 A. Process Metrics [ ]

 B. Process Wastewater Generation [ ]

 C. Pretreatment System [ ]

 D. Process Flow Schematic [ ]

**IV. Effluent Characteristics 12** [ ]

 A. Flows [ ]

 1. Process Flows [ ]

 2. Non-Process Flows [ ]

 B. Pollutant Concentrations [ ]

 C. PFAS Questionnaire [ ]

**V. Other Waste Generated 15** [ ]

**VI. Certification 15** [ ]

**Appendices**

 A. Authorized Representative Form [ ]

 B. Exterior Site Layout Diagram Example [ ]

 C. Interior Site Layout and Plumbing Diagram Example [ ]

 D. Process Flow Diagram Example [ ]

 E. Pretreatment System Description Examples [ ]

## I. Facility and General Information

### A. Industrial User Contact Information

Facility name and physical address of facility discharging wastewater

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Business name and mailing address, if different from above.

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Corporate contact, if applicable (name, title, phone number, email)

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Primary contact regarding application (name, title, phone number, email)

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Authorized Representative(s)
*For permit renewal or modification applications, list the names of current authorized representatives, including delegates, below. If you are a new applicant or are an existing permit holder and have new authorized representatives or delegates to add, complete the Authorized Representative Form in Appendix A of this application.*

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### B. Application type (select one)

[ ]  New

[ ]  Modification

[ ]  Renewal

### C. Exterior Facility Site Layout Diagram

An exterior facility site layout diagram is required to be submitted with this application. The purpose of the facility site layout diagram is to describe the business’s property boundary and facility building location(s). Appendix B contains a list of requirements and an example.

### D. Interior Site Layout Diagram

An interior site layout diagram is required to be submitted with this application. The purpose of the interior site layout diagram is to identify interior features within your facility. Appendix C contains a detailed list of requirements and an example.

## II. Business Activities

### A. Business Activity Selection

Table 1 contains business activities that may have specific pretreatment regulations. Select the categories in the table that apply to your business. If none of the options apply, select "Other” and specify. Multiple selections may apply. *For example, Brewery, Food Service, and Laboratory.*

Provide the primary NAICS and/or SIC code your business operates under:

Table 1: Business Activities. *Categorical Industrial User regulatory references listed where applicable.*

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| --- | --- |
|[ ]  Aluminum Forming – 40 CFR 467 |[ ]  Metal Molding and Casting – 40 CFR 464 |
|[ ]  Auto Repair/Maintenance |[ ]  Nonferrous Metal Forming and Metal Powders – 40 CFR 471 |
|[ ]  Battery Manufacturing – 40 CFR 461 |[ ]  Nonferrous Metal Manufacturing – 40 CFR 421 |
|[ ]  Car Wash |[ ]  Oil and Gas Extraction – 40 CFR 435 |
|[ ]  Carbon Black Manufacturing – 40 CFR 458 |[ ]  Organic Chemicals Manufacturing – 40 CFR 414 |
|[ ]  \*Centralized Waste Treatment – 40 CFR 437 |[ ]  Paint Formulating – 40 CFR 446 |
|[ ]  Coil Coating – 40 CFR 465 |[ ]  Paving and Roofing Materials (Tars and Asphalt) – 40 CFR 443 |
|[ ]  Concentrated Animal Feeding Operations – 40 CFR 412 |[ ]  Pesticides Chemicals – 40 CFR 455 |
|[ ]  Copper Forming – 40 CFR 468 |[ ]  Petroleum Refining – 40 CFR 419 |
|[ ]  Electric and Electronic Components Manufacturing – 40 CFR 469 |[ ]  Pharmaceutical Manufacturing – 40 CFR 439 |
|[ ]  \*Electroplating – 40 CFR 413 |[ ]  Porcelain Enameling – 40 CFR 466 |
|[ ]  Fermentation/Brewery/Distillery/Winery |[ ]  Printed Circuit Board Manufacturing – 40 CFR 433/413 |
|[ ]  Fertilizer Manufacturing – 40 CFR 418 |[ ]  \*Pulp, Paper, and Fiberboard Manufacturing – 40 CFR 430 |
|[ ]  Food Service – Restaurant/Cafeteria |[ ]  Rubber Manufacturing – 40 CFR 428 |
|[ ]  Glass Manufacturing – 40 CFR 426 |[ ]  Soap and Detergent Manufacturing – 40 CFR 417 |
|[ ]  Grain Mills – 40 CFR 405 |[ ]  Steam Electric Power Generating – 40 CFR 423 |
|[ ]  Ink Formulation – 40 CFR 447 |[ ]  Timber Products – 40 CFR 429 |
|[ ]  Inorganic Chemicals Manufacturing – 40 CFR 415 |[ ]  Transportation Equipment Cleaning – 40 CFR 442 |
|[ ]  Iron and Steel – 40 CFR 420 |[ ]  Waste Combustors – 40 CFR 444 |
|[ ]  Laboratory  |[ ]  Other – describe       |
|[ ]  \*Leather Tanning and Finishing – 40 CFR 425 |  |  |
|[ ]  Metal Finishing – 40 CFR 433 |  |  |
|[ ]  Metal Products and Machining |  |  |

\*indicates industry classifications with a potential for discharges containing PFAS per EPA.

### B. Narrative Description:

#### For new applicants

Based on business activities selected in Table 1, describe what your business manufactures or produces from raw materials to final product using the space below. *Example: Our business brews craft beer. We bring in malt, hops, grain, yeast, and other flavorings to ferment and brew beer. We package our product in cans and kegs for distribution.*

#### For renewal or modification applications

Describe any anticipated changes to your manufacturing and production processes, if applicable. Include any changes to chemical usage, discharge volume, and pollutant concentrations, etc.

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### C. Other Environmental Permits

Enter the type of permit and the permit number of any current environmental permits that have been issued to the facility. Examples include National Pollutant Discharge Elimination System (NPDES) Permits, Industrial Stormwater Permits, hazardous waste generator number, or any other permits or notices issued by CDPHE.

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| --- | --- | --- |
| **Permit Type** | **Issued By** | **Permit Number** |
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### D. Facility Operation Schedule

Provide the facility’s hours of operations, number of staff, and shifts of operation.

*For example: 7 a.m. – 10 p.m., Monday to Friday, 25 staff members, two 8-hour shifts*

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## III. Industrial Process and Pretreatment Information

### A. Process Metrics

Based on the business activities from Table 1, document the annual production metrics for the most recent year, including units. For new applicants, provide anticipated annual production metrics. *For example, produced 20,000 barrels of beer in 2023.*

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Is your business forecasting growth in the next 3 years? [ ]  Yes [ ]  No

If yes, provide anticipated growth estimates on your production metrics.

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### B. Wastewater Generation

List all areas where process wastewater is generated at your business. Be as specific as possible. *Example: Third rinse from a plating bath, mopping of production floor, etc.*

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### C. Pretreatment System

Process wastewater may contain pollutants that need to be treated prior to discharge. The purpose of a pretreatment system is to pre-treat process wastewater to control or remove pollutants to meet regulatory limits. Some examples of pretreatment systems include pH neutralization, and metal removal by filtration or flocculation, etc.

#### Pretreatment System(s) Description

Either as a narrative or as a diagram (see Appendix E for an example of both), describe your pretreatment system(s). Include information pertaining to all pretreatment equipment and treatment technologies, including items such as tanks (with capacities), pumps (with flow rates), filters, chemicals used, flow monitors, pH probes, sample location, and outfall location(s).

*For a modification application*, in addition to the requirement above, include any anticipated equipment and/or treatment technology changes.

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### D. Process Flow Schematic

A process flow schematic is required to be submitted with the application. The purpose of this schematic is to visually show the flow of the manufacturing processes. Appendix D contains a list of requirements and an example.

## IV. Effluent Characteristics

This section requests information on the characteristics of process wastewater effluent, including discharge type, volume of discharge, and pollutant concentrations.

### A. Flows

*1. Process Flows*

What is your current/anticipated effluent discharge type?

[ ]  Batch [ ]  Continuous [ ]  Zero-Discharge

If there are multiple discharge locations, please describe:

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Current or anticipated times and duration of discharge:

Based on the discharge type, describe your flow rates and flow variability. If zero-discharge was selected, describe how you are preventing process wastewater from discharging.

*For modifications applications*, if flow characteristics are anticipated to change, describe any changes that would impact flow rates, discharge types, variability, etc. If no changes are being proposed to flow characteristics, and this application is solely to renew permit terms and conditions, no additional information is needed.

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#### 2. Non-process flows

Are there any non-process wastewater flows (excluding sanitary) that discharge from the facility? *For example: boiler condensate, cooling tower blow down, backwash water, reject RO water.*

[ ]  Yes [ ]  No

If Yes, list the type of non-process wastewater flow, amount discharged, and location of discharge.

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### B. Pollutant Concentrations

Analytical data is required to be submitted as part of your application. See further instructions below.

#### New Permit Applications

For new applicants, analytical data for discharge must be provided for all parameters regulated under Section 26-340 of Fort Collins Municipal Code, in addition to BOD, TSS, Total Phosphorus, and Total Inorganic Nitrogen (the sum of ammonia, nitrate, and nitrite). If your business is a Categorical Industry (see Table 1 under Business Activities), you must also include analytical data required from the referenced regulation.

#### Permit Modifications

For modification applications, if characteristics of discharge are anticipated to change, provide analytical data or a reliable estimate of pollutant concentrations for each outfall.

#### *Permit Renewals*

If no changes are being proposed to existing production, pretreatment processes, or permitted outfalls, and this permit application is solely to renew permit terms and conditions, no analytical data is required to be submitted.

\*All sampling and analysis required shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, or otherwise approved by the EPA. Analysis of pH shall be completed within 15 minutes of sample collection.

### C. PFAS Questionnaire

Per- and polyfluorinated substances (PFAS) are man-made chemicals that are resistant to heat, water, and oil and have been used for decades in industrial applications and consumer products. Common sources are non-stick coatings, paper food packaging, water/stain-resistant fabrics, floor cleaners, industrial chemicals, and firefighting foam to name a few. To adequately fill out this part of the questionnaire please contact vendors and check SDS’s to help determine if PFAS is in any products used onsite.

1. Are there any fluorinated chemicals used in the facility? Look for “fluoro” in the SDS/MSDS chemical listing or product name, e.g. “fluorinated surfactant(s)” or “organic fluorosulfonate.”

[ ]  Yes [ ]  No

2. If you answered yes to Question 1, does your facility discharge PFAS containing wastewater to the sanitary sewer?

[ ]  Yes [ ]  No

3. Does your facility have a fire suppression system? If yes, list the type of system and product names of the foams or other chemicals if used in the system.

[ ]  Yes [ ]  No

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4. If you answered Yes to any of the questions above, list the source(s) of PFAS, if known.

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## V. Other Waste Generated

Describe other wastes generated from your production and/or pretreatment processes and describe means of removal. Waste may include waste sludges, solids, used oils, spent solutions, hazardous wastes, etc.

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## VI. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

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Name Title

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Signature\* Date

*\*The person signing the certification statement must do so with indelible ink and must be an Authorized Representative or be a delegated certifying official. An Authorized Representative and/or Delegation for Authorization Form (Appendix A) shall be submitted with this application or be on file with the Industrial Pretreatment Program.*

# APPENDIX A – Authorized Representative Form

The City of Fort Collins Industrial Pretreatment Program (IPP) is required to have an authorized representative(s) on file for our Industrial User (IU) records. The City’s IPP governing ordinance requires that all wastewater discharge applications and self-monitoring reports be signed by an *Authorized Representative of the Industrial User*. Please refer to the following definition per EPA 40 CFR Part 403 regulations:

An *“Authorized Representative of the Industrial User”* may be:

1. President, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.
2. Manager of one or more manufacturing, production, or operating facilities, but only if the manager is:
	1. Is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with laws and regulations;
	2. Can ensure that necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements;
	3. Has been assigned or delegated the authority to sign documents, in accordance with corporate procedures.
3. General partner or proprietor if the industrial user is a partnership or proprietorship.

The *Authorized Representative of the Industrial User* may also delegate other individuals to be authorized representatives to sign reports on their behalf, or in their absence. This authorization must be submitted in writing, and it must specify the individual(s) having responsibility for the overall operation of the facility from which the discharge originates or has overall responsibility for environmental matters for the company.

Complete the *Authorized Representative and/or Delegation for Authorization Form* on the following page.

## Authorized Representative and/or Delegation for Authorization Form

**Industrial User Information**

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| Company Name |  |       |

 Address

**Authorized Representative of the Industrial User**

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| Name |  | Title      |
| Signature |  | Date |

If delegating an authorized representative(s), please fill out the following:

**Delegated Authorized Representative**

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| Name/Position      |  | Signature |
| Name/Position      |  | Signature |
| Name/Position |  | Signature |

*\*The person(s) signing as an authorized representative must do so with indelible ink. Authorized representative(s) are delegated for the duration of permitted industrial discharge and are not limited to individual permit cycles. Representatives and delegates are valid until notification is made, by the industrial user, that authorization changes need to be made.*

# APPENDIX B – Exterior Site Layout Diagram Example



Provide a Facility Site Layout Diagram of the exterior portions of the facility. This diagram should clearly identify the location of the property line, site buildings, adjacent streets, any outdoor storage areas, any grease or sand interceptors exterior to the building, any on-site storm drain locations, any on-site sanitary or storm sewer manholes, the approximate location of the sanitary sewer tie-in(s), and any other pertinent information on the exterior of the site building.

Aerial photographs with added information may be used.

# APPENDIX C – Interior Site Layout and Plumbing Diagram Example



Provide a diagram of interior features of your facility. This diagram should clearly identify all process/manufacturing areas, all floor drains/trench drains, all sinks, restrooms, any other access points to the sanitary sewer, and any other pertinent information on the interior of all site buildings. Include how water and liquid chemicals are routed through the facility including direction of flow.

If a plumbing schematic is available, include with the application.

# Appendix D – Process Flow Diagram Example

Provide a simple line diagram that illustrates the nature and flow of your facility’s processes from raw materials to final product. Place particular interest on processes that generate wastewater and how they interface with your pretreatment system.

# Appendix E –Pretreatment System Description Examples

*Narrative Example:*

The pretreatment process operates as a batch treatment system. Process wastewater is collected in a 1000 gallon collection tank. After collection, flows are sent to a 500 gallon pH adjustment tank where neutralization chemicals, either 50% NaOH or 50% HNO3/H3PO4, are added to achieve set points. After pH adjustment, flow is sent to a 500 gallon Polymer Addition Tank for mixing and polymer addition. Flows are then sent to a 500 gallon Clarification Tank for flocculant to settle out. Solids settled from the Clarification Tank are removed for third party disposal. Effluent from the Clarification Tank is sent to a 500 gallon Final pH Adjustment Tank where pH is monitored and adjusted as needed to meet discharge set points. When effluent is within pH set points, flows are discharged through Outfall 001, with Flow and pH monitoring equipment to record monitoring data.

*Diagram Example:*

