



Knoxville Utilities Board

INDUSTRIAL WASTE SURVEY AND PERMIT APPLICATION FORM

MAILING ADDRESS

Please send completed application and all supporting attachments to:

Industrial Pretreatment Program
Attn. Pretreatment Coordinator
Knoxville Utilities Board (JK-16)
PO Box 59017
Knoxville, Tennessee 37950

Note: The information contained in this permit application will be used as the basis for an Industrial Wastewater Discharge Permit or a periodic Industrial Waste Survey of dischargers in the KUB system. It is very important that this application be as accurate as possible. Any individual who knowingly falsifies any information requested on this application may be subject to fines and penalties as outlined in KUB's Rules and Regulations for the Wastewater Division.

WASTEWATER SURVEY FOR NONRESIDENTIAL ESTABLISHMENTS: APPLICATION FOR WASTEWATER DISCHARGE PERMIT

SECTION A - GENERAL INFORMATION

A.1. Company name, mailing address, telephone number, and KUB account number:

Zip Code _____ Telephone No. () _____ KUB Account No. _____

A.2. Address of production or manufacturing facility. (If different than above.)

Zip Code _____ Telephone No. () _____

A.3. Name, title, and telephone number of person authorized to represent this firm in official dealings with KUB. (Individual must be locally based)

A.4. Alternate person to contact concerning information provided herein

Name _____ Title _____ Tel. No. _____

A.5. Identify the type of business conducted (auto repair, machine shop, electroplating, warehousing, painting, printing, meat packing, food processing, etc.)

Note to Signing Official: In accordance with *Title 40 of the Code of Federal Regulations Part 403 Section 403.14*, information and data provided in this questionnaire which identifies the nature and frequency of discharge shall be available to the public without restriction. Requests for confidential treatment of other information shall be governed by procedures specified in *40 CFR Part 2*. Should a discharge permit be required for your facility, the information in this questionnaire will be used to issue the permit.

This is to be signed by an authorized official of your firm after adequate completion of this form and review of the information by the signing official.

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 upon my inquiry of the person or 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/or imprisonment.

Date

Signature of Official

Print Name

A.6. Provide a detailed description of the manufacturing processes, production, or service activities provided on the premise, **specifically those processes which involve process wastewater or hazardous materials**. Use additional sheets if necessary.

A.7. List all products manufactured or services provided by your facility and the corresponding North American Industry Classification System (NAICS) number(s):

PRODUCT OR SERVICE	NAICS NUMBER
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
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A.8. List environmental control permits issued by the local, state or federal authorities that are held by facility (air, stormwater, etc.):

SECTION B - FACILITY OPERATION CHARACTERISTICS

B.1. Hours of operation: _____am to _____pm Days per week _____

Number of employee shifts worked per 24-hour day is _____.

Average number of employees per shift is _____.

Hours of each shift: 1st _____am/pm 2nd _____am/pm
3rd _____am/pm.

Note: Information in this section must be completed for each product line.

B.2. Principal product(s) produced

B.3. Specific chemicals and compounds (noted by name and include MSDSs) used, generated, or disposed of at this facility. (Acids, caustics, fats, lubricants, solutions, soaps or cleaning agents, etc.). Additional pages may be included if necessary.

B.4. Solvents used:

B.5. Describe storage practices for the chemicals and solvents listed above:

B.6. Describe any routine or intermittent (regardless of infrequency) cleaning of equipment and facility. Include volumes of water used, type of cleaning chemicals used, and how the cleaning water is discharged. Include a list of any automatically metered cleaning chemicals. Additional pages may be included if necessary.

B.7. Is production subject to seasonal variation or are there any peak periods associated with production?

____ Yes ____ No. If yes, briefly describe seasonal production cycle.

B.8. Are any process changes or expansions planned during the next three years? If yes, explain.

____ Yes ____ No Explanation _____

B.9. Is a Spill Prevention Control and Countermeasure (SPCC) Plan prepared for this facility?

____ Yes ____ No If yes, please attach current version to this form.

Does this facility have a Solvent Management Plan or Toxic Organic Management Plan?

____ Yes ____ No If yes, please attach current version to this form.

SECTION C - WASTEWATER INFORMATION

C.1. Is this facility subject to any of the below Federal Categorical Pretreatment Standards, as per 40 CFR Part 403? Refer to specific 40 CFR parts to determine inclusion. If you need additional information please contact the pretreatment coordinator.

A. Industrial Categories **with** Categorical Pretreatment Limits

√	Category	40 CFR Part
	Aluminum Forming	467
	Battery Manufacturing	461
	Carbon Black Manufacturing	458
	Centralized Waste Treatment	437
	Coil Coating	465
	Commercial Hazardous Waste Combustors	444
	Feedlots	412
	Copper Forming	468
	Electrical and Electronic Components	469
	Electroplating	413
	Fertilizer Manufacturing	418
	Glass Manufacturing	426
	Grain Mills Manufacturing	406
	Ink Formulating	447
	Inorganic Chemicals	415
	Iron & Steel Manufacturing	420
	Leather Tanning and Finishing	425
	Metal Finishing	433
	Metal Molding and Casting (Foundries)	464
	Metal Products and Machinery	438
	Nonferrous Metals Forming and Metal Powders	471
	Nonferrous Metals Manufacturing	421
	Oil and Gas Extraction	435
	Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF)	414
	Paint Formulating	446
	Paving and Roofing Materials (Tars and Asphalt)	443
	Pesticide Chemicals	455
	Petroleum Refining	419
	Pharmaceutical Manufacturing	439
	Porcelain Enameling	466
	Pulp, Paper and Paperboard	430
	Rubber Manufacturing	428
	Soap and Detergent Manufacturing	417
	Steam Electric Power Generation	423
	Timber Products Processing	429
	Transportation Equipment Cleaning	442

B. Industrial Categories **without** Categorical Pretreatment Limits

√	Category	40 CFR Part
	Airport Deicing (Pending)	449
	Asbestos Manufacturing	427
	Canned and Preserved Fruits and Vegetables Processing	407
	Canned and Preserved Seafood Processing	408
	Cement Manufacturing	411
	Chlorine and Chlorinated Hydrocarbon Manufacturing (Pending)	
	Coal Mining	434
	Concentrated Aquatic Animal Production (Aquaculture)	451
	Construction and Development (Pending)	450
	Dairy Products Processing	405
	Dental Amalgam (Pending)	
	Drinking Water Treatment (Pending)	
	Explosives Manufacturing	457
	Ferroalloy Manufacturing	424
	Gum and Wood Chemicals	454
	Hospitals	460
	Landfills	445
	Meat Products	432
	Mineral Mining and Processing	436
	Ore Mining and Dressing (Hard Rock Mining)	440
	Phosphate Manufacturing	422
	Photographic	459
	Plastic Molding and Forming	463
	Sugar Processing	409
	Textile Mills	410

C. Other Business Activity – Not subject to Federal Categorical Pretreatment Standards

√	Business Type
	Adhesives
	Automatic Laundries
	Beverage Bottler
	Chemical Compounding
	Food/Edible Products Processor
	Foundries
	Grease Processing or Dewatering
	Industrial or Commercial Laundries
	Manufacturing – Non-Categorical
	Mechanical Products
	Printing and Publishing
	Shipping Container Printing or Manufacturing

C.2. Pretreatment devices or processes used for treating wastewater or sludge (check as many as appropriate):

- Air Stripper
- Centrifuge
- Chemical Precipitation
- Chlorination
- Clarification
- Cyanide Destruction
- Cyclone (Sediment Removal)
- Dissolved Air Flotation (DAF)
- Equalization of flow
- Evaporation
- Filter Press or other dewatering process
- Filtration (using media)
- Flow Equalization
- Garbage Grinder
- Grease or oil separation (specify) _____
- Grease Removal (specify exterior
interceptor or internal trap) _____
- Grit Removal
- Ion Exchange
- Neutralization, pH correction
- Ozonation
- Polymer Addition
- Reverse Osmosis
- Screening
- Sedimentation
- Septic tank
- Solvent Separation
- Spill Protection
- Sump
- Biological Treatment (specify) _____
- Rainwater Diversion or Storage (specify) _____
- Other chemical treatment (specify) _____
- Other physical treatment (specify) _____
- Other (specify) _____
- No pretreatment provided

C.3. Describe any process control testing that is used to monitor the pretreatment equipment and processes.

C.4. Describe any additional pretreatment facilities and/or processes under consideration. Include a specific time schedule for completion.

C.5. If you use or dispose of any of the items on the following two pages, mark as follows:

(U) Item is used at this location

(DT) Disposed of, after treatment, to the sanitary sewer system

(DW) Disposed of, without treatment, to the sanitary sewer system

(DO) Disposed of off site after being used and/or generated, such as sludge or liquid

(TU) Item is totally used in production, therefore no waste product is left

(VU) Item is vaporized in use, and therefore no waste product is left

*An item may have several different markings depending on the use, treatment, and disposal of each by your facility.

PRIORITY POLLUTANTS

Volatile Compounds

Acrolein
Benzene
Carbon Tetrachloride (Tetrachloromethane)
Chlorodibromomethane
2-Chloroethyl Vinyl Ether
Dichlorobromomethane
1,2-Dichloroethane
1,2-Dichloropropane
Ethylbenzene
Methyl Chloride (Dichloromethane)
1,1,2,2-Tetrachloroethane
Toluene
1,1,1-Trichloroethane
Trichloroethylene

Vinyl Chloride (Chloroethylene)
Acrylonitrile
Bromoform (Tribromomethane)
Chlorobenzene
Chloroethane
Chloroform
1,1-Dichloroethane
1,1-Dichloroethylene
1,3-Dichloropropene (1,2-Dichloropropylene)
Methyl Bromide (Bromomethane)
Methylene Chloride (Dichloromethane)
Tetrachloroethylene
1,2-Trans-Dichloroethylene
1,1,2-Trichloroethane

Acid Compounds

2-Chlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
4-Nitrophenol
Pentachlorophenol
2,4,6-Trichlorophenol

2,4-Dichlorophenol
4,6-Dinitro-O-Cresol
2-Nitrophenol
Parachloro-Meta-Cresol
Phenol

Base/Neutral Compounds

Acenaphthene
Anthracene
1,2-Benzanthracene (Benzo(A) Anthracene)
3,4-Benzofluoranthene (Benzo(B) Fluoranthene)
Benzo(B) Fluoranthene (11,12-Benzofluorathene)
Bis(2-Chloroethyl) Ether
Bis(2-Ethylhexyl) Phthalate

Acenaphthylene
Benzidine
Benzo(A) Pyrene (3,4-Benzo-pyrene)
1,12-Benzoperylene (Benzo(GHI) Perylene)
Bis(2-Chloroethoxy) Methane
Bis(2-Chloroisopropyl) Ether
4-Bromophenyl Phenyl Ether

Butyl Benzyl Phthalate
1,2-Dichlorobenzene
1,2,5,6-Bibenzanthracene (Dibenzo(A,H) Anthracene)
1,3-Dichlorobenzene
3,3-Dichlorobenzidine
Dimethyl Phthalate
2,4-Dinitrotoluene
Di-N-Octyl Phthalate
Fluoranthene
Fluorene
Hexachlorobutadiene
Hexachloroethane
Isophorone
Nitrobenzene
1,2,4-Trichlorobenzene
1,2-Diphenylhydrazine (as Azobenzene)

2-Chloronaphthalene
Chrysene
4-Chlorophenyl Phenyl Ether
1,4-Dichlorobenzene
Diethyl Phthalate
Di-N-Butyl Phthalate
2,6-Dinitrotoluene
Phenanthrene
Hexachlorobenzene
Hexachlorocyclopentadiene
Indeno(1,2,3-CD) Pyrene (2,3- O-Phenylene pyrene)
Naphthalene
N-Nitrosodimethylamine
N-Nitrosodiphenylamine
Pyrene
N-Nitrosodi-N-Propylamine

Pesticides and PCBs

Aldrin
Alpha-BHC
Beta-BHC
4,4-DDT
4,4-DDD (p,p-TDE)
Alpha-Endosulfan
Endosulfan Sulfate
Endrin Aldehyde
PCB-1242 (Arochlor 1242)
PCB-1254 (Arochlor 1254)
PCB-1221 (Arochlor 1221)
PCB-1016 (Arochlor 1016)
Heptachlor

Gamma-BHC (lindane)
Delta-BHC (PCB- Polychlorinated Biphenyls)
Chlordane (Technical mixture & metabolites)
4,4-DDE (p,p-DDX)
Dieldrin
Beta-Endosulfan
Endrin
Toxaphene
PCB-1232 (Arochlor 1232)
PCB-1260 (Arochlor 1260)
PCB-1248 (Arochlor 1248)
Heptachlor Epoxide (BHC- Hexachlorocyclohexane)

Metals and Cyanide

Antimony
Beryllium
Chromium
Lead
Nickel
Silver
Zinc

Arsenic
Cadmium
Copper
Mercury
Selenium
Thallium
Cyanide, Total

Miscellaneous

2,3,7,8-Tetrachlorodibenzo-P-Dioxin (TCDD)
Asbestos

SECTION D – WATER USAGE AND DISCHARGE INFORMATION

D.1. List **intake water** sources and volumes

<u>Source</u>	<u>Volume (gpd)</u>	<u>Circle One</u>
KUB Water System	_____	Estimated / Measured
Private Well	_____	Estimated / Measured
Surface Water	_____	Estimated / Measured
Other (specify)	_____	Estimated / Measured

D.2. List the average volume of wastewater **discharged**

<u>Source</u>	<u>Volume (gpd)</u>	<u>Circle One</u>
KUB Sanitary Sewer	_____	Estimated / Measured
Natural Outlet (NPDES)	_____	Estimated / Measured
Waste Hauler (to offsite)	_____	Estimated / Measured
Evaporation	_____	Estimated / Measured
Groundwater	_____	Estimated / Measured
Contained in Product	_____	Estimated / Measured
Other (specify)	_____	Estimated / Measured

D.3. Break down the **discharges** to the sanitary sewer system into the following categories

<u>Source*</u>	<u>Volume (gpd)</u>	<u>Circle One</u>
Process Wastestream #1	_____	Estimated / Measured
Process Wastestream #2	_____	Estimated / Measured
Process Wastestream #3	_____	Estimated / Measured
Process Wastestream #4	_____	Estimated / Measured
Contact Cooling Water	_____	Estimated / Measured
Non-Contact Cooling Water	_____	Estimated / Measured
Boiler Blowdown	_____	Estimated / Measured
Domestic Wastewater (restrooms, showers, sinks, etc.)	_____	Estimated / Measured
Any onsite food preparation?	_____ Yes _____ No	
Grease Trap Waste	_____	Estimated / Measured
Any food grinder waste to sewer?	_____ Yes _____ No	
Laundry Wastewater	_____	Estimated / Measured
Equipment / Facility Washdown	_____	Estimated / Measured
Air Pollution Control Unit	_____	Estimated / Measured
Stormwater Runoff	_____	Estimated / Measured
Laboratory Waste	_____	Estimated / Measured
Medical Waste	_____	Lbs/day (Explain process below)
Radioactive Waste	_____	Lbs/day (Explain process below)
Other (describe)	_____	Estimated / Measured

*Contact cooling water is water that comes into contact with process materials, thereby becoming contaminated. Non-contact cooling water does not contact with process materials. Domestic wastewater only includes water used for hygiene purposes. Equipment/Facility washdown includes water specifically used for cleaning the facility. If domestic flow is not metered, give an estimate based on 20 gallons per day per employee.

Explain:

D.4. Is any water recycled? ____ Yes ____ No If yes, please explain and give estimated volume.

D.5. Is the discharge to the sewer: ____ Continuous ____ Batch ____ Both

If both: ____ % batch ____ % continuous

Average number of batches per 24-hour day _____

What is the average volume (gallons) of each batch _____

What is the maximum volume (gallons) of each batch _____

D.6. **IMPORTANT:** Provide a schematic drawing of the plant showing production lines, process flow, floor drains, sanitary lines, cooling streams, etc., and their point of entry into the sanitary sewer system. Also provide a schematic of wastewater flow through the pretreatment system. Indicate on the schematic the location of the pretreatment system and where you collect effluent samples. If application is for a new facility, provide preliminary drawings for process, proposed pretreatment equipment, and sampling location.

D.7. Do you have automatic sampling equipment or continuous wastewater flow metering equipment currently in use or included in future plans?

Current:	Flow Metering	_____	Yes	_____	No
	Sampling Equipment	_____	Yes	_____	No
Planned:	Flow Metering	_____	Yes	_____	No
	Sampling Equipment	_____	Yes	_____	No

SECTION E - OTHER WASTES

E.1. Do you dispose of any categories of chemicals, solvents, sludges, hazardous materials, or other wastes as a result of your process(es)? _____ Yes _____ No

E.2. If yes, specify waste type, volume (as gallons or pounds per year), and composition (as solid, liquid, or gas).

√	Waste Type	Volume (gallons or lbs per year)	Composition (solid, liquid, or gas)
	Acids and Alkalies		
	Heavy metal sludges		
	Inks / Dyes		
	Oil and/or Grease		
	Organic compounds		
	Paints		
	Pesticides		
	Plating wastes		
	Pretreatment sludges		
	Solvents / Thinners		
	Other hazardous waste (specify)		

E.3. For the above checked wastes, does your company store or dispose of the material? If yes, indicate method of storage or disposal for each waste type.

Onsite storage _____
 Offsite storage _____
 Onsite disposal _____
 Offsite disposal _____

E. 4. If a waste hauler is used to haul away sludges/residuals, provide the name of the company and the ultimate disposal site.

E.5. Do you retain copies of manifests for wastes hauled offsite? _____ Yes _____ No

SECTION F – WASTEWATER CHARACTERISTICS – NEW PERMITTEES ONLY

F.1. Attach any sampling data pertaining to the facility discharge to the sanitary sewer system. Explain where and when the sampling was accomplished, what type of sample was taken (i.e., grab, composite), and how many samples were analyzed.

F.2. A full scan of priority pollutants and any other acids, oils, caustics, fats, grease, or other chemical not listed in Section C that is believed to be present will be required for new discharge permits unless exempted by KUB. Samples must be collected and analyzed in accordance with 40 CFR Part 136.

F.3. Describe the exact procedure used to collect the sample:
