

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

South Dakota Surface Water Discharge Program Application for Permit to Discharge Wastewater

GENERAL INFORMATION

This form is provided by the Secretary of the South Dakota Department of Environment and Natural Resources in accordance with '74:03:18:09 of the Administrative Rules of South Dakota. No South Dakota Surface Water Discharge Permit will be issued except under completion, and submittal of this form to:

South Dakota Department of Environment and Natural Resources Surface Water Quality Program Joe Foss Building 523 East Capitol Avenue Pierre, South Dakota 57501-3181

Check the appropriate response:

Permit Renewal New Application

Indicate type of facility (check most appropriate response):

POTW Water Treatment Plant Other (please specify) Industry Federal

PLEASE PRINT OR TYPE

1. Name of Facility:

2. Mailing Address of Owner:

Name		
Street		
City		
Stata		Zip Code
3. Mailing address	of facility (if different from own	ner):
Name		·
Straat		
City		
~		Zip Code
Include other local of	contacts:	
Name	Title	Phone
Name	T : 1	Phone
4. Telephone Numb	er:	
Owner:	Facility:	
Date Received:	E	ermit Number:
New Facility	F	xisting Facility

PCS:

Receiving Stream:

- 5. Is this facility located on Indian lands?
 - Yes No
- 6. Please include a brief description of the nature of the business conducted at this facility. Include from one to four Standard Industrial Classification (SIC) codes which best reflect the principal products or services provided by the facility.

Please list all the activities which require the applicant to obtain a discharge permit.

7. Operational History:

Date Constructed:	
Operational Start-up:	

NOTE: Provide a narrative description of each change or improvement made to this facility, either currently underway or anticipated over the next five years, which will affect the quality of the discharge or generated sludge. For each change or improvement, provide projected dates, as accurately as possible, for completion of each step listed below:

- A. Begin Construction
- B. End Construction
- C. Begin Discharge
- D. Operational Level Attained

8. Type of treatment (check <u>all</u> appropriate boxes):

A. No treatment

Stabilization pond:

- A. Effluent discharge to "Waters of the State"
- B. Effluent used for irrigation
- C. Total retention No Discharge
- D. Stabilization pond/artificial wetland system
- E. Infiltration/percolation basins
- F. Aerated Lagoon
- G. Other, please explain:

Mechanical Treatment Facilities:

- A. Conventional Secondary Treatment
- B. Advanced Treatment Tertiary
- C. Other, please explain:

NOTE: Please attach a description of the treatment units employed by the facility, including a line drawing of the current wastewater treatment facility. Waters of the State can not be used for treatment

9. Number of separate discharge points which have an existing or potential release of treated or untreated wastewater (outfalls):______

Describe the discharge and the type of wastewater from each outfall. Include all overflows, bypasses, or seasonal discharges from lift stations, lagoons, holding ponds, etc.:

Outfall 001	
Outfall 002	
Outfall 003	

Attach additional sheets if necessary.

NOTE: Please place points of discharge on a topographic map, or other map if a topographic map is unavailable. This map should extend to one (1) square mile beyond the property boundaries of the facility and each of its intake and discharge facilities; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, drinking water wells, and surface water intake structures listed in public records, or otherwise known to the applicant in the map area.

10. Are you able to bypass your treatment facility?

Yes If yes, which outfall(s) listed above correspond to this bypass discharge?______ No

11. Is discharge (check one):

- A. Continuous
- B. Intermittent
- C. Seasonal
- D. No Discharge

If other than continuous, please explain:

If wastewater is discharged to places other than surface water, please explain:

13. Type of Sludge disposal (check all appropriate boxes):

- A. Land Application (please explain):
- B. Surface Disposal
- C. Landfill
- D. Other (please explain):
- E. Sludge is not generated or disposed of at this facility

14. If A, B, C, or D was marked in Question 13, provide a narrative on the following sludge production information: (Attach additional sheets if necessary)

- A. Tons of dry sludge produced each year
- B. Average percent solids sludge produced
- C. Tons of dry sludge disposed of each year _____
- D. Average percent solids sludge sent for use and/or disposal
- E. Attach any sludge monitoring data obtained over the last year (including groundwater monitoring data, results of hazardous waste tests, and results of actions taken to determine whether sludge is hazardous). Include a description of the methods used and sampling locations and dates.

15. List other information which you feel should be brought to the attention of the SDDENR in regard to the issuance of a discharge permit for the facility. (Attach additional sheets if necessary.)

16. Type of Discharge (check <u>all</u> that apply):

Publicly Owned Treatment Works (Complete Appendix A) Existing Industrial process wastewater (Complete Appendix B) New Industrial process wastewater (Complete Appendix C) Non-contact cooling water, or other non-process wastewater (Complete Appendix D) Storm water associated with industrial activity (Complete Appendix E) Large or medium municipal separate storm sewer system Discharge to sanitary sewer and/or Publicly Owned Treatment Works (Complete Appendix C) Backwash from water treatment plants (Complete Appendix C) Concentrated animal feeding operation (Complete Appendix C) Concentrated aquatic animal production facility (Complete Appendix C) Privately owned treatment works (Complete Appendix C) Federal facility (except those located on Indian reservations) (Complete Appendix C) Silvicultural point source (Complete Appendix C) 17. Does this application substantially duplicate an application by the same applicant which was denied by the SDDENR or the USEPA within the past five years and which has not been reversed by a court of competent jurisdiction?

Yes No

18. Existing Environmental Permits

Please check all other Environmental Permits which are held by the facility. Include permit numbers in the space provided:

A. NPDES or SWD (Discharges to Surface Water)

B. UIC (Underground Injection of Fluids)

C. RCRA (Hazardous Wastes)

D. PSD (Air Emissions from Proposed Sources)

E. Other (please specify)

F. Other (please specify)

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 directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that I will provide for the operation of this facility in accordance with the Rules and Regulations Governing Operation of Water Pollution Control Facilities and will provide certified operators as required by SDCL 34A-3, Water Supply and Treatment System Operators. I am aware that there are significant penalties for submitting false information, including revocation of the permit and the possibility of fine and imprisonment for knowing violations.

NOTE: Application must be signed by the authorized chief elective or executive officer of the applicant, or by the applicant, if an individual.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Name	Title
Date	
Signature	

Department of Environment and Natural Resources Surface Water Quality Program Joe Foss Building 523 East Capitol Pierre, SD 57501-3181 Telephone: (605) 773-3351

STATE OF SOUTH DAKOTA BEFORE THE SECRETARY OF THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF)
(FACILITY NAME))
STATE OF))
COUNTY OF) 55

CERTIFICATION OF

I, _____, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

South Dakota Codified Laws Section 1-40-27 provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner or resident general manager of the facility for which application has been made:

- (a) Has intentionally misrepresented a material fact in applying for a permit;
- (b) Has been convicted of a felony or other crime involving moral turpitude;
- (c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;
- *(d) Has had any permit revoked under the environmental laws of any state or the United States; or*
- (e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification, consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

Pursuant to SDCL 1-40-27, I certify that I have read the forgoing provision of state law, and that I am not disqualified by reason of that provision from obtaining the permit for which application has been made.

I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct.

Dated this _____, day of ______, 20 ____.

Applicant Signature

Applicant Name (print)

PLEASE ATTACH SHEET DISCLOSING ALL FACTS PERTAINING TO SDCL 1-40-27 (1) (a) THROUGH (e). ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

South Dakota Surface Water Discharge Program Application for Permit to Discarge Wastewater

APPENDIX C - NEW INDUSTRIAL PROCESS WASTEWATER

United States Environmental Protection Agency

Permits Division

Office of Water Enforcement and Permits Washington, DC 20460 EPA Form 3510-2D September 1986

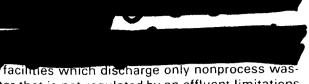


Application Form 2D —

New Sources and New Dischargers:

Application for Permit to Discharge Process Wastewater

Form 2D Instructions



tewater that is not regulated by an effluent limitations guideline or new source performance standard may use EPA Form 3510-2E (Form 2E). Educational, medical, and commercial chemical laboratories should use this form or EPA Form 3510-2C (Form 2C). To further determine if you are a new source or a new discharger, see §122.2 and §122.29. This form should not be used for discharges of stormwater runoff.

Public Availability of Submitted Information

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. Section 402(j) of the CWA requires that all permit applications shall be available to the public. This information will therefore be made available to the public upon request.

You may claim as confidential any information you submit to EPA which goes beyond that required by this form and Form 1. Confidentiality claims for effluent data must 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. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations in 40 CFR Part 2.

Completeness

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

Followup Requirements

Although you are now required to submit estimated data on this form (Form 2D), please note that no later than two years after you begin discharging from the proposed facility, you must complete and submit Items V and VI of NPDES application Form 2C (EPA Form 3510-2C). How-ever, you need not complete those portions of Item V requiring tests which you have already performed under the discharge monitoring requirements of your NPDES permit. In addition, the permitting authority may waive requirements of Items V-A and VI if the permittee makes the demonstrations required under 40 CFR §122.22(g)(7)(i)(B) and 122.21(g)(9).

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.

Item I

You may use the map you provided for Item XI of Form 1 to determine the latitude and longitude (to the nearest 15 seconds) of each of your outfalls and the name of the receiving water. You should name all waters to which discharge is made and which flow into significant receiving waters. For example, if the discharge is made to a ditch which flows into an unnamed tributary which in turn flows into a named river, you should provide the name or description (if no name is available) of the ditch, the tributary, and the river.

Item II

This item requires your best estimate of the date on which your facility or new outfall will begin to discharge.

Item III-A

List all outfalls, their source (operations contributing to the flow), and estimate an average flow from each source. Briefly describe the planned treatment for these wastewaters prior to discharge. Also describe the ultimate disposal of any solid or liquid wastes not discharged. You should describe the treatment in either a narrative form or list the proper code for the treatment unit from a list provided in Table 2D-1.

Item III-B

An example of an acceptable line drawing appears in Figure 2D-1 to these instructions. The line drawing should show the route taken by water in your proposed facility from intake to discharge. Show all sources of wastewater, including process and production areas, sanitary flows, cooling water, and storm water runoff. You may group similar operations into a single unit, labeled to correspond to the more detailed listing in Item III-A. The water balance should show estimates of anticipated average flows. Show all significant losses of water to production, atmosphere, and discharge. You should use your best estimates.

Item III-C

Fill in every applicable column in this item for each source of intermittent or seasonal discharge. Base your answers on your best estimate. A discharge is intermittent if it occurs with interruptions during the operating hours of the facility. Discharges caused by routine maintenance shutdowns, process changes, or other similar activities are not considered to be intermittent. A discharge is seasonal if it occurs only during certain parts of the year. The reported flow rate is the highest daily value and should be measured in gallons per day. Maximum total volume means the total volume of any one discharge within 24 hours and is measured in units such as gallons.

Item IV

* "Production" in this question refers to those goods which the proposed facility will produce, not to "wastewater" production. This information is only necessary where production-based new source performance standards (NSPS) or effluent guidelines apply to your facility. Your estimated production figures should be based on a realistic projection of actual daily production level (not design capacity) for each of the first three operating years of the facility. This estimate must be a long-term-average estimate (e.g., average production on an annual basis). If production will vary depending on long-term shifts in operating schedule or capacity, the applicant may report alternate production estimates and the basis for the alternate estimates.

If known, report quantities in the units of measurement used in the applicable NSPS or effluent guideline. For example, if the applicable NSPS is expressed as "grams of pollutant discharged per kilogram of unit production," then report maximum "Quantity Per Day" in kilograms. If you do not know whether any NSPS or effluent guideline applies to your facility, report quantities in any unit of measurement known to you. If an effluent guideline or NSPS specifies a method for estimating production, that method must be followed.

There is no need to conduct new studies to obtain these figures; only data already on hand are required. You are not required to indicate how the reported information was calculated.

Items V-A, B, and C

These items require you to estimate and report data on the pollutants expected to be discharged from each of your outfalls. Where there is more than one outfall, you should submit a separate Item V for each outfall. For Part C only a list is required. Sampling and analysis are not required at this time. If, however, data from such analyses are available, then those data should be reported. Each part of this item addresses a different set of pollutants or parameters and must be completed in accordance with the specific instructions for that part. The following are the general and specific instructions for Items V-A through V-C.

Item V — General Instructions

Each part of this item requires you to provide an estimated maximum daily and average daily value for each pollutant or parameter listed (see Table 2D-2), according to the specific instructions below. The source of the data is also required.

For Parts A through C, base your determination of whether a pollutant will be present in your discharge on your knowledge of the proposed facility's raw materials, maintenance chemicals, intermediate and final products, byproducts, and any analyses of your effluent or of any similar effluent. You may also provide the determination and the estimates based on available in-house or contractor's engineering reports or any other studies performed on the proposed facility (see Item VI of the form). If you expect a pollutant to be present solely as a result of its presence in your intake water, please state this information on the form.

Please note that no later than 2 years after you begin discharging from the proposed facility, you must complete and submit Items V and VI of NPDES application Form 2C (followup data).

Reporting Intake Data. You are not required to report pollutants or parameters present in intake water unless you wish to demonstrate your eligibility for a "net" effluent limitation for these pollutants or parameters, that is, an effluent limitation adjusted to provide allowance for the pollutants or parameters present in your intake water. If you wish to obtain credits for pollutants or parameters present in your intake water, please insert a separate sheet, with a short statement of why you believe you are eligible (see §122.45 (g)), under Item VII (Other Information). You will then be contacted by the permitting authority for further instructions.

All estimated pollutant or parameter levels must be reported as concentration and as total mass, except for discharge flow, temperature, and pH. Total mass is the total weight of pollutants or parameters discharged over a day.

Use the following abbreviations for units:

Concentration	Mass
ppmparts per million	lbspounds
mg/1 milligrams per liter	tontons (English tons)
ppb parts per billion	mgmilligrams
Ug/1 micrograms per liter	ggrams
kgkilograms	T Tonnes (metric tons)
Source	

Source

In providing the estimates, use the codes in the following table to indicate the source of such information in column 4 of Parts V - A and - B.

Code

Engineering study	1
Actual data from pilot plants	1
Estimates from other engineering studies	
Data from other similar plants	
Best professional estimates	
Others	specify on the form

Item V-A

Estimates of data on pollutants or parameters in Group A must be reported by all applicants for all outfalls, including outfalls

containing only noncontact cooling water or nonprocess nwastewater.

To request a waiver from reporting any of these pollutants or parameters, the applicant must submit to the permitting authority a written request specifying which pollutants or parameters should be waived and the reasons for requesting such a waiver. This request should be submitted to the permitting authority before or with the permit application. The permitting authority may waive the requirements for information about these pollutants or parameters if he or she determines that less stringent reporting requirements are adequate to support issuance of the permit. No extensive documentation will normally be needed, but the applicant should contact the permitting authority if she or he wishes to receive instructions on what his or her particular request should contain.

Item V-B

Estimates of data on pollutants in Group B must be reported by all applicants for all outfalls, including outfalls containing only noncontact cooling water or nonprocess wastewater. You are merely required to report estimates for those pollutants which you know or have reason to believe will be discharged or which are limited directly by an effluent limitations guideline (or NSPS) or indirectly through promulgated limitations on an indicator pollutant. The priority pollutants in Group B are divided into the following three sections:

- Metal toxic pollutants, total cyanide, and total phenols
- 2) 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD) (CAS # 1764-016)
- Organic Toxic Pollutants (Gas Chromatography/-Mass Spectrometry Fractions)
 - a) Volatile compounds
 - b) Acid compounds
 - c) Base/neutral compounds
 - d) Pesticides

For pollutants listed in Sections 1 and 3, you must report estimates as instructed above.

For Section 2, you are required to report that TCDD may be discharged if you will use or manufacture one of the following compounds, or if you know or have reason to believe that TCDD is or may be present in an effluent:

- A. 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS # 93-765);
- B. 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4, 5TP) (CAS # 93-72-I);
- C. 2-(2,4,5-trichlorophenoxy) ethyl 2,2dichloropropionate (Erbon) (CAS # 136-25-4);
- D. 0,O-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS # 299-84-3);

- E. 2,4,5-trichlorophenol (TCP)(CAS # 95-95-4); or
- F. Hexachlorophene (HCP) (CAS # 70-30-4).

Small Business Exemption

If you are a "small business," you are exempt from the reporting requirement for Item V-B (section 3). You may qualify as a "small business" if you fit one of the follow-ing definitions:

- Your expected gross sales will total less than \$100,000 per year for the next three years, or
- 2) in the case of coal mines, your average production will be less than 100,000 tons of coal per year.

If you are a "small business," you may submit projected sales or production figures to qualify for this exemption. The sales or production figures you submit must be for the facility which is the source of the discharge. The data should not be limited only 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, where intracorporate transfers of goods and services are involved, the transfer price per unit should approximate market prices for those goods and services as closely as possible. If necessary, you may index your sales figures to the second guarter of 1980 to demonstrate your eligibility for a small business exemption. This may be done by using the gross national product price deflator (second quarter of 1980 = 100), an index available in "National Income and Product Accounts of the United States" (Department of Commerce, Bureau of Economic Analysis).

The small business exemption applies to the GC/MS fractions (Section 3) of Item V-B only. Even if you are eligible for a small business exemption, you are still required to provide information on metals, cyanide, total phenols, and dioxin in Item V-B, as well as all of Items V-A and C.

Item V-C

List any pollutants in Table 2D-3 that you believe will be present in any outfalls and briefly explain why you believe they will be present. No estimate of the pollutant's quantity is required, unless you already have quantitative data.

Note: The discharge of pollutants listed in Table 2D-4 may subject you to the additional requirements of section 311 of the CWA (Oil and Hazardous Substance Liability). These requirements are not administered through the NPDES program. However, if you wish an exemption under 40 CFR 117.12(a)(2) from these requirements, attach additional sheets of paper to this form providing the following information:

A. The substance and the amount of each substance which may be discharged;

- B. The origin and source of the discharge of the substance;
 - C. The treatment which is to be provided for the dis-
 - An onsite treatment system separate from any treatment system which will treat your normal discharge,
 - 2. 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
 - 3. Any combination of the above.

An exemption from the section 311 reporting requirements pursuant to 40 CFR Part 117 for pollutants on Table 2D does not exempt you from the section 402 reporting requirements pursuant to 40 CFR Part 122 (Item V-C) for pollutants listed on Table 2D-3.

For further information on exclusions from Section 311, see 40 CFR Section 117.12(a)(2) and (c), or contact your EPA Regional office (Table 1 in the Form 1 instructions).

Item VI-A

If an engineering study was conducted, check the box labeled "report available." If no study was done, check the box labeled "no report."

Item VI-B

Report the name and location of any existing plant(s) which (to the best of your knowledge) resembles your planned operation with respect to items produced, production process, wastewater constituents, or wastewater treatment. No studies need be conducted to respond to this item. Only data which are already available need be submitted.

This information will be used to inform the permit writer of appropriate treatment methods and their associated permit conditions and limits.

Item VII

A space is provided for additional information which you believe would be useful in setting permit limits, such as additional sampling. Any response is optional.

Item VIII

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 no more than \$10,000 or by imprisonment for not more than six months, or both."

40 CFR Part 122.22 Requires the Certification To Be Signed as Follows:

- A. For a corporation: by a responsible corporate officer.
 - A responsible corporate officer 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 secondquarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- B. For a partnership or sole 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).

PHYSICAL TREATMENT PROCESSES

1—AAmmonia Stripping	1—MGrit Removal
1-BDialysis	1-NMicrostraining
1—CDiatomaceous Earth Filtration	1—0Mixing
1—DDistillation	1—PMoving Bed Filters
1-EElectrodialysis	1–QMultimedia Filtration
1—FEvaporation	1—RRapid Sand Filtration
1—GFlocculation	1—SReverse Osmosis (Hyperfiltration)
1—H Flotation	1-TScreening
1—I Foam Fractionation	1—U Sedimentation (Settling)
1—JFreezing	1—VSlow Sand Filtration
1—KGas-Phase Separation	1—WSolvent Extraction
1—LGrinding (Comminutors)	1—XSorption

CHEMICAL TREATMENT PROCESSES

- 2—ACarbon Adsorption 2—BChemical Oxidation
- 2—CChemical Precipitation
- 2—DCoagulation
- 2—EDechlorination
- 2—FDisinfection (Chlorine)

- 2—G Disinfection (Ozone)
- 2—H Disinfection (Other)
- 2-I.....Electrochemical Treatment
- 2—Jlon Exchange
- 2-KNeutralization
- 2-LReduction

BIOLOGICAL TREATMENT PROCESSES

- 3—AActivated Sludge
- 3—B Aerated Lagoons
- 3-C Anaerobic Treatment
- 3-D.....Nitrification-Denitrification

- 3—EPreaeration
- 3—FSpray Irrigation/Land Application 3—GStabilization Ponds
- 3-H Trickling Filtration

OTHER PROCESSES

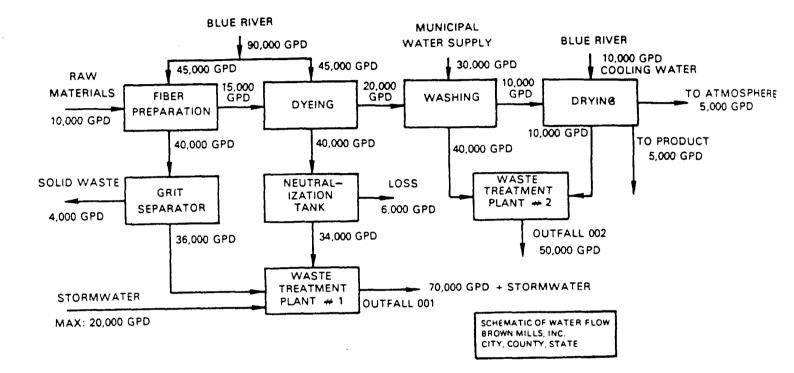
4—ADischarge to Surface Water 4—BOcean Discharge Through Outfall

4-CReuse/Recycle of Treated Effluent 4-DUnderground Injection

SLUDGE TREATMENT AND DISPOSAL PROCESSES

- 5—AAerobic Digestion
- 5-BAnaerobic Digestion
- 5-CBelt Filtration
- 5-D.....Centrifugation
- 5-E Chemical Conditioning
- 5—FChlorine Treatment 5—GComposting
- 5-HDrying Beds
- 5—IElutriation
- 5-JFlotation Thickening
- 5—KFreezing
- 5-LGravity Thickening

- 5-MHeat Drying 5-NHeat Treatment 5-0.....Incineration
- 5—P Land Application
- 5—Q Landfill
- 5-R Pressure Filtration
- 5—SPyrolysis
- 5-TSludge Lagoons
- 5-U Vacuum Filtration
- 5—V Vibration
- 5-WWet Oxidation



, GS/MS FRACTION – ACID COMPOUNDS

2-Chlorophenol 2,4-Dimethylphenol 2,4-Dinitro-phenol 4-Nitrophenol Pentachlorophenol 2,4,6-Trichlorophenol

2,4-Dichlorophenol 4,6-Dinitro-O-Cresol 2-Nitrophenol P-Chloro-M-Cresol Phenol

GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS

Acenaphthene Anthracene Benzo (a) Anthracene 3,5-Benzofluoranthene Benzo (k) Fluoranthene Bis (2-Chloroethyl) Ether Bis Bis (2-Ethylhexyl) Phthalate Butyl Benzyl Phthalate 4-Chlorophenyl Phenyl Ether Dibenzo (a, h) Anthracene 1,3-Dichlorobenzene 3,3-Dichlorobenzidine **Dimethyl Phthalate** 2,4-Dinitrotoluene **Di-N-Octyl Phthalate** Fluoranthene Hexachlorobenzene Hexachlorocyclopentadiene Indeno (1,2,3-cd) Pyrene Naphthalene N-Nitro-sodimethylamine N-Nitro-sodiphenvlamine Pvrene

Acenaphtylene **Benzidine** Benzo (a) Pyrene Benzo (ghi) Pervlene Bis (2 Chloroethoxy) Methane (2-Chloroisopropyl) Ether 4-Bromophenyl Phenyl Ether 2-Chloronaphthalene Chrvsene 1,2-Dichlorobenzene 1,4-Dichlorobenzene **Diethyl Phthalate Di-N-Butyl Phthalate** 2,6-Dinitrotoluene 1,2, Diphenylhydrazine (as Azobenzen) Fluorene Hexachlorobutadiene Hexachloroethane Isophorone Nitrobenzene N-Nitrosodi-N-Propylamine Phenanthrene 1,2,4-Trichlorobenzene

GC/MS FRACTION – PESTICIDES

Aldrin Alpha-BHC Beta-BHC 4,4' DDT 4,4'-DDD Alpha-Endosulfan Endosulfan Sulfate Endrin Aldehyde Heptachlor Epoxide PCB-1254 PCB-1252 PCB-1260 Toxaphene

Gamma-BHC Delta-BHC Chlordane 4,4' DDE Dieldrin Beta-Endosulfan Endrin Heptachlor PCB-1242 PCB-1221 PCB-1248 PCB-1016

*fractions defined in 40 CFR Part 136

Table 2D-2

EPA Form 3510-2D (9-86)

*

Biochemical Oxygen Demand (BOD) Chemical Oxygen Demand (COD) Total Organic Carbon (TOC) Total Suspended Solids (TSS) Flow Ammonia (as N) Temperature (winter) Temperature (summer) pH

GROUP B

Bromide Total Residual Chlorine Color Fecal Coliform Fluoride Nitrate-Nitrite (as N) Oil and Grease Phosphorus (as P) Total Radioactivity (1) Alpha, Total (2) Beta, Total (3) Radium, Total (4) Radium 226, Total

Section 1

Antimony, Total Beryllium, Total Chromium, Total Lead, Total Nickel, Total Silver, Total Zinc, Total Phenols, Total

Section 2

2,3,7,8,Tetrachlorodibenzo-P-Dioxin

Section 3

GC/MS FRACTION* - VOLATILE COMPOUNDS

Acrolein Benzene Carbon Tetrachloride Chlorodibramomethane 2-Chloroethylvinyl Ether Dichlorobomomethane 1,2-Dichloroethane 1,2-Dichloropropane Ethylbenzene Methyl Chloride 1,1,2,2-Tetrachloroethane Toluene 1,1,1-Trichloroethane Trichloroethylene

- Sulfate (as SO₄) Sulfide (as S) Sulfite (as SO₃) Surfactants Aluminum, Total Barium, Total Boron, Total Cobalt, Total Iron, Total Magnesium, Total Molybdenum, Total Manganese, Total Tin, Total Titanium, Total
- Arsenic, Total Cadmium, Total Copper, Total Mercury, Total Selenium, Total Thallium, Total Cyanide, Total

Vinyl Chloride Acrylonitirle Bromoform Chlorobenzene Chloroethane Chloroform 1,1-Dichloroethane 1,3-Dichloroethane Methyl Bromide Methylene chloroethane Tetrachloroethylene 1,2-Trans-Dichloroethylene 1,1,2-Trichloroethane

Table 2D-2

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

TOXIC POLLUTANT

Asbestos

HAZARDOUS SUBSTANCES

Aceltaldehyde 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 dodecylbenzenesulfonate Kelthane Kepone Malathion Mercaptodimethur Methoxychlor

HAZARDOUS SUBSTANCES

Methyl mercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethyl amine Monomethyl amine Naled Naphthenic acid Nitrotoluene Parathion Phenolsulfonate Phosgene Proparqite Propylene oxide Pyrethrins Quinoline Resorcinol Strontium Strvchnine 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) TDE (Tetrochlorodiphenvl ethane) 2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanic acid] Trichlorofon Triethanolamine dodecylbenzenesulfonate Triethylamine Uranium Vanadium Vinvl acetate **Xvlene Xylenol** Zirconium

HAZARDOUS SUBSTANCES

- Acetaldehvde Acetic acid Acetic anhydride Acetone cyanohydrin Acetyl bromide Acetyl chloride Acrolein Acrylonitrile Adipic acid Aldrin Allyl alcohol AlvII chloride Aluminum sulfate Ammmonia Ammonium acetate Ammonium benzoate Ammonium bicarbonate Ammonium bichromate Ammonium bifluoride Ammonium bisulfite Ammonium carbamate Ammonium carbonate Ammonium chloride Ammonium chromate Ammonium citrate Ammonium flouroborate Ammonium fluoride Ammonium hydroxide Ammonium oxalate Ammonium silicofluoride Ammonium sulfamate Ammonium sulfide Ammonium sulfite Ammonium tartrate Ammonium thiocyanate Ammonium thiosulfate Amyl acetate Aniline Antimony pentachloride Antimony potassium tartrate Antimony tribromide Antimony trichloride Antimony trifluoride Antimony trioxide Arsenic disulfide Arsenic trichloride Arsenic trioxide Arsenic trisulfide Barium cyanide Benzene Benzoic acid Benzonitrite Benzoyl chloride Benzyl chloride Beryllium chloride Bervllium 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 Cvclohexane 2.4-D acid (2,4-Dichlorophenoxyacetic acid) 2,4-D esters (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 Dinitrophenol 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 Formaldehvde 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

HAZARDOUS SUBSTANCES (Continued)

+ Maleic acid Maleic anhydride Mercaptodimethur Mercuric cvanide Mercuric nitrate Mercuric sulfate Mercuric thiocyanate Mercurous nitrate Methoxychlor Methyl mercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethylamine 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 acetic acid esters) 2,4,5-T salts (2,4,5-Trichlorophenoxy acetic acid salts) 2,4,5-TP acid (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 Vinvl 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 Zinc silicofluoride Zinc sulfate Zirconium nitrate Zirconium potassium fluoride Zirconium sulfate Zirconium tetrachloride

Please type or print in the unshaded areads only Form Form New Sources and New Discharge Process Lourdal Location For each outfall, list the latitude and longitude, and the name of the receiving water. Outfall Number Latitude Longitude Longitude Receiving Water (name) (list) Deg Min Sec Deg Min Sec Receiving Water (name) (list) III. Pischarge Date (When do you expect to begin discharging?) III. Flows. Sources of Pollution, and Treatment Technologies A. For each outfall, provide a description of (1) All operations contributing wastewater to the efforts wastewater, and (3) The treatment received by the wastewater. Continue on a if necessary. Outfall 1. Operations Contributing Flow (list) 0. Untail 1. Operations Contributing Flow (list) 0. Longitude (list) 0.	
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Outline 1. Operations contributing from	
Number (list) (include units) (Description or List Construction) Image:	
	des from Table 2L

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-	or storm runof	ment measur ff, leaks, or sp	es. vills, will any of	the discharges	·····	fany sources of v m III-A be intern	
L	Yes (complete t	the following tab		go to item IV)			
		Ļ		uency		2. Flow b. Maximum	c. Duration
	Outfall Number	,	a. Days Per Week <i>(specify</i> <i>average)</i>	b. Months Per Year <i>(specify</i> average)	a. Maximum Daily Flow Rate <i>(in mgd)</i>	D. Maximum Total Volume (specify with units)	c. Duration (in days)
actual produ	ction level not d	lesion) express	ed in the terms an	d units used in the	applicable effluent	ed level of productio t guideline or NSPS, attach a separate s	for each of the
	a. Quantity Per Day	b. Units of Measure		c. Operatio	on, Product, Material, e	etc (specify)	

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CONTINUED FROM THE FRONT	EDA ID N	annu ferra la da d	Family 61			
	CPA ID Number (copy from Item 1 of	rorm 1)	Outfall Number		
V. Effluent Characteristics						
A, and B: These items require you to report estimated amounts <i>(both concentration and mass)</i> of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.						
General Instructions (See table 2D-2 for Pollutants) Each part of this item requests you to provide an estimated daily maximum and average for certain pollutants and the source of information. Data for all pollutants in Group A, for all outfalls, must be submitted unless waived by the permitting authority. For all outfalls, data for pollutants in Group B should be reported only for pollutants which you believe will be present or are limited directly by an effluent limitations guideline or NSPS or indirectly through limitations on an indicator pollutant.						
1. Pollutant	2. Maximum Daily Value (include units)	3. Average Daily Value (include units)		4. Source (see instructions)		
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ÇÖN	TINUED FROM THE FRONT	EPA ID Number (copy from Item 1 of Form 1)
C.	Use the space below to list a reason to believe will be disc believe it will be present.	ny of the pollutants listed in Table 2D-3 of the instructions which you know or hav harged from any outfall. For every pollutant you list, briefly describe the reasons yo
1. Po	ollutant	2. Reason for Discharge
	Engineering Report on Wastewater 1	
<u>VI.</u> A.	If there is any technical evaluation	concerning your wastewater treatment, including engineering reports or pilot plant studies, check t
	appropriate box below.	
	Report Available	No Report
В.	Provide the name and locat	tion of any existing plant(s) which, to the best of your knowledge, resembles th ect to production processes, wastewater constituents, or wastewater treatments.
N	ame	Location
i i		

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

VIII. 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 and Official Title (type or print)	B. Phone No.
C. Signature	D. Date Signed
	/