

623 Return Church Road Seneca, South Carolina 29678 Phone (864) 972-3900 www.ojrsa.org

# Industrial Discharge Permit Application and Questionnaire Instructions

An Oconee Joint Regional Sewer Authority (OJRSA) Wastewater Discharge Permit allows your business to discharge industrial/commercial wastewater to the Coneross Creek Wastewater Treatment Facility in accordance with established local regulations.

To obtain a permit, you must complete fully a Wastewater Discharge Permit Application. Your completed application fulfills the requirement for submittal of a Baseline Monitoring Report (BMR) for dischargers subject to federal categorical pretreatment standards.

The application asks for a great deal of information on your business and its wastewater generation and disposal activities. A guide with instructions and examples is provided on the following pages help you in completing this application.

The Pretreatment Department has tried to make the application and instructions as clear and complete as possible, but they do not include many of the details of the local, state, and federal laws that dictate permit application requirements. If you need further information contact:

Allison McCullough, Pretreatment Coordinator Oconee Joint Regional Sewer Authority Industrial Pretreatment Department

Phone:864-972-3900Fax:864-972-3917 (fax)Email:allison.mccullough@ojrsa.org

Address: 623 Return Church Road Seneca, South Carolina 29678

### **General Information**

The following items are required for the application:

- Provide a cover letter (company letterhead) indicating the reason for the application.
- The application must be complete when it is submitted.
- No photo copies; only original and signed applications will be accepted.
- The Oconee Joint Regional Sewer Authority does not require an application fee.
- Answer all questions and include the required schematics and drawings. Incomplete applications will be returned.
- Indicate "N/A" if a section does not apply to your operations.
- If you do not have an answer for the requested information, indicate so and explain why.
- Type or print clearly all required information. If you need more space you may attach additional sheets for any section of the application.
- Provide the facility name as you would like it to appear on the discharge permit.
- Provide the physical location of the facility that is applying for the discharge permit.
- Provide the mailing address where correspondence from the Authority may be sent.
- Provide the name and contact information of someone that we may contact at all times for information concerning this application and facility.
- Properly print the official contact person's name and title on the application and then provide an original signature for the application.
- You can base most of your answers on the 3-year period prior to the application date and add any allowances for estimated growth over the next 5 years. Be careful not to underestimate.
- If you are applying for a permit before you begin discharging, you will be estimating the quantities requested in the permit application. You can base these estimates on your design engineer's specifications and on performances of similar industries or services.

### Section A: Industrial Wastewater Disposal

- 1. Please indicate if you are presently discharging into the Sewer System.
- 2. Indicate the purpose of this application.

<u>Permit Renewal</u> – Facility that currently has a permit and wants to renew it. <u>New Discharge</u> – If you (a) do not currently have a permit, or (b) currently have a permit but will be adding new wastestreams not covered on previous applications. <u>Transfer of Owner</u> – If there is a complete change in ownership. <u>Modification</u> – Bequesting a modification in your current permit manufacturing operations, shanges

<u>Modification</u> – Requesting a modification in your current permit, manufacturing operations, changes in pretreatment, etc.

- 3. Indicate the year and date of sewer connection (month and year). If you are proposing to connect to the sewer, please indicate that year and date.
- 4. Briefly describe all operations at the facility or activities employed by the facility (attach additional sheets if necessary).
- 5. Indicate applicable Standard Industrial Classification (SIC) codes for all processes.

<u>Standard Industrial Classification</u> (SIC) is a four-digit number used for statistical classification by the Federal Government. If you are unsure of your facility's SIC number, please consult with OJRSA's Industrial Pretreatment Coordinator.

Note: Publications of Standard Industrial Classifications (SICs) are available at the National Technical Information Service, Springfield, Virginia 22161 (<u>http://www.ntis.gov</u>). North American Industry Classification System (NAICS) is acceptable with provided documentation pertinent to the specific classification. A copy of NAICS can also be obtained at <u>http://www.ntis.gov</u>.

#### Section B: Sewer Information

- 1. Check all of the appropriate information for EXISTING business (sewer service) or proposed (NEW) business.
- 2. Check all appropriate information for additional questions.
- 3. Describe and indicate the number of sewer connections that your facility has (to the sanitary sewer system) and state the size of the sewer pipe connections (4-inch, 10-inch, etc.). Provide an estimate of flow being discharged from each sewer connection.
- 4. Provide a schematic flow diagram. The schematic flow diagram is a simple line drawing that illustrates the nature and flow of your plant's processes, placing particular emphasis on the processes that generate wastewater and their associated pretreatment systems. For sites already in operation, your diagram should also show any proposed changes in your processes. Describe these proposed changes. Your diagram should be no larger than 11 inches by 17 inches (11"x17").

### Section C: Business Activities

The industrial categories noted in Section C are specific manufacturing categories that determine National Categorical Pretreatment Standards promulgated by the EPA. For information concerning these industrial categories noted in Section C, view the following websites for assistance:

## http://cfpub.epa.gov/npdes/regs.cfm?program\_id=0 http://www.epa.gov/waterscience/guide/

If you have further questions, contact the OJRSA Pretreatment Coordinator.

### Section D: Water Supply

The purpose for Section D is to demonstrate a direct relation between the amount of water coming into your site each day and the amount that is used or discharged. All water sources must be balanced with water uses and allocated to specific discharge points.

- 1. Provide the type of potable or process water supply.
- 2. List each water meter by account name and number. If you have more than one water meter, list all of them.
- 3. List an average daily water usage for the previous year in gallons per day (gpd). Calculate all quantities for the past year and enter them in gallons per day (gpd). If there is a significant discrepancy between water received and wastewater discharged, state the reason for the difference on an attached sheet. The Water Balance covers the entire facility.
- 4. In this item, you will Identify how water is being used within your facility by completing the table. Details on each category are listed below:

<u>Contact Cooling Water</u> means water used for cooling which comes into direct contact with any raw product, intermediate product (other than heat) or finished product.

<u>Non-Contact Cooling Water</u> means water used for cooling which does not come into direct contact with any raw product, intermediate product (other than heat) or finished product. For the purposes of this general permit, cooling water can be generated from any cooling equipment blowdown or produced as a result of any non-contact cooling process through either a single pass (once through) or recirculating system.

<u>Boiler Feed Water</u>. A boiler is a device for generating steam, which consists of two principal parts: the furnace, which provides heat, usually by burning a fuel, and the boiler proper, a device in which the heat changes water into steam. The steam or hot fluid is then recirculated out of the boiler for use in various processes in heating applications. The boiler receives the feed water, which consists of varying proportions of recovered condensed water (return water) and fresh water, which has been purified in varying degrees (make-up water). The make-up water is usually natural water either in its raw state, or treated by some process before use. Feed-water composition therefore depends on the quality of the make-up water and the amount of condensate returned to the boiler. The steam, which escapes from the boiler, frequently contains liquid droplets and gases. The water remaining in liquid form at the bottom of the boiler picks up all the foreign matter from the water that was converted to steam. The impurities must be blown down by the discharge of some of the water from the boiler to the drains.

<u>Process and Sanitary Wastewaters</u>. Water that has been used, as for washing, flushing, or in a manufacturing process, and contains waste products, chemicals, and or sewage. Process wastewater is also a combination of liquid and water-carried waste from commercial buildings, industrial plants, and institutions. Process wastewater shall mean a combination of liquid and water carried wastes discharged from any industrial establishment and resulting from any trade or process inside that establishment and shall include the waste from pretreatment facilities. Sanitary Wastewater shall mean the combination of liquid and water carried waste discharged from toilet and other sanitary plumbing facilities. Contained in Product refers to water leaving a facility as part of the finished product.

Steam and Evaporation refers to both natural and heated process water loss to the atmosphere from boiler and cooling tower losses.

Waste Hauler refers to the amount of water contained in waste being shipped off site.

<u>Floor Scrubber/Mop Wastewaters</u> refers to wastewater generated by cleaning the floors in a facility. This wastewater could not be discharged.

#### Section E: Process Wastewater Discharge Information

- 1. Provide information on the number of hours per day your facility discharges and indicate the hours of discharge for each day.
- 2. Peak Hourly Flow rate is expressed in gallons per <u>minute</u> (gpm). This should be the maximum gallons per minute (gpm) process flow from your facility. To determine this volume of wastewater flow, you may have to read water meters, sewer meters, or make estimates of flow that are not directly measurable.
- 3. Actual Maximum Daily Flow is expressed in gallons per <u>day</u> (gpd). This should be the maximum daily flow that is discharged from your facility. This may require you to read water meters or sewer meters on a daily basis. New facilities may estimate this flow rate. Please indicate the duration of this flow in gallons per day.

- 4. Actual Average Daily Flow is expressed in gallons per day (gpd). This should be the average daily discharge flow that is discharged from your facility for the past year. New facilities may estimate this flow rate. For example, if an Industry discharges 20 day out of a month of 31 days, the actual average daily flow should be the average for the 20 days that they actually discharged, not the 31 days in that month.
- 5. <u>Batch Discharges</u> are wastestreams that are controlled in some way or held in a tank and discretely discharged when full or according to a schedule, as opposed to freely entering the sewer continuously throughout each day. Batch flow rates shall be expressed in gallons per minute (gpm). Batch discharges may result in high flow rates over a short period of time, potentially impacting the receiving sewer collection system. Include annual cleaning of cooling towers and boilers as batch discharges. Indicate the percent the batch discharge makes up of the total discharge flow. For example, an industry has 100,000 gallons of discharge with 20,000 of these gallons being a bath discharge. That would mean that the batch discharge would be 20% of the total discharge flow.
- 6. Describe each process that generates wastewater that you are discharging or are planning to discharge to the OJRSA Sewer System.

<u>Regulated Process Streams</u> are wastewaters from manufacturing operations that use water in these manufacturing operations and enter the OJRSA Sewer System. This includes any wastewaters being discharged from pretreatment facilities.

## Section F: Wastewater Discharge Information

1. Indicate whether your facility uses a wastewater flow measurement device for flow reading. If so, complete the remaining blanks in Item 1.

<u>Meter/type brand</u>: Brand name of the meter. (i.e., Isco, Micronics, Muller) <u>Totalizer multiplier</u>: Indicate the multiplying factor for calculating total flow. <u>Recorder brand</u>: i.e., Isco <u>Recorder chart</u>: i.e., circular, scroll, plotter <u>Flume/weir size/type</u>: i.e., Parshall Flume, Palmer-Bowlus, etc. <u>Last calibration date</u>: All permitted industries are required to calibrate their flow meters twice a year. Indicate the most recent flow calibration date. <u>Calibration company</u>: Indicate the name, address, and phone number of the company who performs your calibration.

- 2. Check the answer that applies to your business.
- 3. Complete this item if you checked "Yes" to number 2.
- 4. <u>Water reclamation</u> refers to any recycling and reuse of waste waters. Indicate whether this applies.
- 5. Complete this item if you indicated "Yes" to number 4.
- 6a 7d. Complete these questions as they pertain to cooling water, HVAC/humidity control, and boiler water. If you need additional information on these questions, contact the OJRSA Pretreatment Department.

#### Section G: Facility Operational Characteristics

- 1. Indicate the days of the week of normal operations for your facility.
- 2. Describe your normal operating work shifts and indicate the number of employees per shift.

- 3. Indicate the total employees at your location. This number should represent the actual number of employees on the date of submission of the application. New facilities or businesses may estimate the expected number of employees for their facility. An employee is considered to be a full time, part time, or contract employee.
- 4. Indicate if your business activity is continuous through a normal year or if it is seasonal. If your facility business activity is seasonal, indicate which months would be considered seasonal.
- 5. Indicate which months would be considered the heaviest production months.
- 6. Indicate which months would be considered heaviest wastewater flow.
- 7. Add comments as necessary.
- 8. Specify any facility shutdowns during normal operations throughout the year. This would include seasonal shutdowns, vacation shutdowns, or general maintenance shutdowns. Include comments as necessary.
- 9. Indicate industrial activities that occur at your facility or business. Activities includes all intermediate processes required for the production and integration of a product's components. Activities is not limited to production operations, assembly or fabrication. Check "Other" if a specific category is not listed. Describe the manufacturing process here. Please address any specific category that may not be listed in this section on a separate sheet.

#### Section H: Pollutants

Indicate those pollutants that apply.

If your facility has performed any Volatile and Semi-Volatile Analysis within the previous three (3) years, you may submit this data as an attachment for this section. However, you must indicate any pollutants that have been reported above the detection limit.

Non-Conventional Pollutants can be reviewed in 40 CFR Part 401.

Toxic Pollutant is any pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of EPA under the provision of the Clean Water Act 307(a) 40 CFR Part 403 Appendix B.

The term pollutant is defined very broadly by the NPDES regulations and case law, and includes substances found in industrial, municipal, and certain types of agricultural waste discharged into water. For regulatory purposes, pollutants have been grouped into three general categories: conventional, toxic, and non-conventional. There are five conventional pollutants: biochemical oxygen demand (BOD), total suspended solids (TSS), pH, fecal coliform, and oil and grease (defined in 40 CFR 401.16). Toxic pollutants, or priority pollutants, are those defined in Section 307(a) (1) of the Clean Water Act and include metals and manmade organic compounds. Non-conventional pollutants are those which do not fall under either of the above categories, and include such parameters as ammonia, nitrogen, phosphorus, chemical oxygen demand (COD), and whole effluent toxicity (WET).

## SIGNATURE AND DATE IS REQUIRED

#### Section I: Total Toxic Organic (TTO) Requirements

1. Pretreatment Standards have been established for Electroplating and Metal Finishing industries noted 40 CFR 403. These Standards were established for the prevention and removal of toxic pollutants.

- 2. Those industries that are affected by these standards are those that perform electroplating, anodizing, coating, etching and printed circuit board manufacturing, and metal finishing operations.
- 3. A Total Organic Management Plan (TOMP) is a strategy for keeping track of all solvents delivered to a site, their storage, use and disposal. This includes keeping spent solvents segregated from other process wastewater to maximize the value of the recoverable solvents and to prevent the discharge of toxic organics to any wastewater collection system.

### Section J: Nature and Concentration of Pollutants in Wastewater

Certain types of industrial manufacturing and production based companies generate certain wastes that render certain pollutants in its wastewater discharge. The purpose of Section K is to determine if your wastestreams require pretreatment, or if your pretreatment systems (proposed or existing) are adequate. Existing dischargers can provide laboratory analytical data from three samples that will represent the characteristics of the pollutants noted in Section K.

Example:

Automotive – Oil & Grease, BOD, COD, phenols Metal Finishing – metals, cyanide, BOD, TSS, Phosphorus, oil & grease Plastics & Synthetics – BOD, COD, TSS,

Please indicate any noted pollutants that are present <u>or suspected</u> to be in your wastewater discharge or indicate those presently known to be in your wastewater discharge by checking all that apply.

Example:

It has been previously reported through lab analysis that your discharge levels for Silver have been above the DHEC detection limits thee (3) out of five (5) times in the previous year. Silver will need to be checked.

You have had your wastestream analyzed for Total Phosphorus above 15 mg/L three (3) out of five (5) times in the previous year. Total Phosphorus will need to be checked.

New facilities can estimate expected pollutants based on good engineering practices, applicable industrial sources, or provide a certification from the design engineer's best estimates.

For proposed facilities or wastestreams, you may submit historical data from another business with similar process or evidence documenting the potential waste concentrations, as long as an South Carolina licensed engineer signs the submitted data.

Any data submitted must be analyzed by a SC DHEC certified laboratory using approved test methods.

For additional assistance concerning specific pollutants, contact the OJRSA Pretreatment Coordinator.

## SIGNATURE AND DATE IS REQUIRED

#### Section K: Pretreatment Operations

- 1. Indicate if your facility employs any form of pretreatment and/or wastewater treatment. All pretreatment systems or operations must have a SC DHEC Permit to Operate (provide a copy).
- 2. You will need to state any expected modifications to your pretreatment and/or wastewater treatment planned for the next three (3) years.
- 3. If your facility or business employs or will be employing processes that require treatment devices or wastewater treatment processes, indicate those processes or devices.
- 4. Describe pollutant loadings, flow rates, etc., for any pretreatment system and/or wastewater treatment.
- 5. Submit a pretreatment flow diagram for the complete pretreatment system (or separate units). Identify the pretreatment flow and extended lines throughout the entire pretreatment system to its outfall.
- 6. Complete this section if your facility is expecting any upgrades or modifications to its wastewater treatment system that would alter any process or disposal methods.
- 7. If your facility operates and performs any type of wastewater treatment, you should have a SC DHEC Permit to Operate. Stated in this permit are the requirements for SC LLR operator license grades. Please indicate those grades in this section.
- 8. The <u>Operator in Charge</u> is the designee that has oversight and signatory authority for the Discharge Monitoring Reports.
- 9. List all wastewater treatment operators and provide a copy of their licenses.
- 10. A <u>manual</u> would constitute as an up-to-date on the overall operation of all the wastewater treatment works and appurtenances associated with wastewater handling and processing.
- 11. Indicate "Yes" or "No" as to whether or not an updated operations and maintenance manual has been provided to the OJRSA.
- 12. Indicate "Yes" or "No" as to whether or not there is a bypass pipe or facility that allows wastewater to bypass the onsite treatment process. If "Yes," describe the bypass operation.

#### Section L: Raw Materials and Chemicals

Develop a comprehensive list for all raw materials and chemicals used in your facility.

List the chemicals that could be found in wastewaters or that enter the sewer system first. List all chemicals used to condition raw water, are used in cooling towers and boilers, and/or are utilized in the pretreatment process. List any significant quantities used in your facility second.

Indicate the purpose for each raw material or chemical (stripping, restrooms, pretreatment, floor cleaning, cooling, etc.) and specify whether there is wastewater contact with each chemical listed.

Small quantities of five (5) gallons or less are not important unless they are an organic cleaner or render a hazardous waste. Do not list materials or cleaners used in routine office operations or non-hazardous chemicals with a total volume of less than one (1) gallon. Restroom cleaners are not significant unless more than three (3) gallons of chemicals are used each day.

100 gallons of floor cleaning chemicals used per month must be listed.

Extensive chemical lists should not be submitted unless requested by the OJRSA Pretreatment Coordinator. Master Chemical Lists must be submitted to the Pretreatment Coordinator for approval (in Microsoft Excel format) but must contain pertinent information in the same format as the table in Section L. CAS numbers must be provided.

#### Section M: Non-Hazardous and Hazardous Waste

1. If your facility or business generates any liquid or solid waste that is considered Non-Hazardous or Hazardous, please complete Section M. However, if this question does not apply to your facility, check "No" and proceed to Section N.

This pertains to wastes that are sent to off-site centralized waste treatment facilities. New facilities can estimate in this section.

You will need to identify these wastes by:

- Technical Name (i.e., mop water, grease, non-hazardous sludge/grinding product, cooling water, etc.)
- Description (solid waste, liquid waste, dewatered sludge, etc.)
- Disposal Method and Transporter information (off-site centralized) (i.e., ABC Solids Recovery Company, 123 Main Street, Nearby, South Carolina, 29123)
- Amount that is shipped off-site per reporting quarter (i.e., 125,000 lbs./quarter, etc.)
- 2. Indicate whether or not your facility has dedicated spaces for storing non-hazardous waste.
- 3. <u>Spill containment</u> is an engineered device that is installed as a preemptive measure to contain a spill and prevent it from spreading.
- 4. Indicate whether or not there are any floor drains in the area where non-hazardous waste is stored.
- 5. Indicate whether or not steps have been taken to eliminate the risk of a spilled product from entering the sewer system. If "Yes," describe what steps have been taken.
- 6. If your facility or business generates any liquid or solid waste that is considered hazardous, please complete the remainder of this section. If this question does not apply to your facility, check "No" and proceed to Section O.

This pertains to wastes that are sent to off-site centralized hazardous waste treatment facilities.

You will need to identify these wastes by:

- Technical Name (i.e., plating bath, alkaline cleaner, lead paint, etc.)
- Waste Codes: The Hazardous Materials Waste Number (i.e., D007, F003, P001, etc.)
- Disposal Method and Transporter information (off-site centralized) (i.e., ABC Solids Recovery Company, 123 Main Street, Nearby, South Carolina, 29123)
- Amount that is shipped off-site per reporting quarter (i.e., 125,000 lbs./quarter, etc.)
- 7. Indicate whether or not your facility has dedicated spaces for storing non-hazardous waste.
- 8. <u>Spill containment</u> is an engineered device that is installed as a preemptive measure to contain a spill and prevent it from spreading.
- 9. Indicate whether or not there are any floor drains in the area where non-hazardous waste is stored.
- 10. Indicate whether or not steps have been taken to eliminate the risk of a spilled product from entering the sewer system. If "Yes," describe what steps have been taken.

<u>NOTE</u>: Please attach a most recent manifest representative of each waste listed.

### Section N: Spill Prevention

- 1. Identify if your facility utilizes storage facilities for chemicals on your site. If "Yes," provide additional information on these as necessary in the comments section.
- 2. Provide an up-to-date diagram of the storage areas for chemicals in relation to any sewer drain, pump station, or other such location.
- 3. Indicate whether or not your facility has floor drains in the chemical storage areas. If "Yes," please provide information about the location of each drain's discharge point.
- 4. Select all locations where a spill could reach at your complex.
- 5. Indicate whether or not your company has an SPCC and/or Slug Control Program <u>Slug Control Plan</u>: On July 24, 1990, the Agency promulgated amendments to the general pretreatment and NPDES regulations to enhance control of toxic pollutant and hazardous waste discharges to POTWs (55 FR 30082). One of these amendments, 40 CFR 403.8(f)(2)(v), specifically addresses slug discharges. It provides that POTWs with approved pretreatment programs shall evaluate, at least once every two (2) years, whether each significant industrial user (defined in 40 CFR 403.3(t)) needs a plan to control slug discharges. For purposes of this provision, a slug discharge is any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge.

The purpose of a Slug Control Plan is to eliminate or minimize the potential for an accidental or slug discharge of pollutants into the sanitary sewer system. This plan will describe the facility as a whole, the particular operations with greatest potential to discharge pollutants into the sanitary sewer, spill prevention measures, emergency response, notification procedures, and employee training.

<u>Spill Prevention, Control, and Countermeasure (SPCC) Plan</u>: Since 1973, the federal Environmental Protection Agency has used the SPCC plans as a cornerstone of its strategy to prevent oil spills from reaching our nation's waters. Owners and operators of Aboveground Storage Tanks (AST's) which store more than 1,320 gallons of oil must have and implement an SPCC Plan. Unlike oil spill contingency plans that address cleanup measures after a spill, SPCC Plans are preventive measures to assure that a spill from an Aboveground Storage Tank (AST) is contained and countermeasures are established to prevent oil spills that could reach navigable waters. A spill contingency plan is required as part of the SPCC Plan if a facility is unable to provide secondary containment (i.e. berms surrounding the oil storage tank).

Please enclose any Slug Control and/or SPCC Plan with the application/questionnaire.

6. Describe how your facility has addressed previous spills.

## Section O: Building Layout

Submit all items requested in this section with your application. If you need assistance with these requirements, contact the OJRSA Pretreatment Coordinator.