Arizona Pollutant Discharge Elimination System

FORM 2D

INSTRUCTIONS

FOR INDUSTRIAL AND COMMERCIAL OPERATIONS THAT PROPOSE TO DISCHARGE NON-DOMESTIC WASTEWATER

New Sources and New Dischargers

All applicants must complete this form if checked "yes" to Part VII.D on Form1

This form is to be used by private or government owners of facilities that propose to discharge wastewater other than domestic wastewater. This includes discharges from water treatment plants, groundwater remediation efforts, mining and silvicultural operations, and noncontact cooling waters among others. To further determine if you are a new source or a new discharger, see Arizona Administrative Code (A.A.C.) R18-9-A901 (19), R18-9-A901(20) and Code of Federal Regulations (CFR) Part 122.29, incorporated by reference under A.A.C. R18-9-A905(A)(1)(e). 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. This form should not be used for discharges of stormwater runoff.

Availability of Information to Public

Information contained in this application form will, upon request, be made available to the public for inspection and copying. No information on this form including effluent characterization data may be claimed as confidential. If you send in more information than is required in these forms that is considered company-privileged information, you may ask ADEQ to keep that extra information confidential. Otherwise, ADEQ may make the information public without letting you know in advance. For more information on claims of confidentiality, see Arizona Revised Statutes (A.R.S.) § 49-205.

Follow-up Requirements

Although you are now required to submit estimated data on this form, no later than two years after you begin discharging from the proposed facility, you must complete and submit Item V of AZPDES Application Form 2D to ADEQ. However, you need not complete those portions of Item V requiring tests which you have already performed under the discharge monitoring requirements of your AZPDES permit.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in Section D-Glossary of Instructions, which accompanies Form 1.

Item I. Outfall Location

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

Item II. Discharge Date

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

Item III. Flows, Sources of Pollution and Treatment Technologies

Part III.A

Attach a line drawing showing 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 Part III-B. The water balance should show estimates of anticipated average flows. Show all significant losses of water to production, atmosphere and discharge. You should use your best estimates. An example of an acceptable line drawing appears in Figure 2D-1 to these instructions.

Part III.B

List all outfalls and their sources (operations contributing to the flow). Operations may be described in general terms (for example, "dye-making reactor" or "distillation tower"). Provide an estimate of average flow from each source. 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. Briefly describe the planned treatment for these wastewaters prior to discharge. Also describe the ultimate disposal method of any solid or liquid wastes not discharged. Treatment units should be listed in order and you should describe the treatment in either a narrative form or use the proper code for the treatment unit from a list provided in Table 2D-1 to fill in column 3.b.

Part III.C

A discharge is intermittent if it occurs with interruptions during the operating hours of the facility. Discharges caused by routine maintenance shutdowns, process changes or other similar activities are not considered to be intermittent. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every applicable column in this part for each source of intermittent or seasonal discharge. Base your answers on your best estimate. Report the highest daily value for flow rate in the "MAXIMUM DAILY FLOW RATE" column (column 4.a) and should be measured in million gallons per day. "MAXIMUM TOTAL DAILY VOLUME" column (column 4.b) represents the highest total volume of any one discharge within 24 hours and is measured in units such as gallons.

Item IV. Production

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

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

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

Items V. Effluent Characteristics

This item requires 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 must submit a separate Item V for each outfall. 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 general instructions apply to the entire item.

General Instructions

Each part of this item requires you to provide an estimated maximum daily and long term average value for each pollutant or parameter listed according to the specific instructions below. The source of the data is also required. 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. (For example, if you manufacture pesticides, you should expect those pesticides to be present in contaminated stormwater runoff.) You may also provide the determination and the estimates based on available in-house or contractor's engineering reports or any other studies performed on the proposed facility (see Item VI of the form). If you expect a pollutant to be present solely as a result of its presence in your intake water, please state this information on the form.

Please note that no later than 2 years after you begin discharging from the proposed facility, you must complete and resubmit Item V of AZPDES Application Form 2C (follow-up data) to ADEQ.

Reporting

All estimated pollutant or parameter levels must be reported as concentration and as total mass, except for discharge flow, temperature and pH. Mass is the total weight of pollutants or parameters discharged over a day (24 hours). Maximum daily value is the highest daily value obtained. Long term average value is the average of all daily values.

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)

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

1. An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent or total form; or
2. All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
3. ADEQ has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent or total form to carry out the provisions of the CWA.

Source

In providing the estimates, use the codes in the following table to indicate the source of such information in column 4 of Part V.A and column 5 of Parts V.B through V.D.

	Code
Engineering study	1
Actual data from pilot plants	1
Estimates from other engineering studies	2
Data from other similar plants	3
Best professional estimates	4
Others	specify on the form

Reporting of Intake Data

You are not required to report pollutants or parameters present in intake water unless you wish to demonstrate your eligibility for a "net" effluent limitation for these pollutants or parameters, that is, an effluent limitation adjusted to provide allowance for the pollutants or parameters present in your intake water. If you wish to obtain credits for pollutants or parameters present in your intake water, please insert a separate sheet, with a short statement of why you believe you are eligible (see §122.45(g) incorporated by reference under A.A.C. R18-9-A905(A)(3)(e)), under Item VII (other information). You will then be contacted by ADEQ for further instructions.

Part V.A (BOD_5, COD, TOC, TSS, Ammonia, Flow, Temperature, and pH)

All applicants must report estimates of data on pollutants or parameters 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 ADEQ 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 ADEQ before or with the permit application. ADEQ may waive the requirements for information about these pollutants or parameters if it determines that less stringent reporting requirements are adequate to support issuance of the permit.

Part V.B (27 Conventional and Non-conventional Pollutants)

Mark "X" in column 2 for each pollutant and for all outfalls, including outfalls containing only noncontact cooling water or nonprocess wastewater if any of the following conditions apply:

1. You know or have reason to believe that the pollutant will be discharged, or
2. The pollutant is limited directly by an applicable effluent limitations guideline or a new source performance standard (NSPS), or
3. The pollutant is limited indirectly but expressly through applicable promulgated imitations or NSPS on an indicator pollutant (e.g., use of TSS as an indicator to control the discharge of iron and aluminum).

If you mark column 2 for any pollutant, you must provide an estimate of data for that pollutant. Complete one table for each outfall.

Part V.C

The 126 priority pollutants in Part V.C are divided into the following three sections:

1. 15 Metal toxic pollutants, total cyanide and total phenols
2. 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)(CAS #1764-016)
3. 110 Organic toxic pollutants (gas chromatography/mass spectrometry or GC/MS fractions)
   (a) 28 Volatile compounds

(b) 11 Acid compounds
(c) 46 Base/neutral compounds
(d) 25 Pesticides

For pollutants listed in Sections 1 and 3, you must mark “X” in column 2and report estimates as instructed in Part V.B, above.

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

1. 2,4,5-Trichlorophenoxy acetic acid (2,4,5-T) (CAS # 93-765);
2. 2-(2,4,5-Trichlorophenoxy) propanoic acid (Silvex, 2,4,5 TP) (CAS #93-72-1);
3. 2-(2,4,5-Trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4);
4. 0,0-Dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-3);
5. 2,4,5-Trichlorophenol (TCP) (CAS #95-95-4); or
6. Hexachlorophene (HCP) (CAS #70-30-4).

Small Business Exemption

If you are a “small business”, you are exempt from the reporting requirement for Part V.C (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 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 Part V.C only. Even if you are eligible for a small business exemption, you are still required to provide information on other pollutants as required elsewhere in Form 2D.

Part V.D

Report estimates of quantitative data for any of the State of Arizona surface water quality standards applicable to the receiving water which is not covered in Item V, Parts A, B, C, and E of Form 2D if you know or have reason to believe that the pollutant(s) will be discharged from each outfall. Please refer to A.A.C. R18-11-109, Appendix B for the list of Arizona surface waters and their designated uses. A.A.C. R18-11-109, Appendix A lists applicable water quality standards for all designated uses.

Part V.E

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: The discharge of pollutants listed in Table 2D-3 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:

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 which will treat 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-3 does not exempt you from the Section 402 reporting requirements pursuant to 40 CFR Part 122 for 80 pollutants listed on Table 2D-2. For further information on exclusions from Section 311, see 40 CFR Section 117.12(a)(2) and (c).

Item VI. Engineering Report on Wastewater Treatment

Part VI.A

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

Part VI.B

Report the name and location of any existing plant(s) which, to the best of your knowledge, resembles your planned operation with respect to items produced, production processes, wastewater constituents or wastewater treatment. No studies need be conducted to respond to this part. Only available data need be submitted. This information will be used to inform the permit writer of appropriate treatment methods and their associated permit conditions and limits.

Item VII. 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 is optional.

Item VIII. Certification

All permit applications must be signed and certified as provided by 40 CFR Part 122.22(d) incorporated by reference under A.A.C. R18-9-A905(A)(1)(c). A person who signs an application for an AZPDES permit and other information requested by ADEQ shall make the following 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.”*

The signature must be of a qualified person as indicated below and the application can not be signed by a consultant who prepares it.

An application submitted by a municipality, State, Federal or other public agency **must be signed by either a principal executive officer or ranking elected official**. A principal executive officer of a Federal agency includes: (1) The chief executive officer of the agency or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

An application submitted by a corporation **must be signed by a responsible corporate officer**. A responsible corporate officer means:

1. A president, secretary, treasurer or vice president in charge of a principal business function or any other person who performs similar policy or decision making functions; or
2. The manager of manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25million (in second quarter 1980 dollars), if the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

An application submitted by a partnership or sole proprietorship **must be signed by a general partner or the proprietor**, respectively. Federal and state statutes provide for severe penalties for submitting false information on this application form.

Section 309(c)(2) of the CWA provides that, "any person who knowingly makes any false statement, representation or certification in any application . . . shall upon conviction, be punished by a fine of no more than $10,000 or by imprisonment for not more than six months or both."

A.R.S. § 49-262 (C) provides that any person who violates any provision of a rule adopted pursuant to A.R.S. Article 3.1 of Title 49, Chapter 2, Water Quality Control is subject to a civil penalty of up to $25,000 per day per violation.

TABLE 2D-1. CODES FOR TREATMENT UNITS

PHYSICAL TREATMENT PROCESSES

1-A.....Ammonia Stripping
1-B.....Dialysis
1-C.....Diatomaceous Earth Filtration
1-D.....Distillation
1-E.....Electrodialysis
1-F.....Evaporation
1-G.....Flocculation
1-H.....'Flotation
1-I.....'Foam Fractionation
1-J.....'Freezing
1-K.....'Gas-Phase Separation
1-L.....Grinding (Comminutors)
1-M.....Grit Removal
1-N.....Microstraining
1-O.....Mixing
1-P.....Moving Bed Filters
I-Q.....Multimedia Filtration
I-R.....Rapid Sand Filtration
1-S.....Reverse Osmosis (Hyperfiltration)
1-T.....Screening
1-U.....Sedimentation (Settling)
1-V.....Slow Sand Filtration
1-W.....Solvent Extraction
1-X.....Sorption

CHEMICAL TREATMENT PROCESSES

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

BIOLOGICAL TREATMENT PROCESSES

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

OTHER PROCESSES

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

SLUDGE TREATMENT AND DISPOSAL PROCESSES

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

TABLE 2D-2. 80 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
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chloropyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D (2,4-Dichlorophenoxyacetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-Dichloropropoionic acid
Dichlorvos
Diethyl amine
Phenolsulfonate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
TDE (Tetrachlorodiphenyl ethane)
Dinitrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine dodecylbenzenesulfonate
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
Nitrotoluene
Parathion
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Trichlorofon
Triethanoloamine dodecylbenzenesulfonate
Triethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

TABLE 2D-3. HAZARDOUS SUBSTANCES

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

Ethylenediamine
Ethylene dibromide
Ethlyene dichloride
Ethylene diaminetetracetic acid (EDTA)
Ferric ammonium citrate
Ferric ammonium oxalate
Ferric chloride
Ferric fluoride
Ferric nitrate
Ferric sulfate
Ferrous chloride
Ferrous sulfate
Formaldehyde
Formic acid
Fumaric acid
Furfural
Guthion
Heptachlor
Hexachlorocyclopentadiene
Hydrochloric acid
Hyrdofluoric acid
Hydrogen cyanide
Hydrogen sulfide
Isoprene
Isopropanolaminedodecylbenzene-sulfonate
Kelthane
Kepone
Lead acetate
Lead arsenate
Lead chloride
Lead fluoborate
Lead flourite
Lead iodide
Lead nitrate
Lead stearate
Lead sulfate
Lead sulfide
Lead thiocyanate
Lindane
Lithium chromate
Malathion
Maleic acid
Maleic anhydride
Mercaptodimethur
Mercuric cyanide
Mercuric nitrate
Mercuric sulfate
Mercuric thiocyanate
Mercurous nitrate
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethylamine
Monomethylamine
Naled
Naphthalene
Napthenic acid
Nickel ammonium sulfate
Nickel chloride
Nickel hydroxide
TDE (Tetrachlorodiphenyl ethane)
Tetraethyl lead
Tetraethyl pyrophosphate
Thallium sulfate
Toluene
Toxaphene

Nickel nitrate
Nickel sulfate
Nitric acid
Nitrobenzene
Nitrogen dioxide
Nitrophenil
Nitrotoluene
Paraformaldehyde
Parathion
Pentachlorophenol
Phenol
Phosgene
Phosphoric acid
Phosphorus
Phosphorus oxychloride
Phosphorus pentasulfide
Phosphorus trichloride
Polychlorinated biphenyls (PCB)
Potassium arsenate
Potassium arsenite
Potassium bichromate
Potassium cyanide
Potassium hydroxide
Potassium permanganate
Propargite
Propionic acid
Propionic anhydride
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Selenium oxide
Silver nitrate
Sodium
Sodium arsenate
Sodium arsenite
Sodium bichromate
Sodium bifluoride
Sodium bisulfite
Sodium chromate
Sodium cyanide
Sodium dodecylbenzenesulfonate
Sodium fluoride
Sodium hydrosulfide
Sodium hydroxide
Sodium hypochlorite
Sodium methylate
Sodium nitrite
Sodium phosphate (dibasic)
Sodium phosphate (tribasic)
Sodium selenite
Strontium chromate
Strychnine
Styrene
Sulfuric acid
Sulfur monochloride
2,4,5-T acid (2,4,5-Trichlorophenoxy- acetic acid)
2,4,5-T amines (2,4,5-Trichlorophenoxy- acetic acid amines)
2,4,5-T esters (2,4,5-Trichlorophenoxy- acetic acid esters)
2,4,5-T salts (2,4,5-Trichlorophenoxy- acetic acid salts)
2,4,5-TP acid (2,4,5-Trichlorophenoxy-propanoic acid)
2,4,5-TP acid esters (2,4,5-Trichlor-phenoxypropanoic acid esters)

Trichlorofon
Trichloroethylene
Trichlorophenol
Triethanolamine dodecyclbenzenesulfonate
Triethylamine
Trimethylamine

Uranyl acetate
Uranyl nitrate
Vanadium pentoxide
Vanadyl sulfate
Vinyl acetate
Vinylidene chloride
Xylene
Xylenol
Zinc acetate
Zinc ammonium chloride
Zinc borate
Zinc bromide
Zinc carbonate
Zinc chloride
Zinc cyanide
Zinc fluoride
Zinc formate
Zinc hydrosulfite
Zinc nitrate
Zinc phenolsulfonate
Zinc phosphide
Zinc silicofluoride
Zinc sulfate
Zirconium nitrate
Zirconium potassium fluoride
Zirconium sulfate
Zirconium tetrachloride