

# ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

# **APPLICATION FORM 2D**

New Sources and New Dischargers
Application for Permit to Discharge Process Wastewater

Please submit this form to:

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501 DEC.Water.WQPermit@alaska.gov

Form 2D must be completed for a new manufacturing, commercial, mining, or silvicultural discharge. This form must be completed by an applicant who checked "yes" to Section 6-C in APDES Form 1. Form 2D must be completed in conjunction with Form 1. Instructions for completing this form are attached.

instructions for completing this form are attached.					
SECTION 1 – FACILITY INFORMATION (This information must match the facility information entered in Section 1 on Form 1.)					
Facility Name:	Facility Name:				
Physical Address/Location:					
SECTION 2 – OUTFALL LOC	ATION				
List the latitude and longitude of e	each outfall location to the sixth	decimal place and the name	e of the receiving water.		
Outfall Number (list)	Latitude	Longitude	Receiving Water (name)		
	٥	0			
at/Long Coordinate Source:					
Source Map Scale (if applicable):					
Iorizontal Accuracy: Horizontal Datum:					
SECTION 3 – DISCHARGE DATE					
On what date do you expect to begin discharging? (mm/dd/vyvy)					

CECTION 4		COLIDATE	SE DOLL LITION	AND TOPATMENT	TECHNICI COIEC
SECTION 4 -	FLUWS.	SOURCES	JE POLLUTION.	AND TREATMENT	TECHNOLOGIES

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

Outfall No.	Operations Contri	buting Flow (list)	Average Flow (Inlcude Units	Treat (Description of List co	
contributing wa Construct a wa outfalls. If a wa	stewater to the effluenter balance on the line	at, and treatment units drawing by showing a determined (e.g., for o	labeled to correspon average flows betwe certain mining activit	een intakes, operations, tr ties), provide a pictorial de	escriptions in Section 4-A. eatment units, and
Section C: Exc seasonal?	cept for storm water r	unoff, leaks, or spills,	will any of the disc	charges described in Sec	ction 4-A be intermittent or
Yes (comple	ete the following table)	□ No (go to	Section 5)		
	Frequ	uency		Flow	
Outfall Number	Days Per Week	Months per Year	Maximum Daily Flo	w Maximum Total Volume	Duration

	Frequ	uency		Flow	
Outfall Number	Days Per Week (specify average)	Months per Year (specify average)	Maximum Daily Flow Rate (in mgd)	Maximum Total Volume (specify with units)	Duration (in days)

# SECTION 5 – PRODUCTION

If there is an applicable production-based effluent limitations guideline or a new source performance standard (NSPS), list the estimated level of production (projection of actual production level, not design) for each outfall, expressed in the terms and units used in the applicable effluent limitations guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	Quantity Per Day	Units of Measure	Operation, Product, Material, etc. (specify)

# SECTION 6 – EFFLUENT CHARACTERISTICS

**Section A & B:** These items require you to report estimated amounts (both concentration and mass) 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 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 Department. 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.

enident innitations guideline of Noro of indite	city through inflitations on an i	idicator polititarit	•
Outfall No.:			
Pollutant	Maximum Daily Value (include units)	Average Daily Value (include units)	Source (see instructions)

	For Agency Use
Permit Tracking #	

•	any of the pollutants listed in Table 2D-3 of the instructions which you know or have m any outfall. For every pollutant you list, briefly describe the reasons you believe it will be

Pollutant		Reason for Discharge
SECTION 7 – ENGINEERING REPOR	RT ON WASTEWATE	R TREATMENT
studies, check the appropriate box below.  Report Available  No Report  Section 7-B: Provide the name and locati	on of any existing plant(	s) which, to the best of your knowledge, resembles this
production facility with respect to production  Name	n processes, wastewate	er constituents, or wastewater treatments.  Location
Name		Location

SECTION 8 – 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.	on
SECTION 9 – 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.	t
Right to Enter Premises	
By submitting this application, the applicant hereby consents to entry upon the premises by representatives of the Alaska Department of Environmental Conservation in order to: 1) have access to and copy any records that permit conditions require to applicant to keep; 2) inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and 3) sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).	
Print Name: Title:	
Signature: Date:	
g	

# INSTRUCTIONS FOR APDES FORM 2D New Sources and New Dischargers: Application to Discharge Process Wastewater

See Form 1 General Instructions for additional information.

#### Who Must File Form 2D

Form 2D must be completed in conjunction with Form 1. This form must be completed by all applicants who checked "yes" to Section 6-C in APDES Form 1. However, facilities that discharge only nonprocess wastewater that is not regulated by an effluent limitations guideline or a new source performance standard, may use APDES Form 2E. Educational, medical, and commercial chemical laboratories should use this form or APDES Form 2C. To further determine if you are a new source or a new discharger, see 18 AAC 83.990. This form should not be used for discharges of storm water runoff.

#### **Public Availability of Submitted Information**

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

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

Any information you submit to ADEC which goes beyond that required by this form or Form 1 you may claim as confidential, but claims for information which is effluent data will be denied. If you do not assert a claim of confidentiality at the time of submitting the information, ADEC may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with ADEC's business confidentiality regulations at 18 AAC 83.165.

#### **Definitions**

All significant terms used in these instructions and in the form are defined in the glossary found at the end of these instructions.

### **Follow Up 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 Sections 6 and 7 of APDES Form 2C. However, you need not complete those portions of Section 6 requiring tests that you have already performed under the discharge monitoring requirements of your APDES permit. In addition, the Department may waive requirements of Section 6-A and 7 if the permittee makes the demonstrations required under 18 AAC 83.310(a)(6) and 18 AAC 83.310(h).

#### Section 1 - Facility Information

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

#### Section 2 - Outfall Location

Indicate the latitude and longitude of each outfall to the sixth decimal place, as well as the name of the receiving water. For latitude and longitude information interpolated from a hardcopy map, the fourth decimal place is acceptable and the source map scale must be provided. 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, provide the name or description (if no name is available) of the ditch, the tributary, and the river. The preferred location information will be

provided as the latitude and longitude in decimal degrees, Alaska Albers Projection, North American Datum of 1983. The preferred source of the coordinates will be by a GPS unit, but other methods will be accepted, including GPS, survey, internet (such as Topozone.com), and printed map. Clearly identify the horizontal accuracy and unit of measurement (e.g. 10 meters) and horizontal datum.

# Section 3 – Discharge Date

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

# Section 4 – Flows, Sources of Pollution, and Treatment Technologies

#### Section 4-A

For each outfall, list all sources (operations contributing to the flow), and estimate the average flow for each source. Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). The flow contributed by each source may be estimated if no data is available. Describe the planned treatment for these wastewaters prior to discharge in either a narrative form or by listing the proper code for the treatment unit from the list provided in Table 2D-1. Describe the ultimate disposal of any solid or liquid waste not discharged. Be sure to include the units used to indicate the average flows. Provide additional copies of this Section as necessary for each outfall.

#### Section 4-B

An example of an acceptable line drawing appears in Figure 2D-1 in 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 Section 4-A. The water balance should show estimates of anticipated average flows. Show all significant losses of water to production, atmosphere, and discharge. Base your answers on your best estimates.

# Section 4-C

Fill in every applicable column in this section for each source of intermittent or seasonal discharge. A discharge is intermittent if it occurs with interruptions during the operating hours of the facility, except for routine shutdowns for maintenance, process changes, or other similar activities. 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. Base your answers on your best estimate.

# **Section 5 - Production**

"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 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 limitations 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.

#### Section 6 A, B, and C - Effluent Characteristics

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 Section 6 for each outfall. For Section 6-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 Section 6-A through 6-C.

#### Section 6 - 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 Section 7 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 two years after you begin discharging from the proposed facility, you must complete and submit Section 6 and 7 of APDES 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 short statement describing why you believe you are eligible (see 18 AAC 83.545), under Section 8 (Other Information). You will then be contacted by ADEC 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		IVIASS	
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 codes in the following table to indicate the source of such information in column 4 of Sections 6-A and 6-B.

# **Engineering Study Code**

Actual data from pilot plants	1
Estimates from other enginee	ering studies2
Data from other similar plants	33
Best professional estimates	4
Others	Specify on the form

#### Section 6-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 wastewater.

To request a waiver from reporting any of these pollutants or parameters, the applicant must submit to ADEC 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 ADEC before or with the permit application. ADEC may waive the requirements for information about these pollutants or parameters if it is determined 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 ADEC to receive instructions on what a particular request should contain.

#### Section 6-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 only 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
- 2,3,7,8-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 groups 1 and 3, you must report estimates as instructed above.

For group 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 # 93-72-1);
- C. 2-(2,4,5-trichlorophenoxy) ethyl 2,2- dichloropropionate (Erbon) (CAS # 136-25-4);
- D. 0,0-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 Section 6-B (section 3). 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) 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 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), 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 Section 6-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 Section 6-B, as well as all of Section 6-A and C.

#### Section 6-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:

- 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;
  - 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 (Section 6-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 ADEC.

# Section 7 – Engineering Report of Wastewater Treatment

#### Section 7-A:

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

#### Section 7-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 is already available need be submitted.

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

#### Section 8 - Other Information

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

#### Section 9 - Certification

Alaska Statute 46.03.790 provides for severe penalties for submitting false information on this application form. State regulations at 18 AAC 83.385 require this application be signed and certified as follows:

- For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:
  - (A) 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
  - (B) the manager of one or more manufacturing, production, or operating facilities, if
    - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
    - (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
    - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- For a partnership or sole proprietorship, the general partner or the proprietor, respectively, shall sign the application; and
- 3. For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official

shall sign the application; in this subsection, a principal executive officer of an agency means

- (A) the chief executive officer of the agency or
- (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

Include the name and title of the person signing the form and the date of signing.

# **TABLE 2D-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	1–0	Mixing
1–D	Distillation	1–P	Moving Bed Filters
1–E	Electrodialysis	1–Q	Multimedia Filtration
1–F	Evaporation	1–R	Rapid Sand Filtration
1–G	Flocculation	1–S	Reverse Osmosis ( <i>Hyperfiltration</i> )
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	Ocean Discharge Through Outfall	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 2D-2 POLLUTANT/PARAMETER LIST

#### **GROUP A**

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

Flow

### **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

Sulfate (as S0<sub>4</sub>)
Sulfide (as S)
Sulfite (as S0<sub>3</sub>)
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total

Magnesium, Total Molybdenum, Total Manganese, Total

Tin, Total Titanium, Total

#### Section 1

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

## Section 2

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

#### Section 3

# **GC/MS Fraction — Volatile Compounds**

Acrolein Vinyl Chloride
Benzene Acrylonitrile
Carbon Tetrachloride Bromoform
Chlorodibramomethane Chloroethylvinyl Ether Chloroethylvinyl Ether Chlorobomomethane
1,2-Dichloroethane 1,1-Dichloroethane

1,2-Dichloroethane1,1-Dichloroethane1,2-Dichloropropane1,3-DichloropropyleneEthylbenzeneMethyl Bromide

Methyl ChlorideMethylene chloroethane1,1,2,2-TetrachloroethaneTetrachloroethyleneToluene1,2-Trans-Dichloroethylene

1,2-Trichloroethane
Trichloroethylene

1,2-Trichloroethane
Trichloroethylene

# **GS/MS Fraction — ACID Compounds**

2-Chlorophenol 2,4-Dichlorophenol

2,4-Dimethylphenol2,4-Dinitro-phenol4-NitrophenolPentachlorophenol2,4,6-Trichlorophenol

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-sodiphenylamine

Pyrene

Acenaphtylene Benzidine Benzo (a) Pyrene

Benzo (ghi) Perylene Bis (2 Chloroethoxy) Methane (2-Chloroisopropyl) Ether 4-Bromophenyl Phenyl Ether

Chrysene

1,2-Dichlorobenzene 1,4-Dichlorobenzene Diethyl Phthalate Di-N-Butyl Phthalate 2,6-Dinitrotoluene

2-Chloronaphthalene

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-1232 PCB-1260 Toxaphene Gamma-BHC
Delta-BHC
Chlordane
4,4' DDE
Dieldrin
Beta-Endosulfan

Endrin Heptachlor PCB-1242 PCB-1221 PCB-1248 PCB-1016

# TABLE 2D-3 TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES REQUIRED TO BE IDENTIFIED BY APPLICANTS IF EXPECTED TO BE PRESENT

#### **TOXIC POLLUTANT**

Asbestos

HAZARDOUS SUBSTANCES

Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran

Cresol Crotonaldehyde Cyclohexane

Carbon disulfide

Chlorpyrifos Coumaphos

2,4-D (2,4-Dichlorophenoxy acetic acid)

Diazinon
Dicamba
Dichlobenil
Dichlone

2,2-Dichloropropionic acid

Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton

Diuron
Epichlorohydrin
Ethion

Ethylene diamine Ethylene dibromide Formaldehyde Furfural Guthion Isoprene

Isopropanolamine dodecylbenzenesulfonate

**HAZARDOUS SUBSTANCES** 

Kelthane Kepone Malathion

Mercaptodimethur Methoxychlor Methyl mercaptan Methyl methacrylate Methyl parathion Mevinphos Mexacarbate Monoethyl amine Monomethyl amine

Naled

Napthenic acid Nitrotoluene Parathion Phenolsulfonate Phosgene Propargite Propylene oxide Pyrethrins Quinoline Resorcinol Strontium Strychnine Styrene

2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)

TDE (Tetrachlorodiphenylethane)

2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]

Trichlorofon

Triethanolamine Dodecylbenzenesulfonate

Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

# **TABLE 2D-4 HAZARDOUS SUBSTANCES**

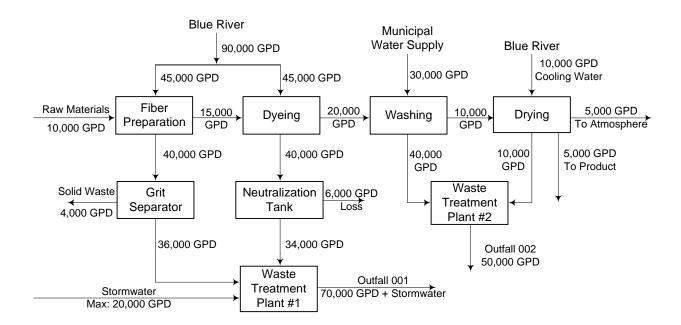
1. Acetaldehyde	66. Calcium arsenate	126. Dodecylbenzesulfonic acid
Acetic acid	67. Calcium arsenite	127. Endosulfan
3. Acetic anhydride	69. Calcium carbide	128. Endrin
Acetone cyanohydrin	69. Calcium chromate	129. Epichlorohydrin
5. Acetyl bromide	70. Calcium cyanide	130. Ethion
6. Acetyl chloride	71. Calcium	131. Ethylbenzene
7. Acrolein	dodecylbenzenesulfonate	132. Ethylenediamine
8. Acrylonitrile	72. Calcium hypochlorite	133. Ethylene dibromide
9. Adipic acid	73. Captan	134. Ethylene dichloride
10. Aldrin	74. Carbaryl	135. Ethylene diaminetetracetic
11. Allyl alcohol	75. Carbor disulfida	acid (EDTA)
12. Allyl chloride 13. Aluminum sulfate	76. Carbon disulfide 77. Carbon tetrachloride	<ul><li>136. Ferric ammonium citrate</li><li>137. Ferric ammonium oxalate</li></ul>
14. Ammonia	78. Chlordane	138. Ferric chloride
15. Ammonium acetate	79. Chlorine	139. Ferric fluoride
16. Ammonium benzoate	80. Chlorobenzene	140. Ferric nitrate
17. Ammonium bicarbonate	81. Chloroform	141. Ferric sulfate
18. Ammonium bichromate	82. Chloropyrifos	142. Ferrous ammonium sulfate
19. Ammonium bifluoride	83. Chlorosulfonic acid	143. Ferrous chloride
20. Ammonium bisulfite	84. Chromic acetate	144. Ferrous sulfate
21. Ammonium carbamate	85. Chromic acid	145. Formaldehyde
22. Ammonium carbonate	86. Chromic sulfate	146. Formic acid
23. Ammonium chloride	87. Chromous chloride	147. Fumaric acid
24. Ammonium chromate	88. Cobaltous bromide	148. Furfural
25. Ammonium citrate	89. Cobaltous formate	149. Guthion
26. Ammonium fluoroborate	90. Cobaltous sulfamate	150. Heptachlor
27. Ammonium fluoride	91. Coumaphos 92. Cresol	151. Hexachlorocyclopentadiene
28. Ammonium hydroxide 29. Ammonium oxalate	93. Crotonaldehyde	152. Hydrochloric acid 153. Hydrofluoric acid
30. Ammonium silicofluoride	94. Cupric acetate	154. Hydrogen cyanide
31. Ammonium sulfamate	95. Cupric acetoarsenite	155. Hydrogen sulfide
32. Ammonium sulfide	96. Cupric chloride	156. Isoprene
33. Ammonium sulfite	97. Cupric nitrate	157. Isopropanolamine
34. Ammonium tartrate	98. Cupric oxalate	dodecylbenzenesulfonate
35. Ammonium thiocyanate	99. Cupric sulfate	158. Kelthane
36. Ammonium thiosulfate	100. Cupric sulfate ammoniated	159. Kepone
37. Amyl acetate	101. Cupric tartrate	160. Lead acetate
38. Aniline	102. Cyanogen chloride	161. Lead arsenate
39. Antimony pentachloride	103. Cyclohexane	162. Lead chloride
40. Antimony potassium tartrate	104. 2,4-D acid (2,4-	163. Lead fluoborate
<ul><li>41. Antimony tribromide</li><li>42. Antimony trichloride</li></ul>	Dichlorophenoxyacetic acid) 105. 2,4-D esters (2,4-	164. Lead flourite 165. Lead iodide
43. Antimony trifluoride	Dichlorophenoxyacetic	166. Lead nitrate
44. Antimony trioxide	acid esters)	167. Lead stearate
45. Arsenic disulfide	106. DDT	168. Lead sulfate
46. Arsenic pentoxide	107. Diazinon	169. Lead sulfide
47. Arsenic trichloride	108. Dicamba	170. Lead thiocyanate
48. Arsenic trioxide	109. Dichlobenil	171. Lindane
49. Arsenic trisulfide	110. Dichlone	172. Lithium chromate
50. Barium cyanide	111. Dichlorobenzene	173. Malathion
51. Benzene	112. Dichloropropane	174. Maleic acid
52. Benzoic acid	113. Dichloropropene	175. Maleic anhydride
53. Benzonitrile	114. Dichloropropene-	176. Mercaptodimethur
54. Benzoyl chloride 55. Benzyl chloride	dichloproropane mix 115. 2,2-Dichloropropionic acid	177. Mercuric cyanide 178. Mercuric nitrate
56. Beryllium chloride	116. Dichlorvos	179. Mercuric sulfate
57. Beryllium fluoride	117. Dieldrin	180. Mercuric thiocyanate
58. Beryllium nitrate	118. Diethylamine	181. Mercurous nitrate
59. Butylacetate	119. Dimethylamine	182. Methoxychlor
60. n-Butylphthalate	120. Dinitrobenzene	183. Methyl mercaptan
61. Butylamine	121. Dinitrophenol	184. Methyl methacrylate
62. Butyric acid	122. Dinitrotoluene	185. Methyl parathion
63. Cadmium acetate	123. Diquat	186. Mevinphos
64. Cadmium bromide	124. Disulfoton	187. Mexacarbate
65. Cadmium chloride	125. Diuron	188. Monoethylamine

- 189. Monomethylamine
- 190. Naled
- 191. Naphthalene
- 192. Naphthenic acid
- 193. Nickel ammonium sulfate
- 194. Nickel chloride
- 195. Nickel hydroxide
- 196. Nickel nitrate
- 197. Nickel sulfate
- 198. Nitric acid
- 199. Nitrobenzene
- 200. Nitrogen dioxide
- 201. Nitrophenol
- 202. Nitrotoluene
- 203. Paraformaldehyde
- 204. Parathion
- 205. Pentachlorophenol
- 206. Phenol
- 207. Phosgene
- 208. Phosphoric acid
- 209. Phosphorus
- 210. Phosphorus oxychloride
- 211. Phosphorus pentasulfide
- 212. Phosphorus trichloride
- 213. Polychlorinated biphenyls (PCB)
- 214. Potassium arsenate
- 215. Potassium arsenite
- 216. Potassium bichromate
- 217. Potassium chromate
- 218. Potassium cyanide 219. Potassium hydroxide
- 220. Potassium permanganate
- 221. Propargite
- 222. Propionic acid
- 223. Propionic anhydride
- 224. Propylene oxide
- 225. Pyrethrins
- 226. Quinoline
- 227. Resorcinol
- 228. Selenium oxide
- 229. Silver nitrate

- 230. Sodium
- 231. Sodium arsenate
- 232. Sodium arsenite
- 233. Sodium bichromate
- 234. Sodium bifluoride
- 235. Sodium bisulfite 236. Sodium chromate
- 237. Sodium cvanide
- 238. Sodium dodecylbenzenesulfonate
- 239. Sodium fluoride
- 240. Sodium hydrosulfide
- 241. Sodium hydroxide
- 242. Sodium hypochlorite
- 243. Sodium methylate
- 244. Sodium nitrite
- 245. Sodium phosphate (dibasic)
- 246. Sodium phosphate (tribasic)
- 247. Sodium selenite
- 248. Strontium chromate
- 249. Strychnine
- 250. Styrene
- 251. Sulfuric acid
- 252. Sulfur monochloride
- 253. 2,4,5-T acid (2,4,5-
- Trichlorophenoxyacetic acid)
- 254. 2,4,5-T amines (2,4,5-Trichlorophenoxy
- acetic acid amines)
- 255. 2,4,5-T esters (2,4,5
- Trichlorophenoxy acetic acid esters)
- 256. 2,4,5-T salts (2,4,5-Trichlorophenoxy
- acetic acid salts) 257. 2,4,5-TP acid (2,4,5-
  - Trichlorophenoxy propanoic acid)
- 258. 2,4,5-TP acid esters (2,4,5-Trichlorophenoxy propanoic acid
  - esters)
- 259. TDE (Tetrachlorodiphenyl ethane)

- 260. Tetraethyl lead
- 261. Tetraethyl pyrophosphate
- 262. Thallium sulfate
- 263. Toluene
- 264. Toxaphene
- 265. Trichlorofon
- 266. Trichloroethylene
- 267. Trichlorophenol 268. Triethanolamine
- - dodecylbenzenesulfonate
- 269. Triethylamine
- 270. Trimethylamine
- 271. Uranyl acetate
- 272. Uranyl nitrate
- 273. Vanadium pentoxide
- 274. Vanadyl sulfate
- 275. Vinyl acetate
- 276. Vinvlidene chloride
- 277. Xylene
- 278. Xylenol
- 279. Zinc acetate
- 280. Zinc ammonium chloride
- 281. Zinc borate
- 282. Zinc bromide
- 283. Zinc carbonate
- 284. Zinc chloride
- 285. Zinc cyanide
- 286. Zinc fluoride
- 287. Zinc formate
- 288. Zinc hydrosulfite 289. Zinc nitrate
- 290. Zinc phenolsulfonate
- 291. Zinc phosphide
- 292. Zinc silicofluoride
- 293. Zinc sulfate
- 294. Zirconium nitrate 295. Zirconium potassium flouride
- 296. Zirconium sulfate
- 297. Zirconium tetrachloride

# FIGURE 2D-1 LINE DRAWING



# **GLOSSARY**

NOTE: This Glossary includes terms used in the instructions and in Forms 1, 2A, 2B, 2C, 2D, 2E, and 2F. If you have any questions concerning the meaning of any of these terms, please contact ADEC.

ADEC means the Alaska Department of Environmental Conservation.

ADMINSTRATOR means the administrator of the United States Environmental Protection Agency (EPA), or an authorized representative.

ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM or APDES means the state's program, approved by EPA under 33.U.S.C. 1342(b), for issuing, modifying, revoking and reissuing, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under 33 U.S.C. 1317, 1328, 1342, and 1345.

ALIQUOT means a sample of specified volume used to make up a total composite sample.

ANIMAL FEEDING OPERATION (AFO) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met

- Animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and
- Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two or more animal feeding operations under common ownership are a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

ANIMAL UNIT means a unit of measurement for any animal feeding operation calculated by adding the following numbers: The number of slaughter and feeder cattle multiplied by 1.0; Plus the number of mature dairy cattle multiplied by 1.4; Plus the number of swine weighing over 25 kilograms (*approximately 55 pounds*) multiplied by 0.4; Plus the number of sheep multiplied by 0.1; Plus the number of horses multiplied by 2.0.

APPLICATION means a submission of required information on (A) the EPA standard national forms for applying for an NPDES permit, or (B) the Department equivalent forms adopted by the state for use in the APDES program and approved by EPA for use by the state, including any approved modifications or revisions.

APPROVED PROGRAM or APPROVED STATE means a state program which has been approved or authorized by EPA under 40 CFR Part 123.

AQUACULTURE PROJECT means a defined managed water area which uses discharges of pollutants into that designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. "Designated project area" means the portions of the waters of the United States within which the applicant plans to confine the cultivated species, using a method of plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure the specific individual organisms comprising an aquaculture crop will enjoy increased growth attributable to the discharge of pollutants and be harvested within a defined geographic area.

AVERAGE MONTHLY DISCHARGE LIMITATION means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

AVERAGE WEEKLY DISCHARGE LIMITATION means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all the daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

BEST MANAGEMENT PRACTICES (BMP) means (A) schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States; and (B) treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BIOLOGICAL MONITORING TEST or BIOMONITORING TEST means any test which includes the use of aquatic algal, invertebrate, or vertebrate species to measure acute or chronic toxicity, and any biological or chemical measure of bioaccumulation.

BYPASS means the intentional diversion of wastes from any portion of a treatment facility.

COMMISSIONER means the commissioner of the Alaska Department of Environmental Conservation.

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) means an animal feeding operation which meets the criteria set forth in either (A) or (B) below or which the **Director** designates as such on a case-by-case basis:

- (A) Large CAFO: As many as or more than the numbers of animals specified in any of the following categories are stabled or confined:
  - 1. 700 mature dairy cows, whether milked or dry cows;
  - 2. 1,000 veal calves;
  - 1,000 cattle other than mature dairy cows or veal calves:
  - 4. 2,500 swine each weighing 55 pounds or more;
  - 5. 10,000 swine each weighing less than 55 pounds;
  - 6. 500 horses;
  - 7. 10,000 sheep or lambs;
  - 8. 55,000 turkeys;
  - 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
  - 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
  - 11. 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
  - 30,000 ducks, if the AFO uses other than a liquid manure handling system; or
  - 5,000 ducks, if the AFO uses a liquid manure handling system.
- (B) Medium CAFO: The type and number of animals falls within any of the ranges listed below, and if pollutants are discharged into the waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or if pollutants are discharged

directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into contact with the animals confined in the operation:

- 200 to 699 mature dairy cows, whether milked or dry cows:
- 2. 300 to 999 veal calves;
- 300 to 999 cattle other than mature dairy cows or veal calves;
- 750 to 2,499 swine each weighing 55 pounds or more:
- 3,000 to 9,999 swine each weighing less than 55 pounds;
- 150 to 499 horses;
- 7. 3,000 to 9,999 sheep or lambs;
- 16,500 to 54,999 turkeys;
- 9. 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
- 37,500 to 124,999 chickens (other than laying hens), if the AFP uses other than a liquid manure handling system;
- 11. 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
- 12. 10,000 to 29,999 ducks, if the AFO uses other than a liquid manure handling system; or
- 13. 1,500 to 4,999 ducks, if the AFO uses a liquid manure handling system.

CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITY means a hatchery, fish farm, or other facility which contains, grows or holds aquatic animals in either of the following categories, or which the Director designates as such on a case-by-case basis:

- (A) Cold water fish species or other cold water aquatic animals including, but not limited to, the Salmonidae family of fish (e.g., trout and salmon) in ponds, raceways or other similar structures which discharge at least 30 days per year but does not include:
  - Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
  - Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
- (B) Warm water fish species or other warm water aquatic animals including, but not limited to, the Ameiuridae, Cetrarchiclae, and Cyprinidae families of fish (e.g., respectively, catfish, sunfish, and minnows) in ponds, raceways, or other similar structures which discharge at least 30 days per year, but does not include:
  - Closed ponds which discharge only during periods of excess runoff; or
  - Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.

CONTACT COOLING WATER means water used to reduce temperature which comes into contact with a raw material, intermediate product, waste product other than heat, or finished product.

CONTIGUOUS ZONE means the entire zone established by the United States under article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

CONTINUOUS DISCHARGE means a discharge that occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

CLEAN WATER ACT (CWA) means the federal law codified at 33 U.S.C. 1251-1387, also known or referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972.

DAILY DISCHARGE means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling; the daily discharge is calculated for a pollutant with limitations expressed in (A) unit of mass, as the total mass of the pollutant discharged over the day, and (B) other units of measurement, as the average measurement of the pollutant over the day.

DEPARTMENT means the Alaska Department of Environmental Conservation.

DIRECT DISCHARGE means the discharge of a pollutant.

DIRECTOR means the commissioner or the commissioner's designee assigned to administer the APDES Program or a portion of it, unless the context identifies an EPA director.

DISCHARGE when used without qualification means the discharge of a pollutant.

#### DISCHARGE (OF A POLLUTANT)

- means any addition of any pollutant or combination of pollutants
  - i) to waters of the United States from any point source; or
  - ii) to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation;
- B) includes any addition of pollutants into waters of the United States from
  - (i) surface runoff that is collected or channeled by humans;
  - (ii) discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works; and
- does not include an addition of pollutants by any indirect discharger.

DISCHARGE MONITORING REPORT(DMR) means the EPA uniform national form, adopted by reference in 18 AAC 83.410(d), for the self-monitoring results by permittees, including any department equivalent modified to substitute the Department's name address, logo, and other similar information, as appropriate, in place of information pertaining to EPA.

DRAFT PERMIT means a document prepared under 18 AAC 83.115, indicating the Department's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit.

EFFLUENT LIMITATION or EFFLUENT LIMIT means any restriction imposed by the Department on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

EFFLUENT LIMITATION GUIDELINES means a regulation published by the administrator under 33 U.S.C. 1314(b) to adopt or revise effluent limitations.

ENVIRONMENTAL PROTECTION AGENCY or EPA means the United States Environmental Protection Agency.

EXISTING SOURCE or EXISTING DISCHARGER (in the APDES program) means any source which is not a new source or a new discharger.

FACILITY or ACTIVITY means any point source or any other facility or activity, including land or appurtenances, that is subject to regulation under the APDES program.

FEDERAL INDIAN RESERVATION means all land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation.

GENERAL PERMIT means an APDES permit issued under 18 AAC 83.205, or an NPDES permit issued by EPA under 40 CFR §122.28 before the state's acceptance of delegation of the NPDES program, authorizing a category of discharges under 33 U.S.C. 1251 – 1387 within a geographical area.

HAZARDOUS SUBSTANCE means any of the substances designated under 40 CFR Part 116 in accordance with 33 U.S.C. 1321. (NOTE: These substances are listed in Table 2C-4 of the instructions to Form 2C)

IN OPERATION means a facility which is treating, storing, or disposing of hazardous waste.

INDIAN TRIBE means any Indian tribe, band, group, or community recognized by the United States Secretary of the Interior and exercising governmental authority over a federal Indian reservation.

INDIRECT DISCHARGER means a nondomestic discharger introducing pollutants to a publicly owned treatment works.

INDIVIDUAL CONTROL STRATEGY means a final APDES permit with supporting documentation showing that effluent limits are consistent with an approved wasteload allocation or other documentation which shows that applicable water quality standards with be met no later than three years after the individual control strategy is established.

INTERSTATE AGENCY means an agency of two or more states established by or under an agreement or compact approved by the United States Congress, or any other agency of two or more states having substantial powers or duties pertaining to the control of pollution as determined and approved by the administrator under 33 U.S.C 1251 – 1387 and regulations adopted under those provisions.

LOG SORTING AND LOG STORAGE FACILITIES means facilities where discharges result from the holding of unprocessed wood, such as logs or roundwood with bark or after removal of bark held in self-contained bodies of water such as mill ponds or log ponds or stored on land for wet decking where water is applied intentionally on the logs.

MAJOR FACILITY means any NPDES facility or activity classified as a major facility by the regional administrator, or any APDES facility or activity classified as a major facility by the regional administrator in conjunction with the Department.

MAXIMUM DAILY DISCHARGE LIMITATION means the highest allowable daily discharge.

MGD means millions of gallons per day.

MINOR FACILITY means any facility that is not a major facility.

MUNICIPALITY means a city, village, town, borough, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of CWA [33 U.S.C. 1288].

MUNICIPAL SEPARATE STORM SEWER SYSTEM or MS4 has the meaning given in 40 CFR 122.26(b)(4) and (b)(7), adopted by reference in 18 AAC 83.010.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM or NPDES (A) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of CWA [33 U.S.C 1317, 1328, 1342, and 1345]; (B) includes the APDES program, as approved by EPA.

NEW DISCHARGER (A) means any building, structure, facility, or installation

- (i) from which there is or may be a discharge of pollutants;
  - (ii) that did not commence the discharge of pollutants at a particular site before August 13, 1979;
  - (iii) that is not a new source; and
  - (iv) that has never received a finally effective NPDES permit for discharges at that site;

#### (B) includes

- (i) an indirect discharger that commenced or commences discharging into waters of the United States after August 13, 1979;
- (ii) any existing mobile point source other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas development drilling rig such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a site for which it does not have a permit; and
- (iii) any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental rig that commenced or commences the discharge of pollutants after August 13, 1979, at a site under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the regional administrator in the issuance of a final permit to be an area of biological concern considering the factors specific in 40 CFR §125.122(a)(1) (10), adopted by reference in 18 AAC 83.010;
- (iv) an offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a new discharger only for the duration of its discharge in an area of biological concern.

NEW SOURCE (A) means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced

- (i) after promulgation of standards of performance under Section 306 of CWA [33 U.S.C. 1316] that are applicable to a new source; or
- (ii) after proposal of standards of performance in accordance with Section 306 of CWA [33 U.S.C. 1316] that are applicable to a new source, but only if the standards are promulgated in accordance with Section

306 of CWA [33 U.S.C 1316] within 120 days of their proposal:

- (B) except as otherwise provided in an applicable new source performance standard, is a source that
  - (i) is constructed at a site at which no other source is located:
  - (ii) totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
  - (iii) has processes which are substantially independent of an existing source at the same site, considering such factors as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source.
- (C) for purposes of (A) and (B), is a new source only if a new source performance standard is independently applicable to it; if there is no independently applicable standard, the source is a new discharger;
- (D) is construction of a new source that has commenced if the owner or operator has
  - (i) begun, or caused to begin as part of a continuous onsite construction program, any placement, assembly, or installation of facilities or equipment or significant site preparation work including clearing, excavation or removal of existing buildings, structures, or facilities that is necessary for the placement, assembly, or installation of new source facilities or equipment; or
  - (ii) entered into a binding contractual obligation for the purchase of a facilities or equipment intended to be used in its operation within a reasonable time; options to purchase or contracts that can be terminated or modified without substantial loss, contracts for feasibility engineering and design studies do not constitute a contractual obligation:
- (E) does not include construction on a site that results in a modification to an existing source subject to 18 AAC 83.130, if the construction does not create a new building, structure, facility, or installation meeting the criteria in (A) (D) of this paragraph, but otherwise alters, replaces, or adds to existing process or production equipment.
- (F) as used in (A)-(E) of this paragraph:
  - (i) "existing source" means any source that is not a new source or a new discharger;
  - (ii) "facility or equipment" means any building, structure, process or production equipment or machinery which form a permanent part of the new source and which will be used in its operation, if the facility or equipment is of such value as to represent a substantial commitment to construct, but does not include any facility or equipment used in connection with feasibility, engineering, and design studies regarding the source or water pollution treatment for the source;
  - (iii) "source" means any building, structure, facility, or installation from which there is or may be a discharge of pollutants;

NONCONTACT COOLING WATER means water used to reduce temperature which does not come into direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

ON-SITE CONTACT means the 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.

OPERATOR means the party responsible for the overall operation of a facility. (See "Responsible Party")

OUTFALL means a point source.

OWNER means the owner of any facility subject to regulation under the APDES program.

PERMIT (A) means an authorization, license, or equivalent control document issued by the Department to implement the requirements of the APDES Program and 18 AAC 83; (B) includes an APDES general permit and an EPA-issued NPDES general permit.

PERSON means an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof.

POINT SOURCE (A) means any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged; (B) does not include return flows from irrigated agricultural storm water runoff.

POLLUTANT (A) means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials except those regulated under 42 U.S.C. 2011, heat, wrecked or discarded equipment, rocks, sand, cellar dirt and industrial, municipal, or agriculture waste discharged into water;

- (B) does not include sewage from vessels or water, gas, or other material that is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well
  - (i) is used either to facilitate production or for disposal purposes
  - (ii) is approved by authority of the Department, and
  - (iii) if the Department determines that the injection or disposal will not result in the degradation of ground or surface water resources.

PRELIMINARY DRAFT PERMIT means a draft permit that the Department intends to provide notice of under 18 AAC 83.120 and that is provided in advance to the applicant under 18 AAC 83.115(e).

PRETREATMENT has the meaning given in 40 CFR §403.3(q), adopted by reference in 18 AAC 83.010.

PRIMARY INDUSTRY CATEGORY means any industry category listed in Appendix A to 40 CFR Part 122, adopted by reference in 18 AAC 83.010.

PRIVATELY OWNED TREATMENT WORKS means any device or system that is used to treat wastes from any facility whose operator is not the operator of the treatment works and is not a POTW.

PROCESS WASTEWATER means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

PROPOSED FINAL PERMIT means a permit, prepared after the public comment period and any public hearing and administrative

appeal, that may be sent to EPA for review before final issuance by the Department.

PUBLICLY OWNED TREATMENT WORKS or POTW (A) means a treatment works as defined by 33 U.S.C. 1292 that is owned by a state or municipality; municipality includes a municipality that has jurisdiction over the indirect discharges to and the discharges from such a treatment works;

#### (B) includes

- (i) any device and system used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature; and
- (ii) any sewer, pipes, and other conveyances that conveys wastewater to a POTW treatment plant.

RECOMMENCING DISCHARGER means a source that recommences discharge after terminating operations.

REGIONAL ADMINISTRATOR means the regional administrator of EPA Region 10 or the authorized representative of the regional administrator.

RESPONSIBLE PARTY means the person, firm, public organization, or any other entity responsible for the overall operation of the facility. This may or may not be the same name as the facility. The responsible party is the legal entity which controls the facility's operation rather than the plant or site manager and receives all correspondence from the Department.

ROCK CRUSHING OR GRAVEL WASHING FACILITIES means facilities that process crushed and broken stone, gravel, and riprap.

SCHEDULE OF COMPLIANCE means a schedule of remedial measures in a permit, including an enforceable sequence of interim requirements such as actions, operations, or milestone events, leading to compliance with 33 U.S.C. 1251 – 1387 and 18 AAC 83.

SECONDARY INDUSTRY CATEGORY means any industry category that is not a primary industry category.

SEPTAGE means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

SEVERE PROPERTY DAMAGE means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass; in this paragraph, "severe property damage" does not include economic loss caused by delays in production.

SEWAGE FROM VESSELS means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of CWA [33 U.S.C. 1322].

SEWAGE SLUDGE (A) means any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage; (B) includes solids removed during primary, secondary, or advanced wastewater treatment, scum, **septage**, portable toilet pumpings, type III marine sanitation device pumpings under 33 CFR Part 159, and sewage sludge products; (C) does not include grit, screenings, or ash generated during the incineration of sewage sludge.

SEWAGE SLUDGE USE OR DISPOSAL PRACTICE means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

SILVICULTURAL POINT SOURCE (A) means any discernable, confined, and discrete conveyance related to rock crushing and gravel washing, log sorting, or log storage facilities that are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States; (B) does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff. However, some of these activities (such as stream crossing for roads) may require a CWA Section 404 permit.

SITE means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

STATE means the State of Alaska.

STATE AND EPA AGREEMENT means an agreement between the regional administrator and the state that coordinates EPA and state activities, responsibilities, and programs, including those under 33 U.S.C. 1251-1387.

STORM WATER means storm water runoff, snow melt runoff, and surface runoff and drainage.

STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant.

SURFACE IMPOUNDMENT or IMPOUNDMENT means a facility or part of a facility which is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

TOTAL DISSOLVED SOLIDS means the total dissolved solids as determined by use of the method specified in 40 CFR Part 136, adopted by reference in 18 AAC 83.010.

TOXIC POLLUTANT means any pollutant listed as toxic under Section 307(a)(1) of CWA [33 U.S.C. 1317(a)(1)].

TREATMENT WORKS TREATING DOMESTIC SEWAGE (TWTDS) means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge.

UNDERGROUND INJECTION means well injection.

UPSET means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee; upset does not include the following: (A) noncompliance to the extent caused by operational error; (B) improperly designed or installed treatment facilities: (C) inadequate treatment facilities; (D) lack of preventive maintenance; (E) careless or improper operation.

VARIANCE (A) means any mechanism or provision under 33 U.S.C. 1311 or 1326 or under 18 AAC 83.160, or in the applicable effluent limitations guidelines, that allows a modification or waiver of the generally applicable effluent limitation requirements or time deadlines of 33 U.S.C 1251 – 1387; (B) includes provisions that allow the establishment of alternative

limitations based on fundamentally different factors or based upon 33 U.S.C. 1311(c), (g) – (i), or 1326(a).

WATERS OF THE UNITED STATES or WATERS OF THE U.S. (A) means:

- all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
- (ii) all interstate waters, including interstate wetlands;
- (iii) all other waters such as intrastate lakes, rivers, streams, including intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such waters that are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or that are used or could be used for industrial purposes by industries in interstate commerce;
- (iv) all impoundments of waters otherwise defined as waters of the United States;
- (v) tributaries of waters identified in paragraphs (i) (iv);
- (vi) the territorial sea; and
- (vii) wetlands adjacent to waters, other than waters that are themselves wetlands, identified in paragraphs (i) - (vi).

#### (B) does not include

- (i) waste treatment systems including treatment ponds or lagoons designed to meet the requirements of 33 U.S.C. 1251 1387 (CWA), other than cooling ponds as defined in 40 CFR §423.11(m), adopted by reference in 18 AAC 83.010 that also meet the criteria of this paragraph;
- (ii) prior converted cropland; however, notwithstanding the determination of an area's status as prior converted cropland by any federal agency other than EPA, the final authority regarding CWA jurisdiction remains with EPA.

WELL INJECTION or UNDERGROUND INJECTION means the subsurface emplacement of fluids through a bored, drilled, or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

WETLANDS means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, and generally include swamps, marshes, bogs, and similar areas.

WHOLE EFFLUENT TOXICITY means the aggregate toxic effect of an effluent measured directly by a toxicity test.