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Industrial Permits Section

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Oklahoma DEQ

**Application for Permit to Discharge Industrial Wastewater**

**Form 2D - Wastewater  
Discharge Information:  
New Manufacturing, Commercial,  
and Mining Operations**

**PLEASE DETACH THESE INSTRUCTIONS AND RETURN ONLY THE COMPLETED APPLICATION FORMS THEMSELVES.**

**This form must be completed by all persons applying for a permit to discharge industrial wastewater from new manufacturing, commercial, and mining operations. This form must be completed in addition to Form 1 and any other applicable forms.**

**See Form 1, Attachment 1 for instructions for the submittal of applications and the public notice requirements.**

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**INSTRUCTIONS - FORM 2D**  
**OPDES APPLICATION TO DISCHARGE INDUSTRIAL WASTEWATER**  
**NEW MANUFACTURING, COMMERCIAL, AND MINING OPERATIONS**

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**This form must be completed by all applicants who check “yes” to Item B-3 in Form 1.**

Your application will not be considered complete unless you answer every question on this form and on any other required forms. If an item does not apply to you, enter “NA” (for not applicable) to show that you considered the question.

**Public Availability of Submitted Information**

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

Any information you submit to DEQ which goes beyond that required by this or any other forms you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, DEQ may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with the Oklahoma Public Records Act.

**Definitions**

All significant terms used in these instructions and in Form 2D are defined in the glossary found in the General Instructions to Form 1.

**Item A**

Enter the facility’s official or legal name. Do not use a colloquial name.

**Item 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 reviewing offices if necessary.

**Item C**

For each outfall, list the legal description (¼, ¼, ¼, Section, Township, Range) to the nearest 10 acres, latitude and longitude, and the name of the receiving water. Use the previous NPDES permit for numbering each outfall.

**Item D-1**

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 D-2. 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 2D-1 to these instructions.

You may use the same drawing to fulfill the requirements of Item D-1 in Form 2C or Item D-1 in Form 2D and Item G-1 in Form 2SI, provided the drawing shows **both** outfalls **and** surface impoundments.

**Item D-2**

List all sources of wastewater to each outfall. Operations may be described in general terms (*for example, “dye-making reactor” or “distillation tower”*). You may estimate the flow contributed by each source if no data are available. For stormwater discharges you may estimate the average flow, but you must indicate the rainfall event upon which the estimate is based and the method of estimation. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid or liquid wastes not discharged. Treatment units should be listed in order.

**Item D-3**

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 of this item for each source of intermittent or seasonal discharges. Base your answers on actual data whenever available; otherwise, provide your best estimate. Report the highest daily value for flow rate and total volume in the “Maximum Daily” columns. Report the average of all daily values measured during days when discharge occurred within the last year in the “Long Term Average” columns.

**Item E-1**

All effluent guidelines and New Source Performance Standards (NSPS) promulgated by EPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to you if you will have any operations contributing process wastewater in any subcategory covered by a BPT, BCT, or BAT guideline, or New Source Performance Standard (NSPS). If you are unsure whether you are covered by a promulgated effluent guideline or NSPS, contact DEQ. You must check “Yes” if an applicable effluent guideline or NSPS has been promulgated, even if the guideline limitations or NSPS are being contested in court. If you believe that a promulgated effluent guideline or NSPS has been remanded for reconsideration by a court and does not apply to your operation, you may check “No”.

**Item E-2**

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

**Item E-3**

This item must be completed only if you checked “Yes” to Item E-2. The production information requested here is necessary to apply effluent guidelines or NSPS to your facility and you cannot claim it as confidential. “Production” in this question refers to those goods which the proposed facility will produce, not to “wastewater” production. 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 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 F-1, -2, -3, and -4**

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 F for each outfall. For Part 3, only a list is required. Sampling and analysis are not required at this time. If, however, data from such analyses are available, then that 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 F-1 through F-3.

**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-1), according to the specific instructions below. The source of the data is also required.

For Parts 1 through 3, 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 F 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 F and G of DEQ application Form 2C (follow-up 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 40 CFR §122.45(g)), under Item G (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
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)

**Source:** In providing the estimates, use the following sources to indicate the origin of such information:

- (1) Engineering study,
- (2) Actual data from pilot plants,
- (3) Estimates from other engineering studies,
- (4) Data from other similar plants,
- (5) Best professional estimates, or
- (6) Other

**Item F-1**

Estimates of data on pollutants or parameters in Group A must be reported by all applicants for all outfalls, including outfalls containing only non-contact cooling water or non-process wastewater.

To request a waiver from reporting any of these pollutants or parameters, the applicant must submit to the Department 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 Department before or with the permit application. The Department may waive the requirements for information about these pollutants or parameters if the reviewer 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 Department if she or he wishes to receive instructions on what his or her particular request should contain.

**Item F-2**

Estimates of data on pollutants in Group B must be reported by all applicants for all outfalls, including outfalls containing only non-contact cooling water or stormwater runoff. 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:

- (1) Metal toxic pollutants, total cyanide, and total phenols
- (2) 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)
- (3) Organic Toxic Pollutants (GC/MS 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)
- B. 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4, 5TP)
- C. 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon)
- D. 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel)
- E. 2,4,5-trichlorophenol (TCP)
- F. Hexachlorophene (HCP)

**Small Business Exemption:** If you qualify as a "small business," you are exempt from the reporting requirements for the organic toxic pollutants, listed in the following sections: Volatile Compounds, Acid Compounds, Base/Neutral Compounds, and Pesticides. You may qualify as a "small business" if you fit one of the following definitions:

- (1) Your expected gross sales will total less than \$100,000 per year for the next three years, or
- (2) If your facility is a coal mine, 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, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. If necessary, you may index your sales figures to the second quarter 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*). This index is 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 of Item F-2 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 F-2, as well as all of Items F-1 and 3.

### Item F-3

List any pollutants in Table 2D-2 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:** Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed in Table 2D-3 of these instructions) may be exempted from the requirements of Section 311 of CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the OPDES 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.

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 for pollutants listed on Table 2D-3.

See 40 CFR §117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact DEQ for further information on exclusions from Section 311.

### Item G

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 H

State statutes provide for penalties for submitting false information on this application form.

27A O.S. 1 §2-6-206(G)(4) provides that, "Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Oklahoma Pollutant Discharge Elimination System Act... shall upon conviction be punished by a fine of not more than Ten Thousand Dollars (\$10,000.00), or by imprisonment for not more than two (2) years, or by both."

All applications must be certified as provided on the forms furnished by the Department, and must be signed by the applicant. Signatures must be original signatures; photostatic copies of signatures will not be accepted. Permit applications must be signed as follows:

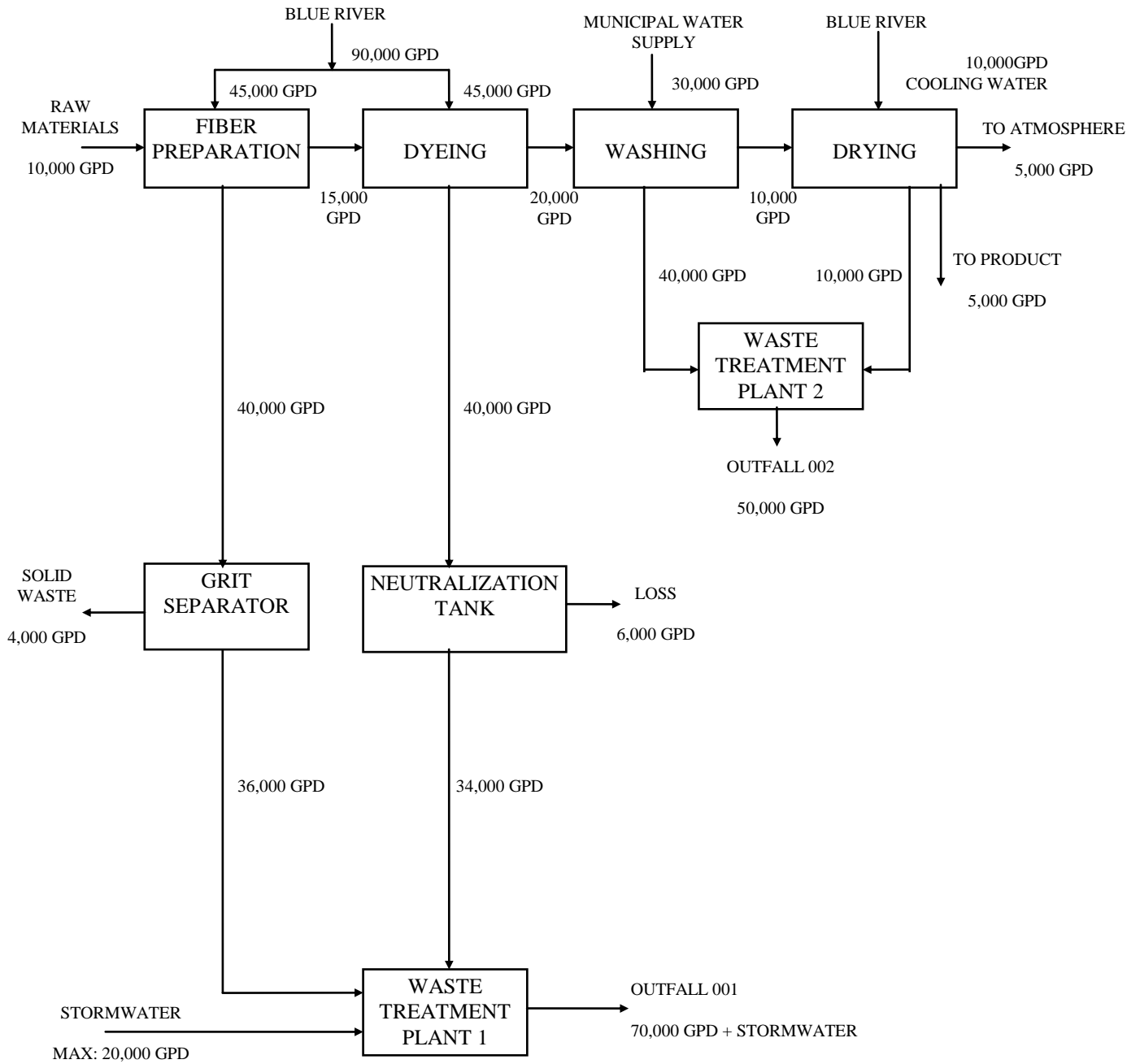
- (A) If the applicant is a private corporation, the application must be signed by:
  - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, 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 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (B) If the applicant is a partnership, sole proprietorship or individual person, the application must be signed, respectively, by a general partner, the proprietor or the individual.

- (A) If the applicant is a municipality, political subdivision, the State or Federal government or other public agency or entity, the application must be signed by the principal executive officer of the entity or the ranking elected official.

Figure 2D-1



**TABLE 2D-1**

**GROUP A**

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

**GROUP B**

Bromide	Sulfate
Chloride	Sulfide
Chlorine (Total residual)	Sulfite
Color	Surfactants
Fecal Coliform	Total Dissolved Solids
Fluoride	Aluminum, Total
Nitrate-Nitrite (as N)	Barium, Total
Nitrogen (as N)	Boron, Total
Oil and Grease	Cobalt, Total
Phosphorus (as P)	Iron, Total
Radioactivity	Magnesium, Total
(1) Alpha, Total	Molybdenum, Total
(2) Beta, Total	Manganese, Total
(3) Radium, Total	Tin, Total
(4) Radium 226, Total	Titanium, Total

**SECTION 1 -- Metal Toxic Pollutants, Total Cyanide, and Total Phenols**

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

**SECTION 2 -- TCDD**

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

**SECTION 3 -- Organic Toxic Pollutants**

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**GC/MS FRACTION -- VOLATILE COMPOUNDS**

Acrolein	1,3-Dichloropropylene
Acrylonitrile	Ethylbenzene
Benzene	Methyl Bromide
Bromoform	Methyl Chloride
Carbon Tetrachloride	Methylene Chloroethane
Chlorobenzene	1,1,2,2-Tetrachloroethane
Chlorodibromomethane	Tetrachloroethylene
Chloroethane	Toluene
2-Chloroethylvinyl Ether	1,2-Trans-Dichloroethylene
Chloroform	1,1,1-Trichloroethane
Dichlorobromomethane	1,1,2-Trichloroethane
1,1-Dichloroethane	Trichloroethylene
1,2-Dichloroethane	Vinyl Chloride
1,2-Dichloropropane	

**GC/MS FRACTION -- ACID COMPOUNDS**

2-Chlorophenol	4-Nitrophenol
2,4-Dichlorophenol	P-Chloro-M-Cresol
2,4-Dimethylphenol	Pentachlorophenol
4,6-Dinitro-o-cresol	Phenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol
2-Nitrophenol	

## SECTION 3 -- Organic Toxic Pollutants (continued)

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### GC/MS FRACTION -- BASE/NEUTRAL COMPOUNDS

Acenaphthene	Diethyl Phthalate
Acenaphthylene	Dimethyl Phthalate
Anthracene	Di-N-Butyl Phthalate
Benzidine	2,4-Dinitrotoluene
Benzo (a) Anthracene	2,6-Dinitrotoluene
Benzo (a) Pyrene	Di-N-Octyl Phthalate
3,4-Benzoflouranthene	1,2-Diphenylhydrazine (as Azobenzene)
Benzo (ghi) Perylene	Fluoranthene
Benzo (k) Fluoranthene	Fluorene
Bis (2-Chloroethoxy) Methane	Hexachlorobenzene
Bis (2-Chloroethyl) Ether	Hexachlorobutadiene
Bis (2-Chloroisopropyl) Ether	Hexachlorocyclopentadiene
Bis (2-Ethylhexyl) Phthalate	Hexachloroethane
4-Bromophenyl Phenyl Ether	Indeno (1,2,3-cd) Pyrene
Butyl Benzyl Phthalate	Isophorone
2-Chloronaphthalene	Naphthalene
4-Chlorophenyl Phenyl Ether	Nitrobenzene
Chrysene	N-Nitrosodimethylamine
Dibenzo (a,h) Anthracene	N-Nitrosodi-N-Propylamine
1,2-Dichlorobenzene	N-Nitrosodiphenylamine
1,3-Dichlorobenzene	Phenanthrene
1,4-Dichlorobenzene	Pyrene
3,3'-Dichlorobenzidine	1,2,4-Trichlorobenzene

### GC/MS FRACTION -- PESTICIDES

Aldrin	Endrin
Alpha-BHC	Endrin Aldehyde
Beta-BHC	Heptachlor
Gamma-BHC	Heptachlor Epoxide
Delta-BHC	PCB-1242
Chlordane	PCB-1254
4,4'-DDT	PCB-1221
4,4'-DDE	PCB-1232
4,4'-DDD	PCB-1248
Dieldrin	PCB-1260
Alpha-Endosulfan	PCB-1016
Beta-Endosulfan	Toxaphen
Endosulfan Sulfate	



## TABLE 2D-2

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

#### TOXIC POLLUTANT

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Asbestos

#### HAZARDOUS SUBSTANCES

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

## TABLE 2D-3 HAZARDOUS SUBSTANCES

Acetaldehyde	Calcium hypochlorite
Acetic acid	Captan
Acetic anhydride	Carbaryl
Acetone cyanohydrin	Carbofuran
Acetyl bromide	Carbon disulfide
Acetyl chloride	Carbon tetrachloride
Acrolein	Chlordane
Acrylonitrile	Chlorine
Adipic acid	Chlorobenzene
Aldrin	Chloroform
Allyl alcohol	Chloropyrifos
Allyl chloride	Chlorosulfonic acid
Aluminum sulfate	Chromic acetate
Ammonia	Chromic acid
Ammonium acetate	Chromic sulfate
Ammonium benzoate	Chromous chloride
Ammonium bicarbonate	Cobaltous bromide
Ammonium bichromate	Cobaltous formate
Ammonium bifluoride	Cobaltous sulfamate
Ammonium bisulfite	Coumaphos
Ammonium carbamate	Cresol
Ammonium carbonate	Crotonaldehyde
Ammonium chloride	Cupric acetate
Ammonium chromate	Cupric acetoarsenite
Ammonium citrate	Cupric chloride
Ammonium flourborate	Cupric nitrate
Ammonium fluoride	Cupric oxalate
Ammonium hydroxide	Cupric sulfate
Ammonium oxalate	Cupric sulfate ammoniated
Ammonium silicofluoride	Cupric tartrate
Ammonium sulfamate	Cyanogen chloride
Ammonium sulfide	Cyclohexane
Ammonium sulfite	2,4-D acid (2,4-Dichlorophenoxyacetic acid)
Ammonium tartrate	2,4-D esters (2,4-Dichlorophenoxyacetic acid esters)
Ammonium thiocyanate	DDT
Ammonium thiosulfate	Diazinon
Amyl acetate	Dicamba
Aniline	Dichlobenil
Antimony pentachloride	Dichlone
Antimony potassium tartrate	Dichlorobenzene
Antimony tribromide	Dichloropropane
Antimony trichloride	Dichloropropene
Antimony trifluoride	Dichloropropene-Dichloropropane mix
Antimony trioxide	2,2-Dichloropropionic acid
Arsenic disulfide	Dichlorvos
Arsenic trichloride	Dieldrin
Arsenic trioxide	Diethylamine
Arsenic trisulfide	Dimethylamine
Barium cyanide	Dinitrobenzene
Benzene	Dinitrophenol
Benzoic acid	Dinitrotoluene
Benzonitrile	Diquat
Benzoyl chloride	Disulfoton
Benzyl chloride	Diuron
Beryllium chloride	Dodecylbenzenesulfonic acid
Beryllium fluoride	Endosulfan
Beryllium nitrate	Endrin
Butylacetate	Epichlorohydrin
n-Butylphthalate	Ethion
Butylamine	Elhylbenzene
Butyric acid	Ethylenediamine
Cadmium acetate	Ethylene dibromide
Cadmium bromide	Ethylene dichloride
Cadmium chloride	Ethylene diaminetetracetic acid (EDTA)
Calcium arsenate	Ferric ammonium citrate
Calcium arsenite	Ferric ammonium exalate
Calcium carbide	Ferric chloride
Calcium chromate	Ferric fluoride
Calcium cyanide	Ferric nitrate
Calcium dodecylbenzenesulfonate	

**Table 2D-3  
HAZARDOUS SUBSTANCES (continued)**

Ferric sulfate	Potassium arsenate
Ferrous chloride	Potassium arsenite
Ferrous sulfate	Potassium bichromate
Formaldehyde	Potassium cyanide
Formic acid	Potassium hydroxide
Fumaric acid	Potassium permanganate
Furfural	Propargite
Guthion	Propionic acid
Heptachlor	Propionic anhydride
Hexachlorocyclopentadiene	Propylene oxide
Hydrochloric acid	Pyrethrins
Hydrofluoric acid	Quinoline
Hydrogen cyanide	Resorcinol
Hydrogen sulfide	Selenium oxide
Isoprene	Silver nitrate
Isopropanolamine dodecylbenzenesulfonate	Sodium
Kelthane	Sodium arsenate
Kepone	Sodium arsenite
Lead acetate	Sodium bichromate
Lead arsenate	Sodium bifluoride
Lead chloride	Sodium bisulfite
Lead fluoborate	Sodium chromate
Lead fluorite	Sodium cyanide
Lead iodide	Sodium dodecylbenzenesulfonate
Lead nitrate	Sodium fluoride
Lead stearate	Sodium hydrosulfide
Lead sulfate	Sodium hydroxide
Lead sulfide	Sodium hypochlorite
Lead thiocyanate	Sodium methylate
Lindane	Sodium nitrate
Lithium chromate	Sodium phosphate (dibasic)
Malathion	Sodium phosphate (tribasic)
Maleic acid	Sodium selenite
Maleic anhydride	Strontium chromate
Mercaptodimethur	Strychnine
Mercuric cyanide	Styrene
Mercuric nitrate	Sulfuric acid
Mercuric sulfate	Sulfur monochloride
Mercuric thiocyanate	2,4,5-T acid (2,4,5-Trichlorophenoxy acetic acid)
Mercurous nitrate	2,4,5-T amines (2,4,5-Trichlorophenoxy acetic acid amines)
Methoxychlor	2,4,5-T esters (2,4,5-Trichlorophenoxy acetic acid esters)
Methyl mercaptan	2,4,5-T salts (2,4,5-Trichlorophenoxy acetic acid salts)
Methyl methacrylate	2,4,5-TP acid (2,4,5-Trichlorophenoxy propanoic acid)
Methyl parathion	2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid esters)
Mevinphos	TDE (Tetrachlorodiphenyl ethane)
Mexacarbate	Tetraethyl lead
Monoethylamine	Tetraethyl pyrophosphate
Monomethylamine	Thallium sulfate
Naled	Toluene
Naphthalene	Toxaphene
Naphthenic acid	Trichlorofon
Nickel ammonium sulfate	Trichloroethylene
Nickel chloride	Trichlorophenol
Nickel hydroxide	Triethanolamine dodecylbenzenesulfonate
Nickel nitrate	Triethylamine
Nickel sulfate	Trimethylamine
Nitric acid	Uranyl acetate
Nitrobenzene	Uranyl nitrate
Nitrogen dioxide	Vanadium pentoxide
Nitrophenil	Vanadyl sulfate
Nitrotoluene	Vinyl acetate
Paraformaldehyde	Vinylidene chloride
Parathion	Xylene
Pentachlorophenol	Xylenol
Phenol	Zinc acetate
Phosgene	Zinc ammonium chloride
Phosphoric acid	Zinc borate
Phosphorus	
Phosphorus oxychloride	
Phosphorus pentasulfide	
Phosphorus trichloride	
Polychlorinated biphenyls (PCB)	

**Table 2D-3**  
**HAZARDOUS SUBSTANCES (continued)**

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Zinc bromide	Zinc phenolsulfonate
Zinc carbonate	Zinc phosphide
Zinc chloride	Zinc silicofluoride
Zinc cyanide	Zinc sulfate
Zinc fluoride	Zirconium nitrate
Zinc formate	Zirconium potassium fluoride
Zinc hydrosulfite	Zirconium sulfate
Zinc nitrate	Zirconium tetrachloride

**TABLE 2D-4**  
**MINIMUM QUANTIFICATION LEVELS**

<u>METALS AND CYANIDE</u>	<u>REQUIRED MOL</u>	<u>RECOMMENDED EPA METHOD</u>
Antimony, Total	60	200.8
Arsenic, Total	0.5	200.8
Beryllium, Total	5	200.8
Cadmium, Total	1	200.8
Chromium, Total	10	200.8
Chromium, (3+)	10	*
Chromium, (6+)	10	218.6
Copper, Total	1	200.8
Lead, Total	0.5	200.8
Mercury, Total	0.05	245.7
Nickel, Total (Freshwater)	10	200.8
Selenium, Total	5	200.8
Silver, Total	0.5	200.8
Thallium, Total	0.5	200.8
Zinc, Total	20	200.8
Cyanide, Total	10	335.4
 <u>DIOXIN</u>		
2,3,7,8-TCDD	0.00001	1613B
 <u>VOLATILE COMPOUNDS</u>		
Acrolein	50	624
Acrylonitrile	50	624
Benzene	10	624
Bromoform	10	624
Carbon Tetrachloride	10	624
Chlorobenzene	10	624
Chlorodibromomethane	10	624
Chloroethane	50	624
2-Chloroethyl Vinyl Ether	10	624
Chloroform	10	624
Dichlorobromomethane	10	624
1,1-Dichloroethane	10	624
1,2-Dichloroethane	10	624
1,1-Dichloroethylene	10	624
1,2-Dichloropropane	10	624
1,3-Dichloropropylene	10	624
Ethylbenzene	10	624
Methyl Bromide (Bromomethane)	50	624
Methyl Chloride (Chloromethane)	50	624
Methylene Chloride	20	624
1,1,2,2-Tetrachloroethane	10	624
Tetrachloroethylene	10	624
Toluene	10	624
1,2-trans-Dichloroethylene	10	624
1,1,1-Trichloroethane	10	624
1,1,2-Trichloroethane	10	624
Trichloroethylene	10	624
Vinyl Chloride	10	624

**TABLE 2D-4**  
**MINIMUM QUANTIFICATION LEVELS (continued)**

<u>ACID COMPOUNDS</u>	<u>REQUIRED MOL</u>	<u>RECOMMENDED EPA METHOD</u>
2-Chlorophenol	20	625
2,4-Dichlorophenol	20	625
2,4-Dimethylphenol	20	625
4,6-Dinitro-o-Cresol	50	625
2,4-Dinitrophenol	50	625
2-Nitrophenol	20	625
4-Nitrophenol	50	625
p-Chloro-m-Cresol	20	625
Pentachlorophenol	50	625
Phenol	20	625
2,4,6-Trichlorophenol	20	625
 <b><u>BASE/NEUTRAL COMPOUNDS</u></b>		
Acenaphthene	20	625
Acenaphthylene	20	625
Anthracene	20	625
Benzidine	50	625
Benzo(a)anthracene	20	625
Benzo(a)pyrene	20	625
3,4-Benzofluoranthene	20	625
Benzo(ghi)perylene	20	625
Benzo(k)fluoranthene	20	625
Bis(2-chloroethoxy) Methane	20	625
Bis(2-chloroethyl) Ether	20	625
Bis(2-chloroisopropyl) Ether	20	625
Bis(2-ethylhexyl) Phthalate	20	625
4-Bromophenyl Phenyl Ether	20	625
Butyl Benzyl Phthalate	20	625
2-Chloronaphthalene	20	625
4-Chlorophenyl Phenyl Ether	20	625
Chrysene	20	625
Dibenzo(a,h)Anthracene	20	625
1,2-Dichlorobenzene	20	625
1,3-Dichlorobenzene	20	625
1,4-Dichlorobenzene	20	625
3,3-Dichlorobenzidine	50	625
Diethyl Phthalate	20	625
Dimethyl Phthalate	20	625
Di-n-Butyl Phthalate	20	625
2,4-Dinitrotoluene	20	625
2,6-Dinitrotoluene	20	625
Di-n-octyl Phthalate	20	625
1,2-Diphenylhydrazine	20	625
Fluoranthene	20	625
Hexachlorobenzene	20	625
Hexachlorobutadiene	20	625
Hexachlorocyclopentadiene	20	625
Hexachloroethane	20	625
Indeno (1,2,3-cd) Pyrene	20	625
Isophorone	20	625
Naphthalene	20	625

**TABLE 2D-4**  
**MINIMUM QUANTIFICATION LEVELS (continued)**

<u>BASE/NEUTRAL (cont.)</u>	<u>REQUIRED MQL</u>	<u>RECOMMENDED EPA METHOD</u>
Nitrobenzene	20	625
n-Nitrosodimethylamine	50	625
n-Nitrosodi-n-Propylamine	20	625
n-Nitrosodiphenylamine	20	625
Phenanthrene	20	625
Pyrene	20	625
1,2,4-Trichlorobenzene	20	625
 <b><u>PESTICIDES</u></b>		
Aldrin	0.05	608
Alpha-BHC	0.05	608
Beta-BHC	0.05	608
Gamma-BHC (Lindane)	0.05	608
Delta-BHC	0.05	608
Chlordane	0.2	608
4,4'-DDT	0.05	608
4,4'-DDE (p,p-DDX)	0.05	608
4,4'-DDD (p,p-TDE)	0.05	608
Dieldrin	0.05	608
Alpha-Endosulfan	0.05	608
Beta-Endosulfan	0.05	608
Endosulfan Sulfate	0.05	608
Endrin	0.05	608
Endrin Aldehyde	0.05	608
Heptachlor	0.05	608
Heptachlor Epoxide (BHC-Hexachlorocyclohexane)	0.05	608
Toxaphene	0.3	608
PCB-1242	0.25	608
PCB-1254	0.25	608
PCB-1221	0.25	608
PCB-1232	0.25	608
PCB-1248	0.25	608
PCB-1260	0.25	608
PCB-1016	0.25	608

\* Chromium (3+) level is determined by subtracting chromium (6+) level from total chromium level.

If any individual analytical test result for any listed pollutant is less than the minimum quantification level (MQL) shown above, then a value of zero (0) may be used for the self monitoring report (SMR), calculations, and reporting requirements.

<b>FORM 2D DISCHARGE</b>	<b>OKLAHOMA DEQ</b>	<b>OPDES APPLICATION TO DISCHARGE AND/OR DISPOSE OF INDUSTRIAL WASTEWATER OR SLUDGE NEW SOURCES AND NEW DISCHARGERS</b>
<b>A. FACILITY NAME</b>		
<b>B. FACILITY CONTACT</b>		
<b>1. NAME &amp; TITLE</b>		<b>2. PHONE</b> (area code & number)
<b>C. OUTFALL LOCATION</b>		
1. For each outfall, list the legal description (¼, ¼, ¼, Section, Township, Range) to the nearest 10 acres and the name of the receiving water.		
<b>a. OUTFALL NO.</b>	<b>b. LEGAL DESCRIPTION</b>	<b>c. RECEIVING WATER</b>
2. For each outfall, list the latitude and longitude.		
<b>a. OUTFALL NO.</b>	<b>b. LATITUDE</b>	<b>c. LONGITUDE</b>
<b>D. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES</b>		
1. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.		
2. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.		
<b>a. OUT-FALL NO.</b>	<b>b. OPERATION(S) CONTRIBUTING FLOW</b>	<b>c. TREATMENT</b>
	(1) Operation	(3) Description
	(2) Average Flow (include units)	
<b>FOR OFFICIAL USE ONLY</b>		
<b>OPDES PERMIT NO.</b>	<b>STATE PERMIT NO.</b>	<b>STATE ID NO.</b>







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

i. POLLUTANT	ii. SOURCE

**G. OTHER INFORMATION**

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.

**H. 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 true belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED