

INSTRUCTIONS

Form C

This form shall accompany all NJPDES-DSW permit applications and request for authorization (RFA) under a general permit for industrial wastewater (except for stormwater only discharges). Facilities that discharge domestic (municipal) wastewater or only stormwater to surface waters shall instead complete Form A or RF respectively, or complete the RFA form for a stormwater general permit.

Item 1 - Provide the name of the facility as it appears in Item 3 of the NJPDES - 1 form.

Item 2 - Provide the NJPDES No. for renewal or major modification permits. New applicants, leave this item blank.

Item 3A - Attach to this application a facility diagram drawn to a standard scale showing the facility and the location of the discharge point(s) to the receiving waterbody as well as all sites where solid or liquid waste is stored at the facility. The diagram should also depict the facility's intake and discharge structures; residual treatment, storage or disposal facilities; underground injection wells and drinking water wells listed or otherwise known by the applicant.

Item 3B - Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units or systems labeled to correspond to the more detailed descriptions in Item 5 below. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment systems, and outfalls. Show all significant losses of water to products, atmosphere, and discharge. You should use actual measurements whenever available; otherwise use your best estimate. If a water balance cannot be determined, you may provide a description instead which indicates the nature and amount of any sources of water. An example of a line drawing appears in Figure 1 below.

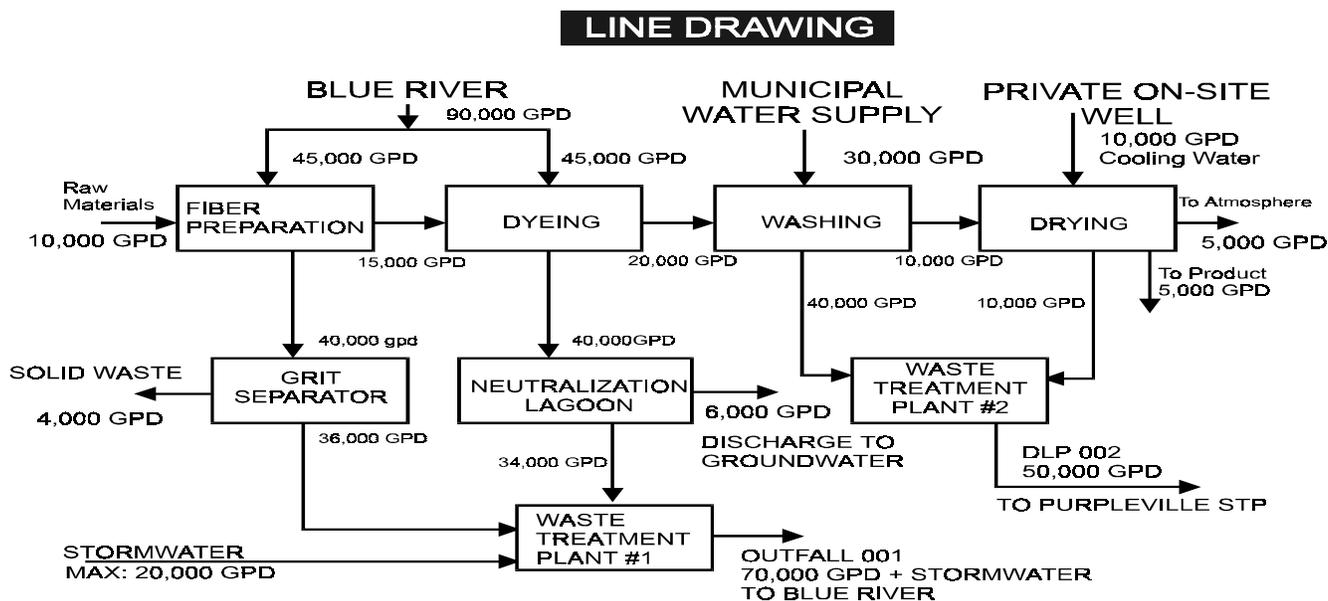


FIGURE 1

Item 3C - Attach a copy of the portion of the U.S. Geological Survey Topographic Map, 7.5 minute Quadrangle Series (provide the quadrangle name on the copy) extending one mile beyond the property boundaries depicting the facility.

Item 4 - For each outfall discharging from your facility, list the latitude and longitude to the nearest second and the name of the receiving water or specify an unnamed tributary to a named receiving water or via a public or private storm drainage system. For new discharges, indicate the proposed start-up date.

Item 5 - For each outfall, provide a description of: (a) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff. Operations may be described in general terms. (b) The average flow contributed by each operation. You

may estimate the flow contributed by each source if no data is available. The average flow of sources composed of stormwater may be estimated. The method of estimation and the basis for the total estimated rainfall must be described. If the discharge is partly due to stormwater, for each outfall, the application must either quantify the contributing drainage area and the runoff coefficient(s) applicable, or provide the other data used to estimate the average flow of stormwater. (c) The treatment received by the wastewater. For each treatment unit, indicate its size, flow rate, and retention time, and describe the ultimate disposal of any solid, hazardous or liquid wastes not discharged. (d) Treatment units should be listed in order and the proper code from Table 1 (page 6 of these instructions) should be obtained for each treatment unit. Insert "XX" into the column if no code corresponds to a treatment unit you list. Continue on additional sheets if necessary.

Item 6 - A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities. A discharge is seasonal if it occurs only during certain parts of the year. Fill in every column for each source of intermittent or seasonal discharges. Base answers on actual data whenever available; otherwise provide a best estimate. Report the highest daily value for flow rate and total volume in the "Daily Maximum" column. Report the average of all daily values measured during days when discharge occurred within the last year in the "Monthly Average" column.

Item 7A - All effluent guidelines promulgated by USEPA appear in the Federal Register and are published annually in 40 CFR Subchapter N. A guideline applies to your discharge if that discharge contains operations contributing process wastewater in any subcategory covered under Section 304, a new source performance standard promulgated under Section 306, or a toxics standard promulgated under Section 307 of the Federal Act. If you are unsure whether you are covered by a promulgated effluent guideline, contact the Department.

Item 7B - This item must be completed only if you checked "yes" to Item 7A. An effluent guideline is expressed in terms of production (or other measure of operation) if the limitations are expressed as mass of pollutant per operational parameter; for example, "pounds of BOD per 1,000 barrels of feedstock," or "pounds of TSS per megawatt hour of electrical energy consumed by smelting furnace." An example of a guideline not expressed in terms of a measure of operation is one which limits the concentration of pollutants.

Item 7C - This item must be completed only if you checked "yes" to Item 7B. The production information requested here is necessary to apply effluent guidelines to your facility and cannot be claimed as confidential. However, you do not have to indicate how the reported information was calculated. Report quantities in the units of measurement used in the applicable effluent guideline. The production figures provided must be based on a reasonable estimate or measure of the applicant's actual maximum and average production. For new sources or new discharges the applicant shall provide estimates expressed in terms of production. To obtain alternate limits under 40 CFR 122.45(b)(2)(ii), you must define your maximum production capability and demonstrate to the Department that your actual production is substantially below maximum production capability and that there is a reasonable potential for an increase above actual production during the duration of the permit.

Item 8 - Identify any administrative orders (AO), administrative consent orders (ACO), judicial consent orders (JCO), notice of violations (NOV), complaints filed (COMP), or other (OT) corrective or enforcement action required by any governmental agency (i.e., NJDEP, USEPA, etc.) concerning water pollution issues at this facility within the last 5 years or any other open action still in effect. Provide a summary of these action(s).

Item 9 - List any improvements required to be made to your facility. Complete all parts of the table or attach a copy of any previous submission you have made to USEPA or the Department containing the same information.

Item 10 - This item requires you to collect and report data on the pollutants discharged from each of your outfalls. Complete one table for each outfall. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to all parts of Item 10. The Chemical Abstracts Service (CAS) numbers are provided where available.

SAMPLING. The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater. You may contact the Office of Quality

Assurance at (609) 292-3950 for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative of your normal operation to the extent feasible with all processes which contribute wastewater in normal operation and with your treatment system operating properly with no system upsets. Samples should be collected from the center of a flow channel, where turbulence is maximum, at a site specified in your present permit or at any site adequate for the collection of a representative sample. Grab and composite samples are defined as follows:

GRAB SAMPLE - An individual sample collected over a time period of less than 15 minutes.

COMPOSITE SAMPLE - A sample composed of several discrete samples combined in a known proportion. The sample can be composed of several discrete samples collected at equal time intervals, or proportionally to the flow rate of the discharge.

ANALYSIS. A New Jersey certified laboratory must perform the analysis. You must use test methods promulgated in 40 CFR Part 136 or N.J.A.C. 7:18 and ensure that the test is sensitive for the Department to compare with surface water quality standards; however if none have been promulgated for a particular pollutant, you may propose to use any suitable method for measuring the level of the pollutant in your discharge. You must submit a description of the proposed methodology to the Department for approval for the specific pollutant prior to initiation of sampling. Your description shall include the sample holding times, preservation techniques and the quality control measures used. Where no certification program in accordance with N.J.A.C. 7:18 is available for a specific parameter, the permittee shall utilize a laboratory certified for a similar parameter or analytical procedure.

If you have two or more substantially identical effluents, the Department will allow you to analyze and report quantitative data from testing only one outfall and indicate that the result applies to the other substantially identical outfall(s).

You are not required to report data under the 'Intake' column unless you wish to demonstrate your eligibility for a 'net' effluent limitation for one or more pollutants in accordance with N.J.A.C. 7:14A-13.4(k). If your influent is treated before use, test the water after it is treated and complete the appropriate intake columns.

For new sources or new discharges, when you are unable to provide sampling data, you must include estimates for the new sources or new discharges of pollutants or parameters listed in Item 10A as well as fecal coliform (if believed present or if sanitary waste is or will be discharged), total residual chlorine (if chlorine is used in the treatment process) and Oil and Grease listed in Item 10B. You shall also report estimated daily maximum and monthly average, and the source of information for each pollutant in Item 10B and 10C you know or have reason to believe to be present or if the application is limited by an effluent limitations guidelines (ELG) or new source performance standard (NSPS) either directly or indirectly through limitations or an indicator pollutant. For estimated data, write 'EST.' in the # of samples column.

REPORTING. All levels must be reported as concentration and loading or as indicated. All levels must be reported with units. Use the following abbreviations in the columns labeled Units.

CONCENTRATION		LOADING			
ppm	parts per million	Lbs	pounds	col	colonies
mg/L	milligrams per liter	Ton	tons (English)	nCi	nanocuries
ppb	parts per billion	Mg	milligrams	uCi	microcuries
ug/L	micrograms per liter	G	grams		
col/100mL	colonies per 100 milliliters	Kg	kilograms		
pCi/L	picrouries per liter	T	tons (Metric)		

All reporting 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) The Department has determined that in establishing case-by-case limitations it is necessary to express the limitations of the metal in dissolved, valent, or total form to carry out the provisions of the Federal CWA.

If you measured only one daily value, insert "1" into the Number of Samples Columns. The Department may require you to conduct additional analyses to further characterize your discharges.

Unless otherwise directed by the Department, new dischargers shall schedule a pre-application meeting to determine the need for further technical requirements.

Item 10A - Part A requires you to report at least one analysis per outfall for each parameter listed, including outfalls containing only non-contact cooling water. However, at your request the Department may waive the requirements to test for one or more of these parameters upon a determination that testing for the parameter(s) is not appropriate for your effluent. Use composite samples for all parameters in this Part, except use grab samples for pH and temperature.

Item 10B - For each outfall you must indicate (by marking "believed present" or "believed absent" for each pollutant) if you know or have reason to believe that any of the pollutants listed in this section are discharged from your facility. You must report quantitative data for each pollutant covered by an ELG or NSPS either directly or indirectly but expressly through limitation on an indicator. For every pollutant discharged which is not limited in an ELG or NSPS, you shall either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged. Use composite samples for all pollutants in this Part, except use grab samples for total residual chlorine, Oil and Grease (O&G) or Petroleum Hydrocarbons (PHC), and fecal coliform. Regarding PHC and O&G, you must analyze for "O&G" (rather than for "PHC") unless the discharge has no nonpetroleum-based oil and grease, in which case you can analyze for either "O&G" or "PHC" (check the appropriate box as to which parameter was analyzed).

Item 10C - For each outfall you must indicate (by marking "believed present" or "believed absent" for each pollutant) if you know or have reason to believe that any of the pollutants listed in this section are discharged from your facility, and provide at least one analysis for each pollutant that is believed to be present in a concentration of 10 ug/L or greater. For acrolein, acrylonitrile, 2,4-dinitrophenol and 4,6-dinitro-o-cresol, where any of these pollutants are expected to be discharged in concentrations of 100 ug/L or greater, you shall submit quantitative data. For pollutants expected to be less than 10 ug/L (for acrolein, acrylonitrile, 2,4-dinitrophenol and 4,6-dinitro-o-cresol, where any of these pollutants are expected to be discharged in concentrations of 100 ug/L) you must submit quantitative data or briefly describe the reasons the pollutants are expected to be discharged. Table 2 lists the 34 "primary" industry categories. If any of your processes which contribute wastewater fall into one of these categories, you must mark an 'X' in the testing required column and test for 1) all of the toxic metals, cyanide, and total phenols (the first 15 parameters in Part C) and 2) the organic toxic pollutants contained in Table 2 as applicable to your category, unless you qualify as a small business (see below). Use composite samples for all pollutants in this Part, except use grab samples for total phenols, volatile compounds and cyanide.

You are required to mark "Testing Required" for dioxin if you use or manufacture one of the following compounds:

- | | |
|--|----------------------------------|
| a) 2,4,5-trichlorophenoxy acetic acid, (2,4,5-T) | b) 2,4,5,-trichlorophenol, (TCP) |
| c) 2-(2,4,5-trichlorophenoxy) propanoic acid, (Silvex, 2,4,5-TP) | d) hexachlorophene, (HCP) |
| e) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate, (Erbon) | |
| f) O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate, (Ronnel) | |

If you marked "Testing Required" or "Believed Present", you must perform a screening analysis for dioxins, using gas chromatography with an electron capture detector.

SMALL BUSINESS QUANTATIVE DATA REQUIREMENT EXEMPTION. If you qualify as a small business, you are exempt from the requirements for the pollutants listed in Item 10C with the exception of all of the toxic metals, cyanide, and total phenols (the first 15 pollutants in Item 10C). An applicant may qualify if gross total annual sales for an average of the most recent three years is less than \$100,000 per year (in second quarter 1980 dollars).

If you want this exemption and feel you qualify for it, check the corresponding box in Item 13C and submit sales data for those years to the Department. The sales data must be for the facility which is the source of the discharge. The data should not be limited to sales for the process or processes which contribute to the discharge unless those are the only processes at the facility. For sales data, in situations involving intra-corporate transfers of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980 = 100). This index is available in the National Income and Product Account of the United States (Department of Commerce Bureau of Economic Analysis).

Item 10D - List each pollutant in Table 3 (page 8) and each biocide(s) that you know or have reason to believe are discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data or attach the material safety datasheet(s) (MSDS) for the biocides used. For new sources and new dischargers, no quantitative estimates are required at the time of application submittal, unless they are already available. However, no later than two years after commencement of discharge from a proposed facility, you shall submit the quantitative data for a permit for a new source or new discharge.

Item 11 - List each toxic pollutant in Item 10C or 10D above which you currently use or manufacture as an intermediate or final product or byproduct. The Department will waive or modify this requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Department has adequate information to issue the permit.

You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item 12 - Every applicant for an individual NJPDES permit shall include a minimum of at least one acute and one chronic whole effluent toxicity test of the effluent. The test must be conducted in accordance with the laboratory certification regulations for biological testing, N.J.A.C. 7:18 and 40 CFR Part 136.

Item 13 - All analyses must be performed by a laboratory certified under N.J.A.C. 7:18. Provide the name, telephone number, certification number, and the pollutant(s) or pollutant category(ies) analyzed by each certified laboratory.

Item 14 - This form must be certified by the applicant(s) for the NJPDES permit. On the top line of this item, provide the name of the applicant/operating entity as it appears in Item 1 of the NJPDES - 1 form. The signature must be an original signature. The Water Pollution Control Act provides for severe penalties for submitting false information on this application form.

BE ON NOTICE THAT any person who knowingly makes any false statement, representation, or certification in any application shall upon conviction be punished by a fine of not less than \$5000.00 nor more than \$75,000.00 or by imprisonment or both (N.J.S.A. 58:10A-10f 2&3).

WHO MUST SIGN?

A Responsible Official is defined in N.J.A.C. 7:14A – 4.9 as follows:

For a corporation: 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 the manager of one or more manufacturing, production, or operating facilities, provided:

(1) The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of recommending major capital investment, initiating and directing comprehensive measures to assure long term compliance with

environmental laws and regulations, and ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; or

(2) The authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: A general partner or the proprietor.

For a government agency: A ranking elected official; or the chief executive officer of the agency; or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator);

A duly authorized representative as defined in N.J.A.C. 7:14A – 4.9(b).

TABLE 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
1-Q	Multimedia Filtration
1-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
1-Y	Equalization
4-H	Grease Removal
6-F	Oil-Water Separator

Chemical Treatment Processes

2-A	Carbon Adsorption
2-B	Chemical Oxidation
2-C	Chemical Precipitation
2-D	Coagulation/Flocculation
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 (pH adjustment)
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
3-I	Rotating Biological Contactor

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
5-X	Waste Disposal Contractor

TABLE 2**Testing Requirements for Organic Toxic Pollutants by Industrial Category**

Industrial Category	Volatile	Acid	Base/Neutral	Pesticide
Adhesives and Sealants	(*)	(*)	(*)	---
Aluminum Forming	(*)	(*)	(*)	---
Auto and Other Laundries	(*)	(*)	(*)	(*)
Battery Manufacturing	(*)	---	(*)	---
Coal Mining	(*)	(*)	(*)	(*)
Coil Coating	(*)	(*)	(*)	---
Copper Forming	(*)	(*)	(*)	---
Electric & Electronic Components	(*)	(*)	(*)	(*)
Electroplating	(*)	(*)	(*)	---
Explosives Manufacturing	---	(*)	(*)	---
Foundries	(*)	(*)	(*)	---
Gum & Wood Chem. (all subparts except D and F)	(*)	(*)	---	---
Subpart D	(*)	(*)	(*)	---
Subpart F	(*)	(*)	(*)	---
Inorganic Chemicals Manufacturing	(*)	(*)	(*)	---
Iron & Steel Manufacturing	(*)	(*)	(*)	---
Leather Tanning & Finishing	(*)	(*)	(*)	---
Mechanical Products Manufacturing	(*)	(*)	(*)	---
Nonferrous Metals Manufacturing	(*)	(*)	(*)	(*)
Ore Mining (base and precious metals/Subpart B)	---	(*)	---	---
Organic Chemicals Manufacturing	(*)	(*)	(*)	(*)
Paint and Ink Formulation	(*)	(*)	(*)	---
Pesticides	(*)	(*)	(*)	(*)
Petroleum Refining	(*)	---	---	---
Pharmaceutical Preparation	(*)	(*)	(*)	---
Photographic Equipment & Supplies	(*)	(*)	(*)	---
Plastic & Synthetic Material Manufacturing	(*)	(*)	(*)	(*)
Plastic Processing	(*)	---	---	---
Porcelain Enameling	---	---	---	---
Printing & Publishing	(*)	(*)	(*)	(*)
Pulp & Paper Mills				
Subpart A	(**)	(*)	(**)	(*)
Subparts B, C and D	(**)	(*)	(**)	(**)
Subpart E	(*)	(*)	(**)	(*)
Subparts F, G, H and I	(*)	(*)	(**)	(**)
Subpart J	(*)	(*)	(*)	(**)
Subparts K, L, M, N, O and P	(*)	(*)	(**)	(**)
Subpart Q	(*)	(*)	(**)	(*)
Subpart R	(**)	(*)	(**)	(**)
Subpart S and T	(*)	(*)	(**)	(*)
Subpart U	(*)	(*)	(*)	(**)
Rubber Processing	(*)	(*)	(*)	---
Soap & Detergent Manufacturing	(*)	(*)	(*)	---
Steam Electric Power Plants	(*)	(*)	---	---
Textile Mills	(*)	(*)	(*)	---
Timber Products Processing	(*)	(*)	(*)	(*)

* Testing is required, ** Testing is required only if believed present in the discharge, --- Testing is not required

Table 3**Toxic Pollutant and Hazardous Substances Required to be Identified if Expected to be Present****TOXIC POLLUTANT**

Asbestos

HAZARDOUS SUBSTANCES

Acetaldehyde	Isopropanolamine Dodecylbenzenesulfonate
Allyl Alcohol	Kelthane
Allyl Chloride	Kepone
Amyl Acetate	Malathion
Aniline	Mercaptodimethur
Benzonitrile	Methoxychlor
Benzyl Chloride	Methyl mercaptan
Butyl Acetate	Methyl Methacrylate
Butylamine	Methyl Parathion
Captan	Mevinphos
Carbaryl	Mexacarbate
Carbofuran	Monoethyl Amine
Carbon Disulfide	Monomethyl Amine
Chlorpyrifos	Naled
Coumaphos	Napthenic Acid
Cresol	Nitrotoluene
Crotonaldehyde	Parathion
Cyclohexane	Phenolsulfanate
2,4-D (2,4-Dichlorophenoxy Acetic Acid)	Phosgene
Diazinon	Propargite
Dicamba	Propylene Oxide
Dichlobenil	Pyrethrins
Dichlone	Quinoline
2,2-Dichloropropionic Acid	Resorcinol
Dichlorvos	Strontium
Diethyl amine	Strychnine
Dimethyl amine	Styrene
Dinitrobenzene	2,4,5-T (2,4,5-Trichlorophenoxy Acetic Acid)
Diquat	TDE (Tetrachlorodiphenylethane)
Disulfoton	2,4,5-TP (2-(2,4,5-Trichlorophenoxy) propanoic acid)
Diuron	Trichlorofan
Epichlorohydrin	Triethanolamine dodecylbenzenesulfonate
Ethion	Triethylamine
Ethylene diamine	Trimethylamine
Ethylene Dibromide	Uranium
Formaldehyde	Vanadium
Furfural	Vinyl Acetate
Guthion	Xylene
Isoprene	Xylenol
	Zirconium