United States
Environmental Protection
Agency

Office of
Enforcement
Washington, DC 20460

EPA Form 3510-2C
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are obsolete

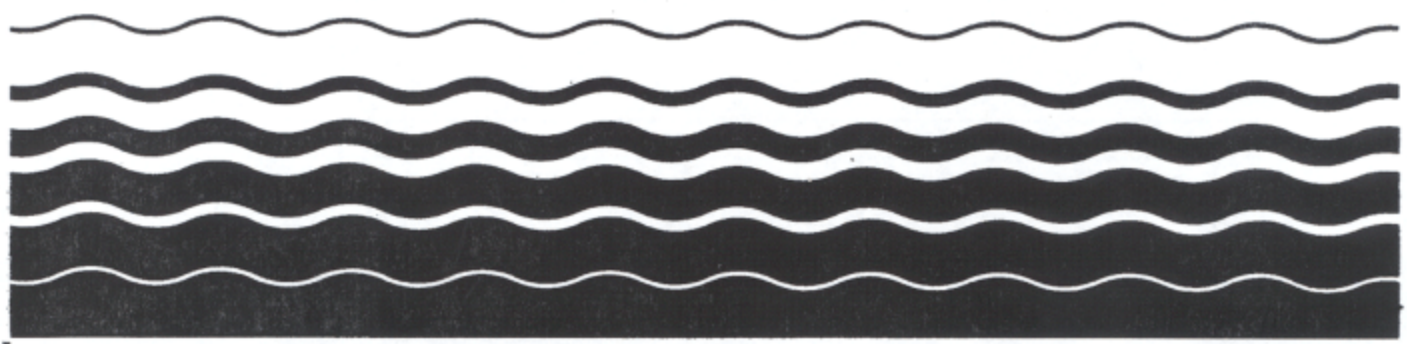
Permits Division

EPA

Application Form 2C - Wastewater Discharge Information

Consolidated Permits Program

This form must be completed by all persons applying for an EPA permit to discharge wastewater *(existing manufacturing, commercial, mining, and silvicultural operations).*



Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 33 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), US Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked **Attention:** Desk Officer for EPA.

INSTRUCTIONS - FORM 2C
Applicant for Permit to Discharge to Wastewater
EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTUREAL OPERATIONS

This information must be completed by all applicants who check "yes" to Item II-C in Form 1.

Public Availability of Submitted Information

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" *(for not applicable)* to show that you considered the question.

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form or Form 1 you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each page of Form 2C. You may copy this number directly from Item 1 of Form 1.

Item 1

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item II-A

The line drawing should show generally the route taken by water in your facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and stormwater runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item II-B. The water balance should show average flows. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise use your best estimate. An example of an acceptable line drawing appears in Figure 2C-1 to these instructions.

Item II-B

List all sources of wastewater to each outfall. Operations may be described in general terms *(for example, "dye-making reactor" or "distillation tower")*. You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should select the proper code from Table 2C-1 to fill in column 3-B for each treatment unit. Insert "XX" into column 3-B if no code corresponds to a treatment unit you list. If you are applying for a permit for a privately owned treatment works, you must also identify all of your contributors in an attached listing.

Item II-C

A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the "Maximum Daily" columns *(columns 4-a-2 and 4-b-2)*. Report the average of all daily values measured during days when discharge occurred within the last year in the "Long Term Average" columns *(columns 4-a-1 and 4-b-1)*.

Item III-A

An effluent guidelines promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you have an operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline. If you are unsure whether you are covered by a promulgated effluent guideline, check with your EPA Regional office *(Table 1 in the Form 1 instructions)*.

Item III-B

An effluent guideline is expressed in terms of production *(or other measure of operation)* if the limitation is expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per cubic foot of logs from which bark is removed," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

Item III-C

This item must be completed only if you checked "yes" to Item III-B. The production information requested here is necessary to apply effluent guidelines to your facility and you cannot claim it as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable effluent guideline. The production figures provided must be based on actual daily production and not on design capacity or on predictions of future operations. To obtain alternate limits under 40 CFR 122.45(b)(2)(ii), you must define your maximum production capability and demonstrate to the Director that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Item IV-A

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing same information.

Item IV-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item V-A, B, C, and D

The items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Part B and C require you to report analytical data in two ways. For some pollutants, you may be required to mark "X" in the "Testing Required" column *(column 2-a, Part C)*, and test *(sample and analyze)* and report the levels of the pollutants in your discharge whether or not you expect them to be present in your discharge. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" column *(columns 2-a or 2-b, Part B, and columns 2-b or 2-c, Part C)* based on your best estimate, and test for those which you believe to be present. *(See specific instructions on the form and below for Parts A through D.)* Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, maintenance chemicals, intermediate and final products

Item V - A, B, C, and D *(continued)*

and byproducts, and any previous analyses known to you or your effluent or similar effluent. *(For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.)* If you would expect a pollutant to be present solely as a result of its presence in your intake water, you must mark "Believe Present" but you are not required to analyze for that pollutant. Instead, mark an "X" in the "Intake" column.

A. Reporting. All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages V-1 to V-9 if the separate sheets contain all the required information in a format which is consistent with pages V-1 to V-9 in spacing and in identification of pollutants and columns. *(For example, the data system used in your GC/MS analysis may be able to print data in the proper format.)* Use the following abbreviations in the columns headed "Units" *(column 3, Part A, and column 4, Parts B and C)*.

Concentration	Mass
ppm.....parts per million	lbs.....pounds
mg/l .....milligrams per liter	ton .....tons *(English tons)*
ppb.....parts per billion	mg.....milligrams
ug/l .....micrograms per liter	g.....grams
	kg.....kilograms
	T .....tonnes *(metric tons)*

All reporting values for metals must be in terms of "total recoverable metal," unless:

(1) An applicable, promulgated effluent limitation or standard specifies the limitations for the metal in dissolved, valent, or total form; or

(2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or

(3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA.

If you measure only one daily value, complete only the "maximum Daily Values" columns and insert "1" into the "Number of Analyses" column *(columns 2-a and 2-d, Part A, and columns 3-a, 3-d, Parts Band C)*. The permitting authority may require you to conduct additional analyses to further characterize your discharges. For composite samples, the daily value is the total mass or average concentration found in a composite sample taken over the operating hours of the facility during a 24-hour period; for grab samples, the daily value is the arithmetic or flow-weighted total mass or average concentration found in a series of at least four grab samples taken over the operating hours of the facility during a 24-hour period.

If you measure more than one daily value for a pollutant and those values are representative of your wastestream, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Values" columns *(column 2-d, Part A, and columns 3-d, Parts B and C)*. Also, determine the average of all daily values taken during each calendar month, and report the highest average under the "Maximum 30-day Values" columns *(column 2-c, Part A, and column 3-b, Parts B and C)*.

B. Sampling: The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact your EAP or State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation, to the extent feasible, with all processes which contribute wastewater in normal operation, and with your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples must be used. For all other pollutants 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours. For stormwater discharges a minimum of one to four grab samples may be taken, depending on the duration of the discharge. One grab must be taken in the first hour *(or less)* of discharge, with one additional grab *(up to a minimum of four)* taken in each succeeding hour of discharge for discharges lasting four or more hours. The Director may waive composite sampling for any outfall for which you demonstrate that use of an automatic sampler is infeasible and that a minimum of four grab samples will be representative eof your discharge.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

Composite sample: A combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. Four (4) *(rather than eight)* aliquots or grab samples should be collected for VOA. These four samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. Only one analysis is required.

The Agency is currently reviewing sampling requirements in light of recent research on testing methods. Upon completion of its review, the Agency plans to propose changes to the sampling requirements.

Data from samples taken in the past may be used , provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in wastewater treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if she or he determines it to be necessary to assess your discharges.

C. Analysis: You must use test methods promulgated in 40 CFR Part 136; however, if none has promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyses only one outfall and submit the results of the analysis

Item V - A, B, C, and D *(continued)*

For other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

D. Reporting of Intake Data: You are not required to report data under the "Intake" columns unless you wish to demonstrate your eligibility for a "net" effluent limitation for one or more pollutants, that is, an effluent limitation adjusted by subtracting the average level of the pollutant(s) present in your intake water. NPDES regulations allow net limitations only in certain circumstances. To demonstrate your eligibility, under the "Intake" columns report the average of the results of analyses on your intake water *(if your water is treated before use, test the water after it is treated)*, and discuss the requirements for a net limitation with your permitting authority.

Part V-A

Part V-A must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. However, at your request, the Director may waive the requirement to test for one or more of these pollutants, upon a determination that available information is adequate to support issuance of the permit with less stringent reporting requirements for these pollutants. You also may request a waiver for one or more of these pollutants for your category or subcategory from the Director, Office of Water Enforcement and Permits. See discussion in General Instructions to Item V for definitions of the columns in Part A. The "Long Term Average Values" column *(column 2-c)* and "Maximum 30-Day Values" column *(column 2-b)* are not compulsory but should be filled out if data are available.

Use composite samples for all pollutants in this Part, except use grab samples for pH and temperature. See discussion in General Instructions to Item V for definitions of the columns in Part A. The "Long Term Average Values" column *(column 2-c)* and "Maximum 30-Day Values" column *(column 2-b)* are not compulsory but should be filled out if data are available.

Part V-B

Part V-B must be completed by all applicants for all outfalls, including outfalls containing only noncontact cooling water or storm runoff. You must report quantitative date if the pollutant(s) in question is limited in an effluent limitations guideline either directly, or indirectly but expressly through limitation on an indicator *(e.g., use of TSS as an indicator to control the discharge of iron and aluminum)*. For other discharged pollutants you must provide quantitative data or explain their presence in your discharge. EPA will consider requests to the Director of the Office of Water Enforcement and Permits to eliminate the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representative of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in the category or subcategory discharge substantially identical levels of the pollutant or discharge the pollutant uniformly at sufficiently low levels. Use composite samples for all pollutants you analyze for in this part, except use grab samples for residual chlorine, oil and grease, and fecal coliform. The "Long Term Average Values" column *(column 2-c)* and "Maximum 30-Day Values" column *(column 2-b)* are not compulsory but should be filled out if data are available.

Part V-C

Table 2c-2 lists the 34 "primary" industry categories in the left-hand column. For each outfall, if any of your processes which contribute wastewater falls into one of those categories, you must mark 'X' in the "Testing Required" column *(column 2-a)* and test for (1) all of the toxic metals, cyanide, and total phenols, and (2) the organic toxic pollutants contained in Table 2c-2 as applicable to your category, unless you qualify as a small business *(see below)*. The organic toxic pollutants are listed by GC/MS fractions on pages V-4 to V-9 in Part V-C. For example, the Organic Chemicals Industry has an asterisk in all four fractions; therefore, applicants in this category must test for all organic toxic pollutants in Part V-C. The inclusion of total phenols in Part V-C is not intended to classify total phenols as a toxic pollutant. If you are applying for a permit for a privately owned treatment works, determine your testing requirements on the basis of the industry categories of your contributors. When you determine which industry category you are in to find your testing requirements, you are not determining your category for any other purpose and you are not giving up your right to challenge your inclusion in that category *(for example, for deciding whether an effluent guideline is applicable)* before your permit is issued. For all other cases *(secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions)*, you must mark "X" in either the "Believed Present" column *(column 2-b)* or the "Believed Absent" column *(column 2-c)* for each pollutant. For every pollutant you know or have reason to believe is present in your discharge in concentrations of 10 ppb or greater, you must report quantitative data. For acrolein, acrylonitrile, 2, 4, dinitrophenol, and 2-methyl-4, 6 dinitrophenol, where you expect these four pollutants to be discharged in concentrations of 100 ppb or greater, you must report quantitative data. For every pollutant expected to be discharged in concentrations less than the thresholds specified above, you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. At your request, the Director of Office of Water Enforcement and Permits may waive the requirement to test for pollutants for an industrial category or subcategory. Your request must be supported by data representatives of the industrial category or subcategory in question. The data must demonstrate that individual testing for each applicant is unnecessary, because the facilities in question discharge substantially identical levels of the pollutant, or discharge the pollutant uniformly at sufficiently low levels. If you qualify as a small business *(see below)* you are exempt from testing for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. For pollutants in intake water, see discussion in General Instructions to this item. The "Long Term Average Values" column *(column 3-c)* and "Maximum 30-Day Values" column *(column 3-b)* are not compulsory but should be filled out if data are available. You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

(a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T);

(b) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP);

(c) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon);

(d) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel);

(e) 2,4,5-trichlorophenol, (TCP);

(f) Hexachlorophene, (HCP).

If you mark "Testing Required" or "Believed Present," you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector. A TCDD standard for quantitation is not required. Describe the results of this analysis in the space provided; for example, "no measurable baseline deflection at the retention time of TCDD" or "a measurable peak within the tolerances of the retention time of TCDD." The permitting authority may require you to perform a quantitative analysis if you report a positive result. The Effluent Guidelines Division of EPA has collected and analyzed samples from some plants for the pollutants listed in Part C in the course of its BAT guidelines development program. If your effluents are sampled and analyzed as part of this program in the last three years, you may use these data to answer Part C provided that the permitting authority approves, and provided that no process change or change in raw materials or operating practices has occurred since the samples were taken that would make the analyses unrepresentative of your current discharge.

ITEM V - A, B, C, and D *(continued)*

Small Business Exemption: If you qualify as a "small business," you are exempt from the reporting requirements for the organic toxic pollutants, listed on pages V-4 to V-9 in Part C. There are two ways in which you can qualify as a "small business." If your facility is a coal mine, and if you probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production *(such as a schedule of estimated total production under 30 CFR § 795.14(c))* instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than $100,000 per year *(in second quarter 1980 dollars)*, you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production of sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator *(second quarter of 1980 = 100)*. This index is available in *National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis)*.

Part V-D

List any pollutants in Table 2c-3 that you believe to be present and explain why you believe them to be present. No analysis is required, but if you have analytical data, you must report it.

Note: Under CFR 117.12(a)(2), certain discharges of hazardous substances *(listed in Table 2c-4 of these instructions)* may be exempted from the requirements of Section 311 of CWA, which establishes reporting requirements, civil penalties and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted in the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of Section 311, attach additional sheets of paper to your form, setting for the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by:
    a. An onsite treatment system separate from any treatment system treating your normal discharge;
    b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
    c. Any combination of the above.

See 40 CFR § 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office *(Table 1 on Form 1, Instructions)*, for further information on exclusions from Section 311.

Item VI

This requirement applies to current use or manufacture of toxic pollutant as an intermediate or final product or byproduct. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VII

Self explanatory. The permitting authority may ask you t provide additional details after your application is received.

Item IX

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the Clean Water Act provides that "Any person who knowingly makes any false statement, representation, or certification in any application, …shall upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than six months, or by both."

40 CFR Part 122.22 requires the certification to be signed as follows:

(A) *For a corporation:* by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a 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, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25,000,000 *(in second-quarter 1980 dollars)*, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in §122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under §122.22(a)(1)(ii) rather than to specific individuals.

(B) *For a partnership or sale proprietorship:* by a general partner or the proprietor, respectively; or

(C) *For a municipality, State, Federal, or other public agency:* by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal Agency includes (i) the chief executive officer of the Agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the Agency *(e.g., Regional Administrators of EPA)*. Applications for Group II stormwater dischargers may be signed by a duly authorized representative *(as defined in 40 CFR 122.22(b))* of the individuals identified above.

CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES

1-A.....Ammonia Stripping
1-B.....Dialysis
1-C .....Diatomaceous Earth Filtration
1-D .....Distillation
1-E.....Electrodialysis
1-F .....Evaporation
1-G .....Flocculation
1-H .....Flotation
1-I .....Foam Fractionation
1-J .....Freezing
1-K.....Gas-Phase Separation
1-L .....Grinding *(Comminutors*
1-M.....Grit Removal
1-N .....Microstraining
1-O.....Mixing
1-P .....Moving Bed Filters
1-Q.....Multimedia Filtration
1-R .....Rapid Sand Filtration
1-S .....Reverse Osmosis *(Hyperfiltration)*
1-T .....Screening
1-U .....Sedimentation *(Settling)*
1-V .....Slow Sand Filtration
1-W .....Solvent Extraction
1-X .....Sorption

CHEMICAL TREATMENT PROCESSES

2-A.....Carbon Adsorption
2-B.....Chemical Oxidation
2-C .....Chemical Precipitation
2-D .....Coagulation
2-E.....Dechlorination
2-F .....Disinfection *(Chlorine)*
2-G.....Disinfection *(Ozone)*
2-H.....Disinfection *(Other)*
2-I.....Electrochemical Treatment
2-J.....Ion Exchange
2-K .....Neutralization
2-L.....Reduction

BIOLOGICAL TREATMENT PROCESSES

3-A.....Activated Sludge
3-B.....Aerated Lagoons
3-C .....Anaerobic Treatment
3-D .....Nitrification-Denitrification
3-E .....Pre-Aeration
3-F .....Spray Irrigation/Land Application
3-G.....Stabilization Ponds
3-H.....Trickling Filtration

OTHER PROCESSES

4-A.....Discharge to Surface Water
4-B.....Ocean Discharge Through Outfall
4-C .....Reuse/Recycle of Treated Effluent
4-D .....Underground Injection

SLUDGE TREATMENT AND DISPOSAL PROCESSES

5-A.....Aerobic Digestion
5-B.....Anaerobic Digestion
5-C .....Belt Filtration
5-D .....Centrifugation
5-E.....Chemical Conditioning
5-F .....Chlorine Treatment
5-G .....Composting
5-H .....Drying Beds
5-I .....Elutriation
5-J .....Flotation Thickening
5-K.....Freezing
5-L .....Gravity Thickening
5-M.....Heat Drying
5-N .....Heat Treatment
5-O.....Incineration
5-P .....Land Application
5-Q.....Landfill
5-R .....Pressure Filtration
5-S .....Pyrolysis
5-T .....Sludge Lagoons
5-U .....Vacuum Filtration
5-V .....Vibration
5-W .....Wet Oxidation

TABLE 2C-1

TESTING REQUIRMENTS FOR ORGANIC TOXIC POLLUTANTS INDUSTRY CATEGORY*

INDUSTRY CATEGORY	GC/MS FRACTION[1]			
	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and sealants	X	X	X	-
Aluminum Forming	X	X	X	-
Auto and other laundries	X	X	X	X
Battery manufacturing	X	-	X	-
Coal mining	X	X	X	X
Coil coating	X	X	X	-
Copper forming	X	X	X	-
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	-
Explosives manufacturing	-	X	X	-
Foundries	X	X	X	-
Gum and wood chemicals	X	X	X	X
Inorganic chemicals manufacturing	X	X	X	-
Iron and steel manufacturing	X	X	X	-
Leather tanning and finishing	X	X	X	X
Mechanical products manufacturing	X	X	X	-
Nonferrous metals manufacturing	X	X	X	X
Ore mining	X	X	X	X
Organic chemicals manufacturing	X	X	X	X
Pain and ink formulation	X	X	X	X
Pesticides	X	X	X	X
Petroleum refining	X	X	X	X
Pharmaceutical preparations	X	X	X	-
Photographic equipment and supplies	X	X	X	X
Plastic and synthetic materials manufacturing	X	X	X	X
Plastic processing	X	-	-	-
Porcelain enameling	X	-	X	X
Printing and publishing	X	X	X	X
Pulp and paperboard mills	X	X	X	X
Rubber processing	X	X	X	-
Soap and detergent manufacturing	X	X	X	-
Steam electric power plants	X	X	X	-
Textile mills	X	X	X	X
Timber products processing	X	X	X	X

*See note at conclusion of 40 CFR Part 122, Appendix D (1983) for explanation of effect of suspensions on testing requirements for primary industry categories.
[1]The pollutants in each fraction are listed in Item V-C.
X = Testing required.
- = Testing not required.

TABLE 2C-2

TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT

TOXIC POLLUTANT

Asbestos

HAZARDOUS SUBSTANCES

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumpahos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D (2,4-Dichlorophinoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2 Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor

HAZARDOUS SUBSTANCES

Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Naphthenic acid
Nitrotoluene
Parathion
Phenolsufonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
TDE (Tetrochlorodiphenyl ethane
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanic acid]
Trichlorofon
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

HAZARDOUS SUBSTANCES

Acetaldehyde
Acetic acid
Acetic anhydride
Acetone cyanohydrin
Acetyl bromide
Acetyl chloride
Acrolein
Acrylonitrile
Adipic acid
Aldrin
Allyl alcohol
Alyll chloride
Aluminum sulfate
Ammonia
Ammonium acetate
Ammonium benzoate
Ammonium bicarbonate
Ammonium bichromate
Ammonium bifluoride
Ammonium bisulfite
Ammonium carbamte
Ammonium carbonate
Ammonium chloride
Ammonium chromate
Ammonium citrate
Ammonium flouroborate
Ammonium fluoride
Ammonium hydroxide
Ammonium oxalate
Ammonium silicofluoride
Ammonium sulfamate
Ammonium sulfide
Ammonium silfite
Ammonium tartrate
Ammonium thiocyanate
Ammonium thisulfate
Amyl acetate
Aniline
Antimony pentachloride
Antimony potassium tartrate
Antimony tribromide
Antimony trichloride
Antimony trifluoride
Antimony trioxide
Arsenic disulfide
Barium cyanide
Benzene
Benzoic acid
Benzonitrite
Benzoyl chloride
Benzyl chloride
Beryllium chloride
Beryllium fluoride
Beryllium nitrate
Butylacetate
n-Butylphthalate
Butylamine
Butyric acid
Cadmium acetate
Cadmium bromide
Cadmium chloride
Calcium arsenate
Calcium arsenite
Calcium carbide
Calcium chromate
Calcium cyanide
Calcium dodecylbenzenesulfonate
Calcium hypochlorite
Captan
Carbaryl
Carbofuran
Carbon disulfide
Carbon tetrachloride
Chlordane
Chlorine
Chlorobenzene
Chloroform
Chloropyrifos
Chlorosulfonic acid
Chromic acetate
Chromic acid
Chromic sulfate
Chromous chloride
Cobaltous bromide
Cobaltous formate
Cobaltous sulfamate
Coumaphos
Cresol
Crotonaldehyde
Cupric acetate
Cupric acetoarsenite
Cupric chloride
Cupric nitrate
Cupric oxalate
Cupric sulfate
Cupric sulfate ammoniated
Cupric tartrate
Cyanogen chloride
Cyclohexane
2,4-D acid (2,4-Dichlorophenoxyacetic acid esters)
DDT
Diazinon
Dicamba
Dichlobenil
Dichlone
Dichlorobenzene
Dichloropropane
Dichloropropene
Dichloropropene-Dichloropropane mix
2.2-Dichloropropionic acid
Dichlorvos
Dieldrin
Diethylamine
Dimethylamine
Dinitrobenzene
Dinirophenol
Dinitrotoluene
Diquat
Disulfoton
Diuron
Dodecylbenzesulfonic acid
Endosulfan
Endrin
Epichlorohydrin
Ethion
Ethylbenzene
Ethylenediamine
Ethylene dibromide
Ethylene dichloride
Ethylene diaminetetracetic acid (EDTA)
Ferric ammonium citrate
Ferric ammonium exalate
Ferric chloride
Ferric fluoride
Ferric nitrate
Ferric sulfate
Ferrous chloride
Ferrous sulfate
Formaldehyde
Formic acid
Fumaric acid
Furfural
Guthion
Heptachlor
Hexachlorocyclopentadiene
Hydrochloric acid
Hydrofluoric acid
Hydrogen cyanide
Hydrogen sulfide
Isoprene
Isopropanolamine dodecylbenzenesulfonate
Kelthane
Kepone
Lead acetate
Lead arsenate
Lead chloride
Lead fluoborate
Lead fluorite
Lead iodide
Lead nitrate
Lead stearate
Lead sulfate
Lead sulfide
Lead thiocyanate
Lindane
Lithium chromate
Malathion

TABLE 2C-4

HAZARDOUS STUBSTANCES *(Continued)*

Maleic acid
Maleic anhydride
Mercaptodimethur
Mercuric cyanide
Mercuric nitrate
Mercuric sulfate
Mercuric thiocyanate
Mercurous nitrate
Methoxychlor
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monethylamine
Monomethylamine
Naled
Naphthalene
Naphthenic acid
Nickel ammonium sulfate
Nickel chloride
Nickel hydroxide
Nickel nitrate
Nickel sulfate
Nitric acid
Nitrobenezene
Nitrogen dioxide
Nitrophenil
Nitrotoluene
Paraformaldehyde
Parathion
Pentachlorophenol
Phenol
Phosoene
Phosphoric acid
Phosphorus
Phosphorus oxychloride
Phosphorus pentasulfide
Phosphorus trichloride
Polychlorinated biphenyls (PCB)
Potassium arsenate
Potassium arsenite
Potassium bichromate
Potassium cyanide
Potassium hydroxide
Potassium permanganate
Propargite
Propionic acid
Propionic anhydride
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Selenium oxide
Silver nitrate
Sodium
Sodium arsenate
Sodium arsenite
Sodium bichromate
Sodium bifluoride
Sodium bisulfite
Sodium chromate
Sodium cyanide
Sodium dodecylbenzenesulfonate
Sodium fluoride
Sodium hydrosulfide
Sodium hydroxide
Sodium hypochlorite
Sodium methylate
Sodium nitrate
Sodium phospate (dibasic)
Sodium phosphate (tribasic)
Sodium selenite
Strontium chromate
Strychnine
Styrene
Sulfuric acid
Sulfur monochloride
2,4,5-T acid (2,4,5-Trichlorophenoxy acetic acid)
2,4,5-Tamines (2,4,5-Trichlorophenoxy acetic acid amines)
2,4,5-T esters (2,4,5-Trichlorophenoxy propanoic acid)
2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)
TDE (Tetrachlorodiphenyl ethane)
Tetraethyl lead
Tetraethyl pyrophosphate
Thallium sulfate
Toluene
Toxaphene
Trichlorofon
Trichloroethylene
Trichlorophenol
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Trimethylamine
Uranyl acetate
Uranyl nitrate
Vanadium pentoxide
Vanadyl sulfate
Vinyl acetate
Vinylidene chloride
Xylene
Xylenol
Zinc acetate
Zinc ammonium chloride
Zinc borate
Zinc bromide
Zinc carbonate
Zinc chloride
Zinc cyanide
Zinc fluoride
Zinc formate
Zinc hydrosulfite
Zinc nitrate
Zinc phenolsulfonate
Zinc phosphide
Zinch silicofluoride
Zinc sulfate
Zirconium nitrate
Zirconium potassium fluoride
Zirconium sulfate
Zirconium tetrahloride

TABLE 2C-4 *(continued)*

LINE DRAWING

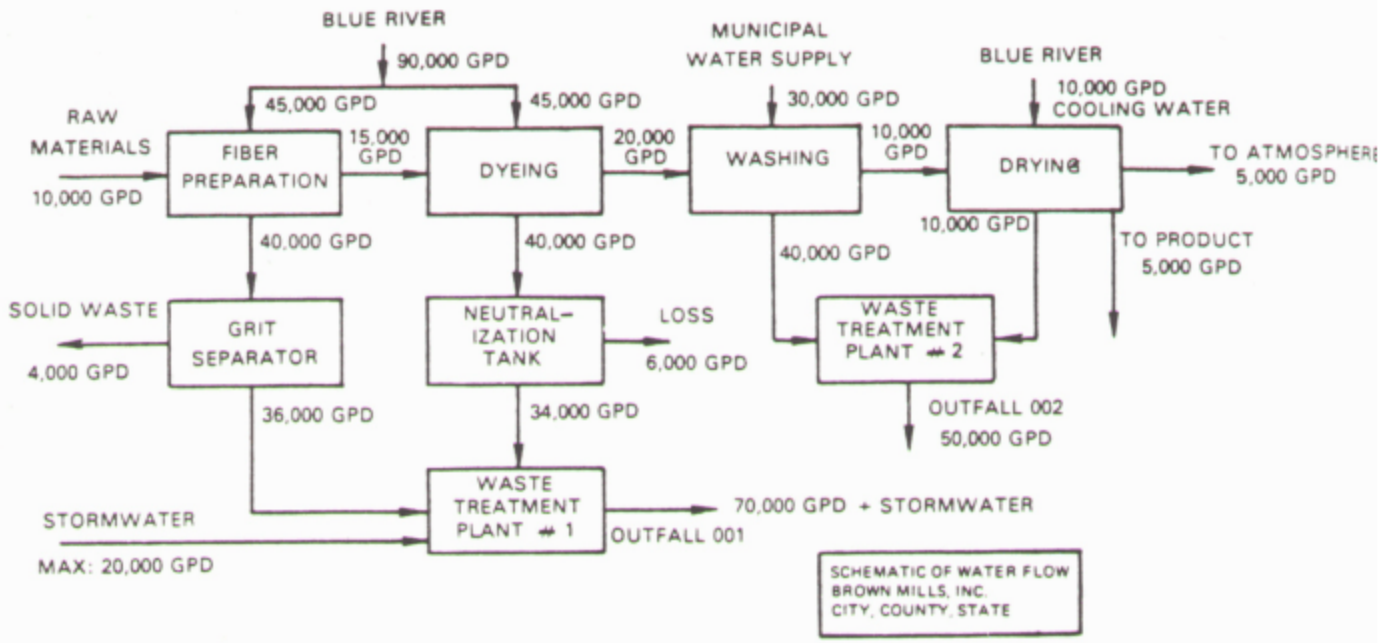


FIGURE 2C-1

Please type or print in the unshaded areas only	EPA ID Number *(Copy from Item 1 of Form 1)*	*Form Approved* *OMB No. 2040-0086* *Approval expires 8-31-98*

Form **2C** NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

I. Outfall Location

For this outfall, list the latitude and longitude, (degrees, min.xxxx) and name of the receiving water(s)

Outfall Number *(list)*	Latitude		Longitude		Receiving Water *(name)*
	Deg	Min	Deg	Min	

II. Flows, Sources of Pollution, and Treatment Technologies

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed description in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictoral description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. Outfall No. (list)	2. Operations Contributing Flow		3. Treatment		
	a. OPERATION *(list)*	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ **YES** *(complete the following table)* ☐ **NO** *(go to Section III)*

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK *(specify average)*	b. MONTHS PER YEAR *(specify average)*	a. FLOW RATE *(in mgd)*		b. TOTAL VOLUME *(specify with units*		c. DURATION *(in days)*
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ **YES** *(complete Item III-B)* ☐ **NO** *(go to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ **YES** *(complete Item III-C)* ☐ **NO** *(go to Section IV)*

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS *(list outfall numbers)*
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ **YES** *(complete the following table)* ☐ **NO** *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. No	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affect your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ **MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAM IS ATTACHED**

EPA ID Number *(Copy from Item 1 of Form 1)*

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding - Complete one set of tables or each outfall - Annotate the outfall number in the space provided. **NOTE:** Tables V-A, V-B, and V-C are included on separate sheets number V-1 through V-9.

D: Use the space below t list any of the pollutants listed in Tables 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ **YES** *(list all such pollutants below)* ☐ **NO** *(go to Item VI-B)*

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ **YES** *(identify the test(s) and describe their purpose below)* ☐ **NO** *(go to Section VIII)*

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ **YES** *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☐ **NO** *(go to Section IX)*

A. NAME	B. ADDRESS	C. TELEPHONE *(area code & no.)*	D. POLLUTANTS ANALYZED *(list)*
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	
		( )	

IX. 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 and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE *(type or print)*	B. PHONE NO. *(area code & no.)* ( )
C. SIGNATURE	D. DATE SIGNED

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets *(use the same format)* instead of completing these pages. SEE INSTRUCTIONS.

EPA [redacted] NUMBER *(copy from Item 1 of Form 1)*

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)* [redacted]

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand *(BOD)*												
b. Chemical Oxygen Demand *(COD)*												
c. Total Organic Carbon *(TOC)*												
d. Total Suspended Solids *(TSS)*												
e. Ammonia *(as N)*												
f. Flow	Value		Value		Value					Value		
g. Temperature *(winter)*	Value		Value		Value			°C		Value		
h. Temperature *(summer)*	Value		Value		Value			°C		Value		
i. pH	Minimum	Maximum	Minimum	Maximum	[redacted]			STANDARD UNITS		[redacted]		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'		3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	☐	☐												
b. Chlorine, Total Residual	☐	☐												
c. Color	☐	☐												
d. Fecal Coliform	☐	☐												
e. Fluoride (16984-48-8)	☐	☐												
f. Nitrate-Nitrite *(as N)*	☐	☐												

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK "X"		3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. BELIEVED PRESENT	B. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic *(as N)*	☐	☐												
h. Oil and Grease	☐	☐												
i. Phosphorus *(as P)*, Total (7723-14-0)	☐	☐												
j. Radioactivity														
(1) Alpha, Total	☐	☐												
(2) Bets, Total	☐	☐												
(3) Radium, Total	☐	☐												
(4) Radium 226, Total	☐	☐												
k. Sulfate *(as SO_4) (14808-79-8)*	☐	☐												
l. Sulfide (as S)	☐	☐												
m. Sulfite *(as SO_3)(14265-45-3)*	☐	☐												
n. Surfactants	☐	☐												
o. Aluminum, Total (7429-90-5)	☐	☐												
p. Barium, Total (7440-39-3)	☐	☐												
q. Boron, Total (7440-42-8)	☐	☐												
r. Cobalt, Total (7440-48-4)	☐	☐												
s. Iron, Total (7439-89-4)	☐	☐												
t. Magnesium, Total (7439-95-4)	☐	☐												
u. Molybdenum, Total (7439-98-7)	☐	☐												
v. Manganese, Total (7439-96-5)	☐	☐												
w. Tin, Total (7440-31-5)	☐	☐												
x. Titanium, Total (7440-32-6)	☐	☐												

CONTINUED FROM PAGE 3 OF FORM 2-C

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*	OUTFALL NUMBER

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant. If you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table *(all 7 pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1m. Antimony, Total (7440-36-0)	☐	☐	☐												
2M. Arsenic, Total (7440-38-2)	☐	☐	☐												
3M. Beryllium, Total (7440-41-7)	☐	☐	☐												
4M. Cadmium, Total (7440-43-9)	☐	☐	☐												
5M Chromium, Total (7440-47-3)	☐	☐	☐												
6M Copper, Total (7440-50-8)	☐	☐	☐												
7M lead, Total (7439-92-1)	☐	☐	☐												
8M Mercury, Total (7439-97-6)	☐	☐	☐												
9M Nickel, Total (7440-02-0)	☐	☐	☐												
10M Selenium, Total (7782-49-2)	☐	☐	☐												
11M Silver, Total (7440-22-4)	☐	☐	☐												
12M Thallium, Total (7440-28-0)	☐	☐	☐												
13M Zinc, Total (7440-66-6)	☐	☐	☐												
14M Cyanide, Total (57-12-5)	☐	☐	☐												
15M Phenols, Total	☐	☐	☐												
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764--01-6)	☐	☐	☐	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	☐	☐	☐												
2V. Acrylonitrile (107-13-1)	☐	☐	☐												
3V. Benzene (71-43-2)	☐	☐	☐												
4V. Bis (Chloromethyl) Ether (542-88-1)	☐	☐	☐												
5V. Bromoform (75-25-2)	☐	☐	☐												
6V. Carbon Tetrachloride (56-23-5)	☐	☐	☐												
7V. Chlorobenzene (108-90-7)	☐	☐	☐												
8V. Chlorodibromomethane (124-48-1)	☐	☐	☐												
9V. Chloroethane (75-00-3)	☐	☐	☐												
10V. 2-Chloroethylvinyl Ether (110-75-8)	☐	☐	☐												
11V. Chloroform (67-66-3)	☐	☐	☐												
12V. Dichlorobromoethane (75-27-4)	☐	☐	☐												
13V. Dichlorodifluoromethane (75-71-8)	☐	☐	☐												
14V. 1,1-Dichloroethane (75-27-3)	☐	☐	☐												
15V. 1,2-Dichloroethane (107-06-2)	☐	☐	☐												
16V. 1,1-Dichloroethylene (7535-4)	☐	☐	☐												
17V. 1,2-Dichloropropane (78-87-5)	☐	☐	☐												
18V. 1,3-Dichloropropylene (542-75-6)	☐	☐	☐												
19V. Ethylbenzene (100-41-4)	☐	☐	☐												
20V. Methyl Bromide (74-83-9)	☐	☐	☐												
21V. Methyl Chloride (74-87-3)	☐	☐	☐												

EPA [redacted]. NUMBER *(copy from Item 1 of Form 1)* | OUTFALL NUMBER

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS *(continued)*															
22 V. Methylene Chloride (75-09-2)	☐	☐	☐												
23V. 1,1,2,2-Tetra-Chloroethane (79-34-5)	☐	☐	☐												
24V. Tetrachloro-ethylene (127-18-4)	☐	☐	☐												
25V. Toluene (108-88-3)	☐	☐	☐												
26V. 1,2-Trans-Dichloroethylene (156-60-5)	☐	☐	☐												
27V. 1,1,1-Tri-chloroethane (71-55-6)	☐	☐	☐												
28V. 1,1,2-Tri-chloroethane (79-00-5)	☐	☐	☐												
29V. Trichloro-ethylene (79-01-6)	☐	☐	☐												
30V. Trichloro-fluoromethane (75-69-4)	☐	☐	☐												
31V. Vinyl Chloride (75-01-4)	☐	☐	☐												
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	☐	☐	☐												
2A. 2,4-Dichloro-phenol (120-83-2)	☐	☐	☐												
3A. 2,4-Dimethyl-phenol (105-67-9)	☐	☐	☐												
4A. 4,6-Dinitro-O-cresol (534-52-1)	☐	☐	☐												
5A. 2,4-Dinitro-phenol (51-28-5)	☐	☐	☐												
6A. 2-Nitro-phenol (88-75-5)	☐	☐	☐												
7A. 4-Nitro-phenol (100-02-7)	☐	☐	☐												
8A. P-Chloro-M-Cresol (59-50-7)	☐	☐	☐												
9A. Penta-chlorophenol (87-86-5)	☐	☐	☐												
10A. Phenol (108-95-2)	☐	☐	☐												
11A. 2,4,6-Tri-chlorophenol (88-06-2)	☐	☐	☐												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenphthene (83-32-9)	☐	☐	☐												
2B. Acenaphtylene (208-96-8)	☐	☐	☐												
3B. Anthracene (120-12-7)	☐	☐	☐												
4B. Benzidine (92-87-5)	☐	☐	☐												
5B. Benzo (a) Anthracene (56-55-3)	☐	☐	☐												
6B. Benzo (a) Pyrene (50-32-8)	☐	☐	☐												
7B. 3,4-Benzo-fluoranthene (205-99-2)	☐	☐	☐												
8B. Benzo (ghi) Perylene (191-24-2)	☐	☐	☐												
9B. Benzo (k) Fluoranthene (207-08-9)	☐	☐	☐												
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	☐	☐	☐												
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)	☐	☐	☐												
12B. Bis (2-Chloroisopropyl) Ether (108-60-1	☐	☐	☐												
13B. Bis(2-Ethyl-hexyl) Phthalate (117-81-7)	☐	☐	☐												
14 B. 4-Bromo-phenyl Phenyl Ether (101-55-3)	☐	☐	☐												
15B Butyl Benzyl Phthalate (85-68-7)	☐	☐	☐												
16B. 2-Chloro-naphthalene (91-58-7)	☐	☐	☐												
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)	☐	☐	☐												
18B. Chrysene (218-01-9)	☐	☐	☐												
19B. Dibenzo (a,h) Anthracene (53-70-3)	☐	☐	☐												
20B. 1,2-Dichloro-benzene (95-50-1)	☐	☐	☐												
21B. 1,3-Dichloro-benzene (541-73-1)	☐	☐	☐												

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4 *if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE *(if available)*		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1,4-Dichlorobenzene (106-46-7)	☐	☐	☐												
23B. 3,3'-Dichlorobenzidine (91-94-1)	☐	☐	☐												
24B. Diethyl Phthalate (84-66-2)	☐	☐	☐												
25B. Dimethyl Phthalate (131-11-3)	☐	☐	☐												
26B. Di-N-Butyl Phthalate (84-74-2)	☐	☐	☐												
27B. 2,4-Dinitrotoluene (121-14-2)	☐	☐	☐												
28B. 2,6-Dinitrotoluene (606-20-2)	☐	☐	☐												
29B. Di-N-Octyl Phthalate (117-84-0)	☐	☐	☐												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	☐	☐	☐												
31B. Fluoranthene (206-44-0)	☐	☐	☐												
32B. Fluorene (86-73-7)	☐	☐	☐												
33B. Hexachlorobenzene (118-74-1)	☐	☐	☐												
34B. Hexachlorobutadiene (87-68-3)	☐	☐	☐												
35B. Hexachlorocyclopentadiene (77-47-4)	☐	☐	☐												
36B. Hexachloroethane (67-72-1)	☐	☐	☐												
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	☐	☐	☐												
38B. Isophorone (78-59-1)	☐	☐	☐												
39B. Naphthalene (91-20-3)	☐	☐	☐												
40B. Nitrobenzene (98-95-3)	☐	☐	☐												
41B. N-Nitrosodimethylamine (62-75-9)	☐	☐	☐												
42B. N-Nitrosodi-N-Propylamine (621-64-7)	☐	☐	☐												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK "X"			2. EFFLUENT							3. UNITS *(specify if blank)*		4. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS *(continued)*															
43B. N-Nitrosodiphenylamine (86-30-6)	☐	☐	☐												
44B. Phenanthrene (85-01-/	☐	☐	☐												
45B. Pyrene (129-00-0)	☐	☐	☐												
46B. 1,2,4-Trichlorobenzene (120-82-1)	☐	☐	☐												
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)	☐	☐	☐												
2P. α-BHC (319-84-6	☐	☐	☐												
3P. β-Bhc (319-85-7)	☐	☐	☐												
4P. γ-BHC (58-89-9)	☐	☐	☐												
5P. δ-BHC (319-86-8)	☐	☐	☐												
6P. Chlordane (57-74-9)	☐	☐	☐												
7P. 4,4'-DDT (50-29-3)	☐	☐	☐												
8P. 4,4'-DDE (72-55-9)	☐	☐	☐												
9P. 4,4'-DDD (72-54-8)	☐	☐	☐												
10P. Dieldrin (60-57-1)	☐	☐	☐												
11P. α-Endo-sulfan (115-29-7)	☐	☐	☐												
12P. β-Endo-sulfan (115-29-7	☐	☐	☐												
13P. Endosulfan Sulfate (1031-07-8)	☐	☐	☐												
14P. Endrin (72-20-8)	☐	☐	☐												
15P. Endrin Aldehyde (7421-93-4)	☐	☐	☐												
16P. Heptachlor (76-44-8)	☐	☐	☐												

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CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X'			3. EFFLUENT							4. UNITS *(specify if blank)*		5. INTAKE *(optional)*		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE *(if available)*		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - PESTICIDES *(continued)*															
17P. Heptachlor Expoxide (1024-57-3)	☐	☐	☐												
18P. PCB-1242 (53469-21-9)	☐	☐	☐												
19P. PCB-1254 (11097-69-1)	☐	☐	☐												
20P. PCB-1221 (11104-28-2)	☐	☐	☐												
21P. PCB-1232 (11141-16-5)	☐	☐	☐												
22P. PCB-1248 (12672-29-6)	☐	☐	☐												
23P. PCB-1260 (11096-82-5)	☐	☐	☐												
24P. PCB-1016 (12674-11-2)	☐	☐	☐												
25P. Toxa-phene (8001-35-2)	☐	☐	☐												