

# MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard ●

Baltimore Maryland 21230

410-537-3000 ● 800-633-6101 ● <http://www.mde.state.md.us>

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## **INSTRUCTIONS FOR COMPLETING THE GROUNDWATER DISCHARGE PERMIT APPLICATION FOR INDUSTRIAL WASTEWATER**

### **INTRODUCTION**

Section 9-322 of the Environment Article, Annotated Code of Maryland, requires that a permit be obtained to discharge any pollutant into surface or underground waters of the State. "Discharge" means the addition, introduction, leaking, spilling, or emitting of any pollutant to State waters or the placing of any pollutant in a location where it is likely to pollute.

Attached is a blank groundwater discharge permit application. This application requires you to supply information concerning the types and quantities of wastewater discharged at your facility. The Maryland Department of the Environment will evaluate your completed application and notify you of any additional requirements, if necessary.

### **PART B: WASTEWATER DESCRIPTION**

A "point of discharge or outfall" is the location where a discharge occurs. This could be seepage through a lagoon, discharge through a drainfield pipe, etc. All waste streams that merge to flow to a single discharge point should be described as one outfall – 001. If your facility discharges at more than one point (for example: a food processing plant discharging by infiltration-percolation via a lagoon, and by land application via spray irrigation of fields), then additional outfall numbers should be completed. Examples of wastewater treatment and method of discharge are provided at the back of this application, in Attachment One.

### **PART C: FLOW DESCRIPTION**

For each "point of discharge" identified in Part B, information concerning the quantity and duration of the discharge must be provided.

### **PART D: EFFLUENT CHARACTERISTICS**

A laboratory analysis of the wastewater from each "point of discharge" identified in Part B must accompany this application. Several industrial categories are listed in Part D. The areas designated by the shading identify those constituents that are generally present or of interest in the wastewater from the respective industry category. Wastewater samples should be analyzed for those constituents of interest. Wastewater samples must be representative of the quality of the effluent. Sample collection, transportation, storage, and analysis shall conform to the procedures identified in 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants." (Electronic copies of this may be found on the internet, under <http://www.access.gpo.gov/nara/cfr/>.) The Department reserves the right to require additional wastewater sampling and analysis, if necessary.

The remaining sections of the application should be self-explanatory. If you have any questions, please feel free to call the Groundwater Discharge Permit Division at 410-537-3778.



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## GROUNDWATER DISCHARGE PERMIT APPLICATION FOR INDUSTRIAL WASTEWATER

Please return form(s) to:  
Attn: Groundwater Discharge Permit Division  
WMA- Wastewater Permit Program  
Maryland Department of the Environment  
1800 Washington Boulevard, STE-455  
Baltimore, Maryland 21230-1708

FOR OFFICE USE ONLY

PERMIT # \_\_\_\_\_

DATE \_\_\_\_\_

### A. GENERAL INFORMATION:

1. FACILITY NAME AND PHYSICAL LOCATION:

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

LATITUDE: deg \_\_\_\_\_ min \_\_\_\_\_ sec \_\_\_\_\_ LONGITUDE: deg \_\_\_\_\_ min \_\_\_\_\_ sec \_\_\_\_\_

COUNTY: \_\_\_\_\_

2. FACILITY OPERATING ENTITY LEGAL NAME AND MAILING ADDRESS (prospective or current permit holder):

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY/STATE/ZIP CODE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

LEGISLATIVE DISTRICT: \_\_\_\_\_ COUNCIL DISTRICT: \_\_\_\_\_

3. CONTACT PERSON:

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

4. NATURE OF BUSINESS (describe briefly): \_\_\_\_\_

FEDERAL EMPLOYER IDENTIFICATION NUMBER \_\_\_\_\_ SIC CODE: \_\_\_\_\_

5. LIST OTHER ENVIRONMENTAL PERMITS (NPDES-surface water; air quality; RCRA-hazardous waste; etc.):

\_\_\_\_\_

6. WORKMAN'S COMPENSATION COVERAGE EXPIRATION DATE: \_\_\_\_\_

COMPANY: \_\_\_\_\_ BINDER/POLICY NUMBER: \_\_\_\_\_



**B. WASTEWATER DESCRIPTION:** General – \_\_\_\_\_

Point of Discharge or Outfall	Process(es) Generating Wastewater	Wastewater Treatment Prior to Discharge (See Table 1 in Attachment	Method of Discharge (See Table 2 in Attachment One)
001		)	
002			
003			

Use additional sheets if necessary.



**C. FLOW DESCRIPTION:**

Fill in the blanks for each wastewater point of discharge identified in Part B.

DISCHARGE TYPES	FLOW RATE (GALLONS/DAY)		DURATION OF FLOW (HOURS/DAY, DAYS/WEEK)
	Average	Maximum	
001			
002			
003			

**D. EFFLUENT CHARACTERISTICS:**

The form on the following page lists common wastewater constituents for the general industry categories designated at the top of the chart. Select, if possible, one industry category which generally describes your facility. The wastewater constituents you must have analyzed are denoted by the **shaded areas** in the column under your industry category. If none of the industry categories generally describes your facility, select the "other" column and select those constituents which could potentially be present in your wastewater. For assistance in determining these constituents, contact the Groundwater Permits Program at 410-537-3778.

A laboratory analysis of a wastewater sample for the characteristics you have indicated in this section must accompany this application. Wastewater samples must be representative of the quality of the effluent. The sampling methods must conform to the guidelines described in 40 CFR Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants." Wastewater concentrations must be expressed in either of the following units: mg/L (ppm) or µg/L (ppb).

Please describe in the space provided below the exact location where the sample was taken, or attach a site map showing the sample location with respect to wastewater treatment components and discharge points:

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**D. EFFLUENT CHARACTERISTICS** (continued):

Constituent	Petroleum Industry	Vehicle Washing & Repair Industry	Vegetable Processing Industry	Meat Packing Industry	Metal Industry	Mining Industry	Other
pH							
Total Dissolved Solids							
Biochemical Oxygen Demand, 5-day							
Total Petroleum Hydrocarbons (EPA Method 1664)							
Chlorides							
Ammonia (as N)							
Total Kjeldahl Nitrogen (TKN)							
Total Phosphorous (as P)							
Ethylene Glycol							
Semi-volatile Organic Compounds (EPA Method 625)							
Volatile Organic Compounds (EPA Method 624)							
Metals *							
Fecal Coliform							
Magnesium							
Sodium							

\* See Attachment Two for the listing of metals.



**E. ADDITIONAL INFORMATION:**

- 1. Sanitary waste is handled by: \_\_\_\_\_
- 2. Hazardous wastes are handled by: \_\_\_\_\_

\_\_\_\_\_

- 3. Source of water supply: \_\_\_\_\_

\_\_\_\_\_ Groundwater (well)

\_\_\_\_\_ Surface water

\_\_\_\_\_ Public/community water supply

\_\_\_\_\_ Other: \_\_\_\_\_

- 4. List all chemical additives used in cooling water, steam, boiler, and/or wash water. Also submit with this application, the respective Material Safety Data Sheets (MSDS):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 5. Other information pertinent to the discharge(s):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 6. Map:

This application must be accompanied by a copy of a U.S. Geological Survey topographical map or a road map with a scale of 1 inch = 2000 feet, showing the exact location of the discharge(s) and facility.

**F. CERTIFICATION:**

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name & Title (Please Print)	Telephone Number
Signature	Date Signed



## **ATTACHMENT ONE**

**TABLE 1: COMMON TYPES OF WASTEWATER TREATMENT  
PRIOR TO DISCHARGE**

Aeration  
Air Stripping  
Anaerobic Treatment  
Carbon Adsorption  
Chemical Precipitation  
Disinfection  
Dissolved Air Flotation  
Oil/water separator  
Grit Removal  
Nitrification/Denitrification  
Screening  
Settling (sedimentation)  
Slow Sand Filtration  
OTHER (Please describe on a form.)  
NONE

**TABLE 2: COMMON METHODS OF WASTEWATER DISCHARGE**

1. Land application of wastewater via:
  - a. spray irrigation
  - b. overland flow
  - c. wetland application
2. Sub-surface absorption system from:
  - a. a drainfield
  - b. a seepage pit
3. Underground Injection Well
4. Infiltration-percolation to groundwater from:
  - a. an infiltration basin
  - b. a lagoon
  - c. a ditch
5. OTHER (Please describe on a form.)

## **ATTACHMENT TWO: METALS**

Antimony  
Arsenic  
Beryllium  
Cadmium  
Chromium, Total  
Chromium, Hexavalent  
Copper  
Cyanide  
Iron  
Lead  
Mercury  
Nickel  
Selenium  
Silver  
Thallium  
Zinc