

Form I  
Instructions for filing a State NPDES  
Water Pollution Control Permit Application  
(Manufacturing and Commercial Operations)

GENERAL INSTRUCTIONS:

WHO MUST APPLY

Any person required to obtain a permit pursuant to Chapter 22, Article 11- 8 for the discharge or disposal of “industrial waste” or “other wastes” as defined under Chapter 22, Article 11-3(12) and (13) of the Water Pollution Control Act and those persons who do not have an effective permit, except persons covered by general permits, persons excluded under Series 10, Section 3.2 of Title 47 Legislative Rules of the Bureau of Environment, Department of Environmental Protection, Division of Water and Waste Management from manufacturing and commercial operations and excluding coal ore and mineral processing and exploratory/developmental drilling of oil and gas.

WHERE TO FILE

The application forms should be mailed to:

Director  
Attention: Permitting Section  
Division of Water and Waste Management  
601 57th Street, SE  
Charleston, WV 25304  
(304) 926-0495

WHEN TO FILE

Any person proposing a new discharge should submit an application at least 180 days prior to commencing construction of the facility. Any person with an existing permit shall submit a new application at least 180 days before the expiration date of the existing permit. Any person proposing a modification to an existing permit shall apply at least 180 days before any such modification.

PERMIT APPLICATION FEE

As required by Title 47, Legislative Rules, Bureau of the Environment, Department of Environmental Protection, Division of Water and Waste Management, Series 26, Water Pollution Control Permit Fee Schedules, a permit application fee by check or money order shall accompany the application. The check or money order shall be made payable to the “West Virginia Department of Environmental Protection.” If the application submitted is determined not to be complete and must be returned to the applicant, a resubmission application fee equivalent to five percent (5%) of the initial permit application fee or one hundred dollars (\$100), whichever is greater, by check or money order shall accompany the second filing.

## SUBMITTAL OF APPLICATION INFORMATION

One (1) copy of the application is enclosed. The original and four (4) copies are to be returned to the Department when completed. An additional copy of the application should be retained by the applicant. All drawings and maps are to be folded to 8 1/2 x 11 inch size. (If additional copies are needed please contact this office.)

## AVAILABILITY OF INFORMATION TO PUBLIC

Information contained in this application form will, upon request, be made available to the public for inspection and copying.

## COMPLETION OF FORMS

Please type or print in the unshaded areas only. Unless other-wise specified in instructions to the form, each item must be answered. To indicate that each item has been considered, enter "NA" for not applicable, if a particular item does not fit the circumstances or characteristics of your facility or activity. Some items in the form require narrative explanation. If more space is necessary to answer a question, attach a separate sheet entitled "Additional Information."

## LINE-BY-LINE INSTRUCTIONS

Item I:

Enter the facility's official or legal name.

Item II -A &B :

Give the name, title, and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by this Agency, if necessary.

Item III - A, B, C, & D:

Give the complete mailing address of the office where correspondence should be sent.

Item IV - A, B, C, & D:

Give the address or location of the facility identified in Item I of this form. If the facility lacks a street name or route number, give the most accurate alternative geographic information (e.g. distance from nearest city, town, or community and distance from nearest intersection of County or State Routes).

Item V-A &B :

Give the name as it is legally referred to, and phone number including area code of the person, firm, public organization, or any other entity which operates the facility described in this application. This may or may not be the same name as the facility.

The operator of the facility is the legal entity which controls the facility's operation rather than the plant or site manager.

If the operator is not the owner of the facility, the operator shall submit documentation with this application form to clarify the liability of each the owner and the operator relative to compliance with the regulations and any permit issued. In situations where the owner and operator are different entities, the responsible official for signing the application form is the one having responsibility for compliance with the permit. If the entity which has responsibility for capital expenditures and operating expenses relative to wastewater handling and treatment is different than the official having permit compliance responsibility, the permit will list both parties as co-permittees and hold both parties responsible.

Item V - C:

Indicate whether the entity which operates the facility also owns it by marking the appropriate box.

Item V - D:

If Item V-C is marked 'No', give name and address of owner.

Item V - E:

Enter the appropriate letter in the box provided to indicate the legal status of the operator of the facility. Indicate "public" for a facility solely owned by local government such as city, town, county, etc.

Item VI - A:

If the intent of the filing of this form is to request reissuance of an existing permit, mark this block and go to Item VII.

Item VI - B:

If you are applying for or are required to apply by the Director for a permit modification and:

- a) The modification involves a new or proposed discharge and:

1) The discharge may not require treatment (e.g. low volume, non-contact cooling water, uncontaminated stormwater, etc.), this item and Items C-1, C-2, and C-3 should be marked.

2) The discharge may require treatment (e.g. process wastewater, contact cooling water, sanitary wastes, contaminated stormwater, etc.), this item and Items C-2 and C-3 should be marked.

b) You are modifying an existing treatment or disposal system, this item and Item C-3 should be marked.

c) You are increasing the volume or concentration of the discharge in excess of your existing permit limitations, this item and Item C-4 should be marked.

d) You are extending, modifying, or adding to an existing point source a new operation which would cause an increase in the volume or concentration of any wastes currently discharging from that point source, this item and Item C-5 should be marked.

If you are applying for a modification for any 'causes' listed under Section 9.2 of the LRWRB and not related to the conditions of a - d above, you need only mark Item VI - B.

#### Item VI - C

If you are applying for a new or proposed discharge and:

a) The discharge may not require treatment (e.g. low volume, non-contact cooling water, uncontaminated stormwater, etc.) Items C-1, C-2 and C-3 should be marked.

b) The discharge may require treatment (e.g. process wastewater, contact cooling water, sanitary wastes, contaminated stormwater, etc.), Item C-2 and C-3 should be marked.

If you are applying for a permit for an existing facility not covered by an effective permit and:

a) The discharge may not require treatment or is not currently treated, Items C-1 and C-3 should be marked.

b) The discharge may require treatment or is currently treated, Item C-3 should be marked.

#### Item VII:

If you marked Item VI - A, you must complete this Item by indicating whether any changes have occurred at your facility since obtaining your existing permit. If you mark 'YES' to this question you will be responsible for submitting all necessary information relating to the changes in any remaining item on this form including revised drawings showing the changes under Item X and XIV. Any item referencing a change from any previous submission must be noted with an asterisk. (\*). If you mark 'NO' to this question, you must still

complete the remainder of this form. It will not be acceptable to refer to any previous submission in completing any item, however, you may repeat the information from any previous sub-mission providing no changes have occurred.

Item VIII:

List, in descending order of significance, the four (4) digit standard industrial classification (SIC) codes which best describes your facility in terms of the principal products or services you produce or provide. Also, specify each classification in words.

SIC code numbers are descriptions which may be found in the "Standard Industrial Classification Manual" prepared by the Executive Office of the President, Office of Management and Budget, which is available from the National Technical Information Service in Springfield, VA. Use the current edition of the manual. If you have any questions concerning the appropriate SIC code for your facility, contact the Water Resources Section, Industrial Branch. (WRS, IB).

Item IX:

List all existing environmental permits by number, type (landfill, UIC, RCRA, etc.) dates of issuance and expiration, and address of and Agency issuing permit. If you have previously filed an application but have not yet received a permit, provide the number of the application, if any.

Item X:

Provide a topographic map or maps of a reasonable scale of the area extending to at least one mile beyond the property boundaries of the facility which clearly show the following:

- 1 . The outline of the facility including the legal boundaries
- 2 . The location and outlet number (if any) of each existing or proposed intake and discharge structure
- 3 . All hazardous waste treatment, storage, or disposal facilities associated with the facility
- 4 . Each well where fluids are injected underground associated with the facility
- 5 . All wells, sinkholes, springs, rivers, and other surface water bodies, plus all drinking water wells identified in public records or otherwise known to the applicant. If an intake or discharge structure, hazardous waste, or other disposal site or injection well associated with the facility is located more than one mile from the facility, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, site, or well. On each map, include the map scale, a meridian arrow showing north, and

latitude and longitude at the nearest whole second.

Item XI - A:

Briefly describe the nature of your business (e.g. products produced or services provided).

Item XI - B:

You qualify as a small business for the most recent three years if your gross annual sales average less than \$100,000 per year (in second quarter 1980 dollars). Production or 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 intra-corporate transfers of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures 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).

Item XII:

State statute provides for severe penalties for submitting false information on this application form. State regulations require this application to be signed as follows:

- 1 . For a corporation: by a responsible corporate officer (See LRWRB Series 2, Section 4.6.a.1. for an expanded definition of responsible corporate officer).
- 2 . For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
- 3 . For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. (See LRWRB Series 2, Section 4.6.a.3. for an expanded definition of a principal corporate officer of a Federal Agency).

Item XIII:

You may use the map you provided for Item X to determine the latitude and longitude of each of your outlets and the name of the receiving water. Also include a river mile point, if known. Be sure to list the immediate receiving water. If the receiving water has no published name, specify as "Unnamed tributary of". Example: "Unnamed tributary of Kettle Creek, a tributary of the South Fork of the South Branch of the Potomac River."

**Item XIV - A:**

The site layout drawing must clearly show, at a minimum, (if applicable) the following: All process areas, tank farm areas, barge, rail and truck loading and unloading areas, treatment systems (including pretreatment systems), collection lines, active and inactive disposal sites (e.g. landfills, spray irrigation sites, land spreading operations, etc.), outdoor material loading and storage areas, cooling towers and/or ponds, the outline and direction of stormwater runoff noting areas where pesticides, herbicides, soil conditioners and fertilizers are applied and the locations of associated conveyance structures, and all discharge structures. In addition for each outlet containing stormwater, determine the area which is covered by impervious surfaces drained by the outlet application, For the purpose of this impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outlet. Include with each discharge structure the CI, PVC, VCT, size and type (material) of construction (e.g. etc.) and type of flow measuring device used. Also include selection (design) criteria for each measuring device. Finally, show location of sampling points if other than final outlet. 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 XIV -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 1 to these instructions. Details and drawings of each treatment unit must include cross sectional and plan views of each unit with dimensions and capacities specified, as well as other necessary details (such as details of inlets, outlets, flow measurement devices, skimming devices, baffles, column internals, filter media, aerators, and all associated appurtenances). Also provide the design criteria or manuals related to each treatment unit.

**Item XIV - B:**

List all sources of wastewater to each outlet. Operations may be described in general terms (for example, "dye-making reactor" or a "distillation tower"). You may estimate the flow contributed by each source if no data is available, and for stormwater, you may use the formula offered in Appendix A to these instructions

or any reasonable alternative measure of duration, volume, or frequency. 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 1 to fill in column 2-b for each treatment unit including any pretreatment unit(s) utilized. Insert "XX" into column 2-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. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water: the method of treatment, storage or disposal of these materials: past and present materials management practices employed in the last three years to minimize contact by these materials with storm water runoff; materials loading and access areas; and the manner and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together, "Significant materials" includes but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets: finished materials such as metallic products: raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers, pesticides: and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

#### Item XIV - 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 discharge, other than stormwater. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate in the "Maximum Daily" column. Report the average of all daily values measured during days when discharge occurred within the last year in the "Long Term Average" column. Units should be specified as MGD, MG/month or MG/year. The duration should be specified as the maximum length of time of each discharge for each operation contributing flow to the outlet.



**Item XV - A:**

A guideline applies to you if you have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, BAT, or NSPS guideline. If you are unsure whether you are covered by a promulgated effluent guideline, check with the WRS, IB. You must check "yes" if an applicable effluent guideline has been promulgated, even if the guideline limitations are being contested in court. If a promulgated effluent guideline has been remanded for reconsideration by a court you may check "no."

**Item XV - B:**

Specific category and subcategory references to the appropriate Code of Federal Regulation (40CFR) must be provided. If more than one subcategory applies, provide each appropriate reference. Example: Leather Tanning and Finishing Point Source Category -Subpart A- Hair Pulp, Chrome Tan, Retan - Wet Finish Subcategory. The Category should be listed as Part 425 and Subcategory listed as Part 425.10 thru 425.16.

**Item XV - C:**

An effluent guideline is expressed in terms of production (or other measure of operation) if the limitations are expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per 1,000 lbs. of raw material used. An example of a guideline not expressed in terms of production is one which limits the concentration of pollutants, (e.g. mg/l).

**Item XV - D:**

This item must be completed only if you checked "yes" to Item xv - c. The production information requested here is necessary to apply effluent guidelines to your facility and you may not 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 under 1.a & b below XV.E. The figures provided must be a measure of actual operation over a one month period, such as the production for the highest month during the last twelve months, or the monthly average production for the highest year of the last five years, or other reasonable measure of actual operation, but may not be based on design capacity or on predictions of future increases in operation.

**Item XV - E:**

This item must be completed only if you checked "No" to Item xv - c. If your basis is other than production, you must

provide this information. Flows and flow rates from each operation or process must be clearly listed as required by the applicable guideline under 1.a & b. Applicants covered by the Organic Chemicals, Plastics and Synthetic Fibers category must also submit the percentage of total production figure represented by each subcategory.

Item XVI - A:

If you check "yes" to this question, complete all parts of the table, or attach a copy of any previous submission you have made to any federal, state or local authority containing the same information.

Item XVI - 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 XVII - A, B, C, D, E, F, G and H:

These items require you to collect and report data on the pollutants or storm events discharged from each of your outlets. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. Should you need assistance in determining the appropriate sampling and testing procedures and requirements, you should contact the WRS, Laboratory Branch at (304) 348-2837 and request a copy of the "Guidance for Preparation of Combined Work/Quality Assurance Project Plans for Environmental Monitoring". Note, however, that the DWR cannot provide analytical services for the required testing. The following general instructions apply to the entire item.

**GENERAL INSTRUCTIONS:**

Part A & D require you to report at least one analysis for each pollutant listed. Parts B, C, E, & F require you to report data in two ways. 1. For some pollutants, you may be required to mark "X" in the "Testing Required" 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. 2. For all others, you must mark "X" in either the "Believe Present" column or the "Believe Absent" columns (2-a or 2-b, Part B, and 2-b or 2-c, Part C) based on your best estimate, and test for those which you believe to be present. For some pollutants addressed in Parts E and F, if

you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge, (See Table 2). For all other pollutants addressed in Parts E and F you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. Part H requires you to list any of a group of pollutants which you believe to be present, with a brief explanation of why you believe it to be present. (See specific instructions on the form and below for Parts A through H.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, materials management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or of any 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.

**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 XVII-1 through XVII-11 if the separate sheets contain all the required information in a format which is consistent with pages XVII-1 through XVII-11 in spacing and in identification of pollutants and columns. (For example, the data system used in your gas chromatography/mass spectrometry (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 4, Parts B & C, and D, E, and F, where appropriate).

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

(1) An applicable, promulgated effluent limitation or standard specifies the limitation 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) Case-by-case limitations are necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. For stormwater, if you measure only one grab sample and one flow-weighted composite sample for a given outlet, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outlet and those values are representative of your discharge, 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 "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

For non-stormwater discharges, if you measure only one daily value, complete only the "Maximum Daily Value" columns and insert "1" into the "Number of Analyses" columns (2-a and 2-d, Part A, and 3-a and 3-d, Parts B and C). The Director may require you to conduct additional analyses to further characterize your discharges.

For composite samples for non stormwater discharges 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 or aliquots taken over the operating hours of the facility during a 24 hour period. (Note, for stormwater discharges see page 13 of these instructions titled "Sampling of Stormwater".

If you measure more than one daily value for a pollutant, determine the average of all values within the last year and report the concentration and mass under the "Long Term Average Value" columns (2-c, Part A, and 3-c, Parts B and C), and the total number of daily values under the "Number of Analyses" columns (2-d, Part A and 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 Value" columns (2-b, Part A, and 3-b, Parts B and C).

**SAMPLING:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. 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 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.

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

2 . COMPOSITE SAMPLE: A combination of individual samples (aliquots) obtained at regular intervals over a time period. Either the volume of each individual aliquot is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite. The maximum time period between individual samples shall be two hours. Samples may be collected manually or automatically.

**SAMPLING OF STORMWATER:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact the Water Resources Section Industrial Branch for 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 time, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets if treatment is provided. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a 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 taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. 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.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area. As the approximately 24 Rainfall Gages operated by the National Weather Service that supplies hourly data in West Virginia can vary greatly from your location, it is suggested that an inexpensive or moderately priced rain gage be obtained to meet your individual needs.

A grab sample shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples for stormwater are defined as follows:

**Grab Sample:** An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

**Flow-Weighted Composite Sample:** A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. 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. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

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

- (1) All data requirements are met;
- (2) Sampling was done no more than three years before submission; and
- (3) 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 storm water treatment. additional information, The Director may request including current quantitative data,if it is determined to be necessary to assess your discharges. The Director may allow or establish alternate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, (snow melt or rainfall), the form of precipitation sampled and additional time for submitting data on a case-by-case basis.

**ANALYSIS:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been 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 times, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outlets, you may request permission from the Director to sample and analyze only one outlet and submit the results of the analysis for other substantially identical outlets. If your request is granted by the Director, on a separate sheet attached to the application form identify which outlet you did test, and describe why the outlets which you did not test are substantially identical to the outlet which you did test.

**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. Net limitations are allowed 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 attach a separate document clearly demonstrating your eligibility based upon the requirements of Series 2, Section 7.7 of the LRWRB.

#### **SPECIFIC INSTRUCTIONS:**

##### **Non-Storm Water Discharges**

Part XVII - A. Part XVII - A must be completed by all applicants for all outlets, discharging non-stormwater discharges including outlets containing only noncontact cooling water. However, at your request, the Director may waive the requirements to test for one or more of these pollutants, upon a determination that testing for the pollutant(s) is not appropriate for your

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

PART XVII - B: Part XVII -for all outlets, B must be completed by all applicants discharging non-stormwater discharges including outlets containing only noncontact cooling water. 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 Value" column and "Maximum 30 Day Value" column are not compulsory but should be filled out if data is available.

PART XVII - C: Table 2 of these instructions list 33 "primary" industry categories with specific testing requirements. For each outlet, if any of your processes which contribute wastewater falls into one of those categories, you must mark "X" in "Testing Required" column 2-a and test for: cyanide, (A) All of the toxic metals, and total phenols: and (B) The toxic organic pollutants contained in the GC/MS fractions indicated in Table 2 as applicable to your category, unless you qualify as a small business or are otherwise exempt from testing for the toxic organics. The toxic organic pollutants are listed by GC/MS fractions on pages XVII-4 through XVII-9 in Part XVII-C. For example, the Organic Chemicals Industry has an "X" in all four fractions: therefore, applicants in this category must test for all toxic organic pollutants in Part XVII-C. 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, non-process wastewater outlets, and non-required GC/MS fractions), you must mark "X" in either the "Believed Present" column 2-b or the "Believed Absent" column 2-c for each pollutant, and test for those you believe present (those marked "X" in column 2-b). If you qualify as a small business and are not listed as a primary industry category, you are exempt from testing for all of the toxic pollutants listed on pages XVII-3 through XVII-9 in Part C. in intake water, For pollutants see discussion in General Instructions to this item. The "Long Term Average Value" column 3-c and "Maximum 30 Day Value" column 3-b are not compulsory but should be filled out if data is available.



Use composite samples for all pollutants in this Part, except use grab samples for total phenols and cyanide. 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); or
- F. Hexachlorophene (HCP).

If you mark "Testing Required" or "Believe 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 Director may require you to perform a quantitative analysis if you report a positive result. Part XVII.D

**SMALL BUSINESS EXEMPTION.** If you are a "small business" you are exempt from the reporting requirements for the organic toxic pollutants listed in Table C -- See Small business qualifications in Item XI b, of these instructions.

**STORMWATER DISCHARGES Part XVII.D** - must be completed by all applicants for all outlets discharging stormwater runoff associated with industrial activity. Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item XVII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

**Part XVII E** - Part XVII E must be completed by all applicants for all outlets discharging stormwater runoff associated with industrial activity. List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's

NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outlet. See discussion in General Instructions to Item XVII, for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

Part XVII F - Part XVII.F must be completed by all applicants for all outlets which discharge storm water associated with industrial activity, or that the Director is evaluating for designation as a significant contributor of pollutants to waters of the State, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part F requires you to address the pollutants in Tables B and C for each outlet. Pollutants in each of these Tables are addressed differently.

Table C. For each Outlet, list all pollutants in Table E that you know or have reason to believe are discharged. For every pollutant in Table C expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrylonitrile, 2,4 dinitrophenol and 2 methyl 4,6 dinitrophenol, you must submit quantitative data, if any of these four pollutants is expected to be discharged in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Table 3: For each outlet, list any pollutant in Table 3, of these instructions that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report it. Note: Under 40 CFR 117.12 (a) (2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of Section 311 of CWA which establishes reporting requirements, civil penalties, and liability for clean-up costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if 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 forth 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.

Table 4. For each stormwater Outlet, list all pollutants that you know or have reason to believe are discharged (except those previously listed in Part VII E). If a pollutant is limited in an effluent guideline limitation to which the facility is subject the pollutant should be listed in Part XVII E. If a pollutant in Table 4 is indirectly limited by an effluent guideline through an indicator, you must analyze for it and report data in Part XVII F . For other pollutants listed in Table 4 (those not limited directly or indirectly by an effluent guideline), that you know or have reason to believe are discharged, you must either report quantitative data or briefly describe the reasons the pollutants are expected to be discharged.

#### Part XVII. G

If sampling is conducted during more than one storm event, you only need to report the information requested in Part XVII.G for the storm event(s) which resulted in any maximum pollutant concentration reported in Part XVII.D, XVII.E or XVII.F.

Provide streamflow measurements or reasonable estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event. If an estimate of flow is given, show computations and analysis of estimate on a separate sheet of paper.

PART XVII - H. List on a separate sheet attached to your application any pollutants in Table 3 of these instructions 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.

#### Item XVIII-A

You must provide a listing, sources, and expected levels of any toxic pollutant not otherwise covered by analysis in Item XVII-C. Base your prediction of expected levels of any pollutant listed upon your knowledge of your processes, raw materials, past and projected product ranges, etc., or upon any testing conducted upon your effluents which indicates the range of variability that can be expected in your effluent over the next five years.

EXAMPLE. Outlet 001 discharges water used to clean six 500 gallon tanks. These tanks are used for formulation of dispersions of synthetic resins in water (adhesives). Use of toxic pollutants which can be expected in the next 5 years is:

- 1 . Copper acetate inhibitor, 1/2 lb. per tank;
- 2 . Dibutyl phthalate, 50 lbs. per tank:
- 3 . Toulene, 5 lbs. per tank: and
- 4 . Antimony oxide, 1 lb. per tank.

Based on normal cleaning, an average of 1% and a maximum of 3% of the contents of each tank is collected and discharged once every two weeks in the 150 gallons of water used for cleaning. Treatment (pH adjustment, flocculation, filtration) removes 85% of metals and 50% of organic compounds. Material Data Safety Sheets (MSDS) must also be provided, where available.

#### Item XVIII - B

You must provide a listing of all treatment chemicals used in each treatment unit (e.g. polymers, flocculants, pH adjustment agents, etc). Also include infrequently used treatment chemicals (e.g. slimicides, algacides, biocides, corrosion inhibitors, pesticides, herbicides, soil conditioners, fertilizers, etc.) and include the frequency and dosage rate of each application unless already provided in Item XIV-C.

#### Item XIX

Self explanatory. The Director may ask you to provide additional details after your application is received.

#### Item XX - A

Briefly describe the procedures and equipment used during sampling of your discharge(s). For example, specify whether manual or automatic sampling was performed, whether plastic or glass sample containers were used and indicate models or manufacturers of automatic sampling units.

Item XX - B, C & D

Self explanatory.

Item XX - E, F, G, H, & I

Specify outlet number (if any) or otherwise describe the outlets sampled, the time, and date the samples were taken, the dates the samples were analyzed, and the name and address of the laboratory performing the analysis.

Item XX -J &K

These items must be completed whether you are using your own facility laboratory or a contract lab. If you are using a contract lab, you should obtain the required information from that lab. Note that it is important to determine if a certification has been granted that the certification covers the pollutant parameters required to be tested for the purpose of this application.

Item XX - L & M

These items must be completed, even if you have checked yes to Item XX - J. If you are using a contract lab, you should obtain the required information from that lab.

Item XXI - A & B

If you have supplied the answer to Part A of this Item under Item XIV - B of this form, specify "Refer to Item XIV - B" and complete any additional information in Part B. If on-site disposal is utilized, the location should be referenced as required in Item XIV - A. If the disposal area is not associated with the facility, specify the name, location, Agency issuing permit and letter of acceptance of wastes from disposal operator. (Disposal in this item refers to any other wastes not previously covered on this application or currently covered by an existing permit.)

Item XXII - A

If you mark YES to this Item, you must submit a copy of the plan to the WRS. Items XXII - B, C & D must also be completed, however, if a BMP plan has been prepared and it covers all requested information in B, C & D, you may simply refer to the BMP Plan and submit the plan instead of completing each item.

Item XXII - B

Section 5.5 of Series 2 of the LRWRB specifies certain requirements for proper operation and maintenance of all facilities and systems of treatment and control which are used to achieve compliance with the conditions of a permit. Briefly describe the plan of maintenance for each treatment unit such as operator staffing and training, inspection frequency, cleaning frequency, preventative maintenance schedule, laboratory and process control, quality assurance procedure, auxiliary or back up equipment, etc.

Item XXII - C & D

Self explanatory. If this information is addressed in any Spill Prevention Control and Countermeasure (SPCC) plan developed, you must submit a copy of the plan.

A Groundwater Protection Plan (GPP) is now required by Title 47, Series 58, Section 4.11 of the Legislative Rules of the Department of Environmental Protection. For any questions regarding the GPP, please contact Rick Shaver of our Groundwater Office at (304) 558-2108.

TABLE 1

CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES

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

CHEMICAL TREATMENT PROCESSES

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

BIOLOGICAL TREATMENT PROCESSES

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

OTHER PROCESSES

4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Discharge to Ground Waters	4-D	Underground Injection

SLUDGE TREATMENT AND DISPOSAL PROCESSES

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

TABLE 2

TESTING REQUIREMENTS FOR ORGANIC TOXIC POLLUTANTS  
BY INDUSTRIAL CATEGORY FOR EXISTING DISCHARGERS

Industrial category	GC/MS fraction 1			
	Volatile	Acid	Base/ neutral	Pesticide
Adhesives and Sealants	(*)	(*)	(*)	.....
Aluminum Forming	(*)	(*)	(*)	.....
Auto and Other Laundries	(*)	(*)	(*)	(*)
Battery Manufacturing	(*)	.....	(*)	.....
Coil Coating	(*)	(*)	(*)	.....
Copper Forming	(*)	(*)	(*)	.....
Electric & Electronic Components	(*)	(*)	(*)	(*)
Electroplating	(*)	(*)	(*)	.....
Explosives Manufacturing	.....	(*)	(*)	.....
Foundries	(*)	(*)	(*)	.....
Gun and Wood Chemicals	(*)	(*)	(*)	(*)
Inorganic Chemicals Manufacturing	(*)	(*)	(*)	.....
Iron & Steel Manufacturing	(*)	(*)	(*)	.....
Leather Tanning and Finishing	(*)	(*)	(*)	(*)
Mechanical Products Manufacturing	(*)	(*)	(*)	.....
Nonferrous Metals Manufacturing	(*)	(*)	(*)	(*)
Ore Mining	(*)	(*)	(*)	(*)
Organic Chemicals Manufacturing	(*)	(*)	(*)	(*)
Paint and Ink Formulation	(*)	(*)	(*)	(*)
Pesticides	(*)	(*)	(*)	(*)
Petroleum Refining	(*)	(*)	(*)	(*)
Pharmaceutical Preparations	(*)	(*)	(*)	.....
Photographic Equipment & Supplies	(*)	(*)	(*)	(*)
Plastic and Synthetic Materials Manufacturing	(*)	(*)	(*)	(*)
Plastic Processing	(*)	.....	.....	.....
Porcelain Enameling	(*)	.....	(*)	(*)
Printing and Publishing	(*)	(*)	(*)	(*)
Pulp and Paper Mills	(*)	(*)	(*)	(*)
Rubber Processing	(*)	(*)	(*)	.....
Soap and Detergent Manufacturing	(*)	(*)	(*)	.....
Steam Electric Power Plants	(*)	(*)	(*)	.....
Textile Mills	(*)	(*)	(*)	(*)
Timber Products Process Processing	(*)	(*)	(*)	(*)

1 The toxic pollutants in each fraction are listed in Table II

\* Testing required.



TABLE 3

Toxic Pollutants and Hazardous Substances Required to be Identified by  
Existing Dischargers if Expected to be Present

## Toxic Pollutants

Asbestos

## Hazardous Substances

Acetaldehyde	Kepone
Allyl alcohol	Malathion
Allyl chloride	Mercaptodimethur
Amyl acetate	Methoxychlor
Aniline	Methyl mercaptan
Benzonitrile	Methyl methacrylate
Benzyl chloride	Methyl parathion
Butyl acetate	Mevinphos
Butylamine	Mexacarbate
Captan	Monoethyl amine
Carbaryl	Monomethyl amine
Carbofuran	Naled
Carbon disulfide	Napthenic acid
Chlorpyrifos	Nitrotoluene
Coumaphos	Parathion
Cresol	Phenolsulfanate
Crotonaldehyde	Phosgene
Cyclohexane	Propargite
Strychnine	Propylene oxide
Cyclohexane	Pyrethrines
2,4-D(2,4-Dichlorophenoxy acetic acid)	Quinoline
Diazinon	Resorcinol
Dicamba	Strontium
Dichlobenil	Strychnine
Dichlone	Styrene
2,2-Dichloropropionic acid	2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
Dichlorvos	TDE (Tetrachlorodiphenyl ethane)
Diethyl amine	2,4,5-TP (2-(2,4,5-Trichlorophenoxy propanic acid)
Dimethyl amine	Trichlorofon
Dinitrobenzene	Triethanolamine
Diquat	Triethylamine
Disulfoton	Trimethylamine
Diuron	Uranium
Epichlorohydrin	Vanadium
Ethanolamine	Vinyl Acetate
Ethion	Xylene
Ethylene diamine	Xylenol
Ethylene dibromide	Zirconium
Formaldehyde	
Furfural	
Guthion	
Isoprene	
Isopropanolamine	
Kelthane	

**APPENDIX A**

**Calculation of the Average  
Discharge Volume for Stormwater Runoff**

The following formula shall be used to determine the average discharge volume for stormwater runoff:

$$\begin{array}{l} \text{Average Discharge Volume} \\ \text{for Stormwater Runoff} = \\ \text{(gallons per day)} \end{array} = \frac{\text{Annual Stormwater Runoff Volume}}{366 \text{ days per year}}$$

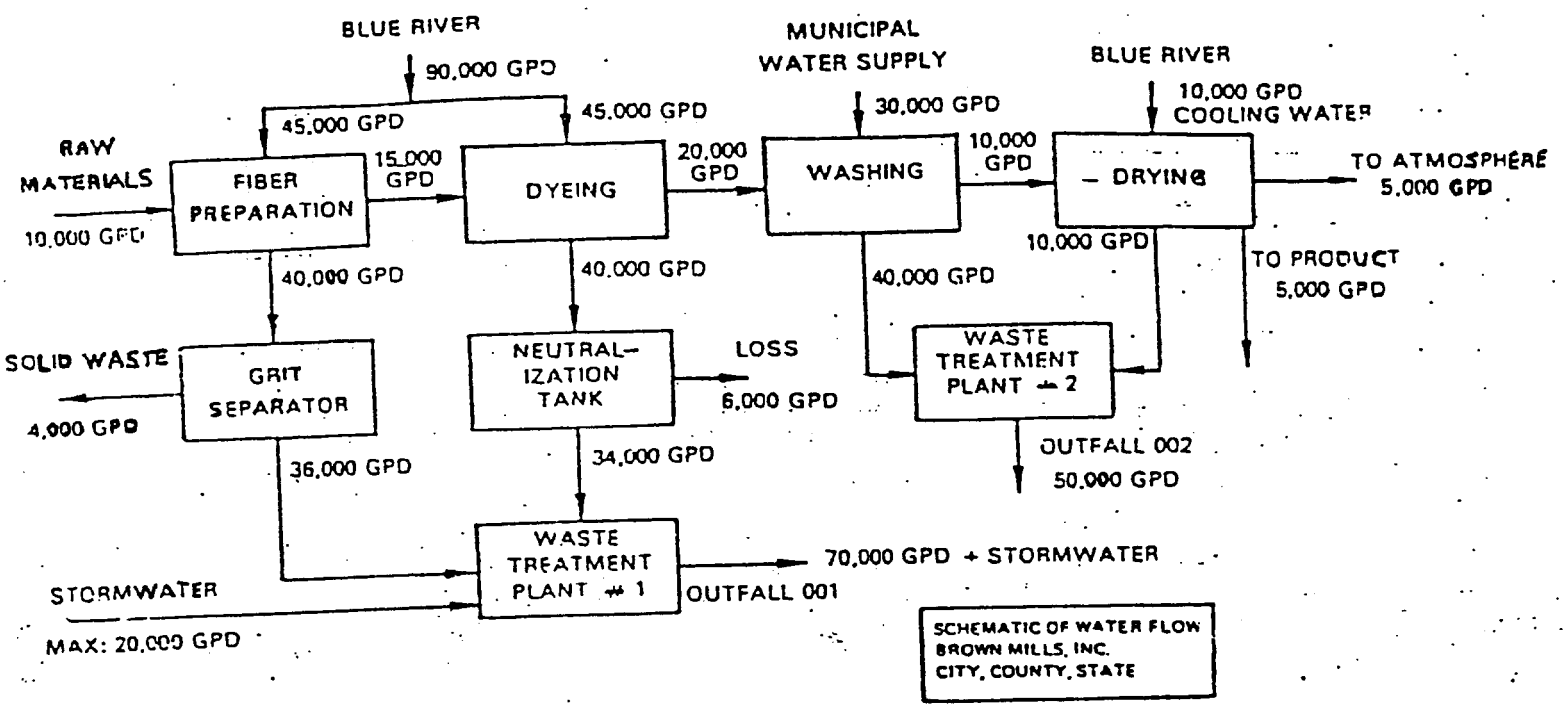
where Annual Stormwater Runoff Volume (gallons) =

$$\begin{array}{l} \text{Annual} \\ \text{Rainfall} \\ \text{(ft/yr)} \end{array} \times \begin{array}{l} \text{Drainage} \\ \text{Area} \\ \text{(ft-sq)} \end{array} \times \begin{array}{l} 7.48 \\ \text{gallons} \\ \text{per ft-cu} \end{array} \times \text{Runoff Coefficient}$$

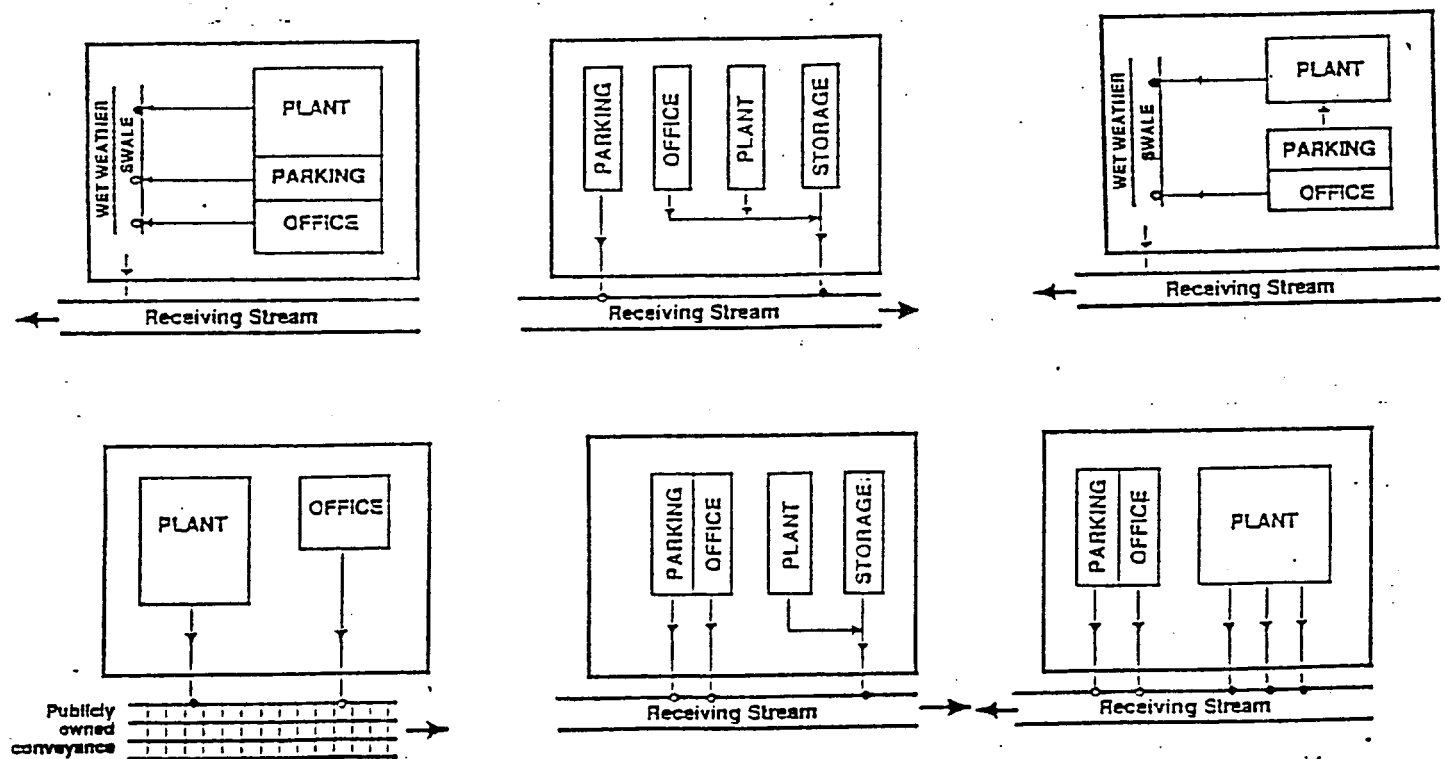
where the Runoff Coefficient shall be  
0.90 for areas covered by concrete or asphalt  
and 0.25 for areas covered by vegetation.

Note: An alternative method of stormwater runoff calculation may be substituted for this formula upon approval from the Director.

EXAMPLE LINE DRAWING SHOWING  
PROCESS WASTE WATER COOLING WATER AND STORM WATER



EXAMPLE INDUSTRIAL STORM RUNOFF OUTLETS WITH  
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY



- Outlet discharges storm water associated with industrial activity
- Outlet discharges storm water that is not associated with industrial activity
- ➔ Runoff direction

Figure 1