CITY OF CAYCE NON-DOMESTIC WASTE SURVEY

QUESTIONNAIRE



City of Cayce 1800 Twelfth Street P. O. Box 2004 Cayce-West Columbia, South Carolina 29171 (803) 796-9020

NON-DOMESTIC WASTEWATER CONTRIBUTION PERMIT APPLICATION

CITY OF CAYCE, SOUTH CAROINA

The undersigned being the ______ (Owner, Leasee, Tenant, Etc.) of property located at

does hereby request a Wastewater Discharge Permit. The Permittee is engaged in _____ business at the said location.

The exact Name of the Permittee (Industry) that should appear on the Wastewater Discharge Permit is:

The mailing address is:

The following documents area required prior to issuing a Wastewater Discharge Permit:

- A plan to the property showing accurately all sewers and 1. drains.
- Plan and specifications covering the work proposed to be 2. performed under this permit.
- 3. A complete schedule of all process waters and industrial wastes produced or expected to be produced at said property, including a description of the character of each waste, the daily volume and maximum rates of discharge, representative analyses, and compliance with any applicable Pretreatment Standard or Requirements. "I understand that it is my responsibility to operate and maintain the pretreatment facility, and to meet the Wastewater Discharge Limits that will be issued in the Wastewater Discharge Permit by the City of Cayce. I also understand that I must obtain a Permit to Construct from SCDHEC prior to the construction of pretreatment facilities and a Permit to Operate from SCDHEC and the City of Cayce prior to the startup of pretreatment facilities, if applicable."

"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 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, including the possibility of fine and imprisonment for knowing violations."

APPENDIX B

NON-DOMESTIC WASTE SURVEY QUESTIONNAIRE

SECTION A - GENERAL INFORMATION

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

Zip Code_____Telephone No. ()

A.2 Address of production or manufacturing facility. (If same as above, check _____.)

Zip Code_____ Telephone No. ()

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 CAR 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 <u>after</u> adequate completion of this form and review of the information by the signing official.

I have personally examined and am familiar with the information submitted in this document and attachments. Based upon my inquiry of those individuals immediately responsible for obtaining the information reported herein, I believe that the submitted information is 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)

- A.3 Name, title, and telephone number of person authorized to represent this firm in official dealings with the Sewer Authority and/or City:
- 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 packaging, food processing, etc.
- A.6 Provide a brief narrative description of the manufacturing, production, or service activities your firm conducts.

- A.7 Standard Industrial Classification Number(s) (SIC Code) for your facilities:
- A.8 This facility generates the following types of wastes (check all that apply):

AVERAGE GALLONS PER DAY

_ ____ _ ___ ___ ___ ___

1.	[]	Domestic wastes (restrooms, employee showers,	[] estimated etc.)	[] measured
2.	[]	Cooling water,	[] estimated	[] measured
3.	[]	Boiler/Towerblow down	[] estimated	[] measured
4.	[]	Cooling water,	[] estimated	[] measured
5.	[]	Process	[] estimated	[] measured
6.	[]	Equipment/ Facility wash down	[] estimated	
7.	[]	Air Pollution Control Unit	[] estimated	[] measured

8.	[] Storm water runoff to sewer	[] estimated	[] measured
9.	[] Other (describe)	[] estimated	[] measured
	Total A.8.1 - A.8.9		

A.9 Waste are discharged to (check all that apply):

AVERAGE GALLONS PER DAY

[]	Sanitary sewer	[]	estimated	[]	measured
[]	Storm sewer	 []	estimated	[]	measured
[]	Surface water	 []	estimated	[]	measured
[]	Ground water	 []	estimated	[]	measured
[]	Waste haulers	 []	estimated	[]	measured
[]	Evaporation	 []	estimated	[]	measured
[]	Other (describe)	 []	estimated	[]	measured

Provide name and address of waste hauler(s), if used.

A.10 Is a Spill Prevention Control and Countermeasure Plan prepared for the facility? [] Yes [] No

A.11 List any environmental control permits issued to the facility and any discharge limits associated with those permits.

Note: If your facility <u>did not</u> check one or more of the items listed A.8.4 through A.8.9 above, then you do not need to complete any further sections in this survey/ application. If any items A.8.4 through A.8.9 <u>were</u> checked, complete the remainder of this survey application. SECTION B - FACILITY OPERATION CHARACTERISTICS

в.1	Number of employee shifts worked per 24-hour day is
	Average number of employees per shift is
в.2	Starting times of each shift: 1stam 2ndam 3rdampmpmpmpm
	Note: The following information in this section must be completed for each product line.
в.3	Principal product produced:
в.4	Raw materials and process additives used: (Use separate sheet if needed).
	#Day or Gal/Day
в.5	Production process is: [] Batch [] Continuous [] both %batch %Continuous
в.6	Hours of operation:a.m. top.m. [] Continuous
в.7	Is production subject to seasonal variation? [] Yes [] No
	If yes, briefly describe seasonal production cycle.
в.8	Are any process changes or expansions planned during the next three years? [] Yes [] No
	If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.
в.9	Average monthly water usage:

SECTION C - WASTEWATER INFORMATION

C.1 Please indicate with an "X" all of the following activities which are a part of operations at your facility: [] Adhesives Formulation 1. 2. [] Aluminum Forming 3. [] Asbestos Manufacturing 4. [] Battery Manufacturing [] Beverage Bottling 5. [] Cement Manufacturing 6. 7. [] Carbon Black Manufacturing 8. [] Coal Mining [] Coil Coating 9. [] Copper Forming 10. 11. [] Dairy Products Processing 12. [] Electric & Electronic Components Manufacturing 13. [] Electroplating [] Explosives Manufacturing 14. 15. [] Ferroalloy Manufacturing 16. [] Fertilizer Production 17. [] Food/Edible Products Processing 18. [] Glass Manufacturing 19. [] Grain Mills 20. [] Gum & Wood Chemicals Manufacturing 21. [] Hospital 22. [] Inorganic Chemicals Manufacturing 23. [] Iron & Steel 24. [] Laundry 25. [] Leather Tanning & Finishing 26. [] Mechanical Products Manufacturing 27. [] Metal Finishing [] Metal Molding 28. 29. [] Mineral Mining 30. [] Nonferrous Metals Forming 31. [] Oil & Gas Extraction 32. [] Ore Mining 33. [] Organic Chemicals, Plastics, or Synthetic Fibers 34. [] Paint & Ink Manufacturing 35. [] Paving & Roofing Materials 36. [] Pesticides Manufacturing 37. [] Petroleum Refining 38. [] Pharmaceuticals Manufacturing 39. [] Phosphate Manufacturing 40. [] Photographic Supplies Manufacturing 41. [] Plastics Processing [] Porcelain Enameling Processing 42. [] Printing & Publishing 43. 44. [] Pulp & Paper Processing 45. [] Rubber Processing 46. [] Slaughter/Meat Packing/Rendering/Feedlots

- 47. [] Soaps & Detergents Manufacturing
- 48. [] Steam Electric Power Generating
- 49. [] Textile Mills
- 50. [] Timber Products Processing
- 51. [] Other
- C.2. Pretreatment devices or processes used for treating wastewater or sludge (check as many as appropriate).

[]	Air Flotation
[]	Centrifuge
[]	Chlorination
	Cyclone
	Filtration
	Flow Equalization
	Grease or oil separation, type
	Grease trap
	Grit Removal
	Ion Exchange
	Neutralization, pH correction
	Ozonation
	Reverse Osmosis
	Screen
	Sedimentation
[]	Septic tank
[]	Solvent separation
[]	Spill protection
[]	Sump
[]	Biological treatment, type
[]	Rainwater diversion or storage
[]	Other chemical treatment, type
[]	Other physical treatment, type
Ī	Other, type
[]	No pretreatment provided

- C.3 If any wastewater analyses have been performed on the wastewater discharge(s) from your facilities, attach a copy of the most recent data to this questionnaire. Be sure to include the date of analysis, name of laboratory performing the analysis, and location(s) from which sample(s) were taken (attach sketches, plans, etc., as necessary).
- C.4 Priority Pollutant Information: Please indicate by placing an "X" in the appropriate box by each listed chemical whether it is "Suspected to be Absent," "Known to be Absent," "Suspected to be Present," or "Known to be Present" in your manufacturing or service activity or generated as a by-product.

		NOWN PRESENT	SUSPECTED PRESENT	KNOWN ABSENT	SUSPECTED ABSENT
I.	METALS AND INORGANIC				
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	Antimony Arsenic Asbestos Beryllium Cadmium Chromium Copper Cyanide Lead Mercury Nickel Selenium Silver Thallium Zinc	[] [] [] [] [] [] [] [] [] []	[] [] [] [] [] [] [] [] [] []		[] [] [] [] [] [] [] [] [] []
II.	PHENOLS AND CRESOL				
16. 17. 18.	Phenol(s) Phenol, 2-chloro Phenol, 2,4 dichloro	[] [] []	[] [] []	[] [] []	[] [] []
19.	Phenol,2,4,6 trichloro	[]	[]	[]	[]
20.	Phenol, pentachloro	[]	[]	[]	[]
21.	Phenol,2-nitro (para-nitro)	[]	[]	[]	[]
22.	Phenol, 4-nitro (ortho-nitro)	[]	[]	[]	[]
23.	Phenol, 2,4- Dinitro	[]	[]	[]	[]
24.	Phenol, 2,4 Dimethyl	[]	[]	[]	[]
25.	m-Cresol, p-chloro	[]	[]	[]	[]
26.	(4-chloro-3-meth o-Cresol, 4-6-dinitro (4,6-dinitro-2-m	[]	[]	[]	[]

CHEMICAL COMPOUND Synonym in ()	KNOWN PRESENT	SUSPECTED PRESENT	KNOWN ABSENT	SUSPECTED ABSENT

III.	MONOCYCLIG AROMATICS (EXCLUDING	PHENOLS,	CRESOLS AND	PHTHALATES)
27. 28. 29.	Benzene Benzene, chloro Benzene, 1,2 dichloro (ortho-dichloro)	[] [] []			
30.	(ortho-dichioro) Benzene, 1,3 dichloro (meta-dichloro)	[]	[]	[]	[]
31.	Benzene, 1,4 dichloro (para-dichloro)	[]	[]	[]	[]
32. 33.	Benzene, 1,2,4 trichlc Benzene, hexachloro (perchloro)	oro [] []	[] []	[] []	[] []
34. 35.	Benzene, ethyl Benzene, nitro	[]	[] []	[] []	[] []
36.	Toluene (methylbenzene)		[]		[]
37. 38.	Toluene, 2,4 dinitro Toluene, 2,6 dinitro	[] []	[] []	[] []	[] []
IV.	PCBs AND RELATED COMPO	OUNDS			
	PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1250 2-Chloronaphthalene	[] [] [] [] [] [] []	[] [] [] [] [] [] []	[] [] [] [] [] [] []	[] [] [] [] [] [] [] []
v.	ETHERS				
47.	Ether, bis 2-chloroethyl	[]	[]	[]	[]
48.	Ether, bis (2-chloroisopropyl)	[]	[]	[] []
49.	Ether, 2- chloroethyl vinyl	[]	[]	[]	[]
50.	Ether, 4-bromophenyl phenyl	[]	[]	[]	[]
51.	Ether, 4-chlorophenyl phenyl	[]	[]	[]	[]
52.	Bis (2-chloroethoxy) methane	[]	[]	[]	[]

CHEMICAL COMPOUND Synonym in ()

VI. NITROSAMINES AND OTHER NITROGEN CONTAINING COMPOUNDS

54. Ni 55. Ni 56. Be 57. Be 58. Hy (1	itrosamine, dimethyl itrosamine, diphenyl itrosamine, di-n-propyl enzidine enzidine, 3,3'-dichloro ydrazine, 1,2-diphenyl nydrazobenzene) crylonitrile	[[[[]]]]]]]]]]	[[[[]]]]]	[[[[]]]]]
	ALOGENATED LIPHATICS								
61. Me	ethane, bromo- ethane, chloro- methyl chloride)] []]	[[]]	[[]]
62. Me 63. Me 64. Me 65. Me 66. Me	ethane, dichloro ethane, chlorodibromo ethane, dichlorobromo ethane, tribromo ethane, trichloro	[[[[]]]]	[]]]]	[[[[]]]]	[[[[]]]]
67. Me	chloroform) ethane, tetrachloro carbon tetrachloride, arbon tet.)	[]	[]	[]	[]
68. Et	thane, chloro ethylchloride)	[]	[]	[]	[]
69. Et	thane, 1,1-dichloro ethylidene chloride)	[]	[]	[]	[]
70. Et 71. Et 72. Et	thane, 1,2-dichloro thane, 1,1,1-trichloro thane, 1,1,2-trichloro vinyl trichloride)	-]]]	[]]]	[[]]]	[[]]]
1,	thane, ,1,2,2-tetrachloro acetylene tetrachloride)	-]	[]	[]	[]
74. Et	thane, hexachloro perchloro, perc)]	[]	[]	[]
75. Et	thene, chloro vinyl chloride)	[]	[]	[]	[]

CHEMICAL COMPOUND Synonym in ()		KNOWN PRESENT	SUSPECTED PRESENT	KNOWN ABSENT	SUSPECTED ABSENT
76. 77. 78. 79. 80. 81. 82. 83.	Ethene, 1,1-dichloro Ethene, trans-dichloro Ethene, trichloro Ethene, tetrachloro Propane, 1,2-dichloro (propylene dichloride) Propene, 1,3-dichloro (1,3 dichloropropylene) Butadiene, hexachloro Cyclopentadiene, hexachloro				
	(Ethene = Ethylene)				
VIII.P	HTHALATE ESTERS				
84. 85. 86. 87. 88.	Phthalate, di-o-methyl Phthalate, di-n-ethyl Phthalate, di-n-butyl Phthalate, di-n-octyl Phthalate, bis 2-ethylhexyl Phthalate, butyl benzyl	[] []			
XI.	POLYCYCLIC AROMATIC HYDROCARBONS				
90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104.	Acenaphthene Acenaphthylene Benzo (a) anthracene Benzo (b) fluoranthene Benzo (k) fluoranthene Benzo (ghi) perylene Benzo (a) pyrene Chrysene Dibenzo (a,h,) anthracene (1,2,5,6 dibenzanthracen Fluoranthene Fluorene Indeno (1,2,3-cd) pyrene Naphthalene Phenanthrene				
104.	Pyrene Anthracene	[]	[]	[]	[]

CHEMIC COMPOU Synony		KNOWN PRESENT	SUSPECTED PRESENT	KNOWN ABSENT	SUSPECTED ABSENT
x.	PESTICIDES				
107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117.	Chlordane DDD DDE DDT Dieldrin Endosulfan Alpha Endosulfan Beta Endosulfan Sulfate Endrin	[] [] [] [] [] [] [] [] [] []		[] []	[] [] [] [] [] [] [] [] [] []

C.5. If you are unable to identify the chemical constituents of products you use that are discharged in your wastewater, attach copies of the materials safety data sheets for such products.

SECTION D - OTHER WASTES

D.1 Are any liquid wastes or sludge from this firm disposed of by means other than discharge to the sewer system?

[] Yes [] No If "No", skip remainder of Section D. IF "Yes", complete items 2 and 3.

D.2 These wastes may best be described as:

Estimated Gallons or Pounds/Year

[]	Acids and Alkalies	
[]	Heavy Metal Sludge	
[]	Inks/Dyes	
[]	Oil and/or Grease	
[]	Organic Compounds	
[]	Paints	
[]	Pesticides	
[]	Plating Wastes	
[]	Pretreatment Sludge	
[]	Solvents/Thinners	
[]	Other Hazardous Wastes (Specify)	

[] Other wastes (specify)

D.3 For the above checked wastes, does your company practice:

.

- [] On-site storage
 [] Off-site storage
 [] On-site disposal
- [] Off-site disposal

Briefly describe the method(s) of storage or disposal checked above.

SECTION E - WASTE STREAM CHARACTERISTICS

- E.1 Number of discharges from regulated processes (those with an existing or proposed categorical limit) to sanitary sewer system and their locations.
- E.2 Provide a schematic drawing showing the regulated process waste streams, unregulated waste streams, domestic wastewater flows, cooling water, boiler blow down, etc.

E.3 Wastewater Characteristics

- a. Daily Flow: Average Daily Flow (GPD) Average Maximum Daily Flow (GPD)_____
- b. Identify the discharge from each regulated process and check type of discharge.

Process	Continuous	Intermittent	Batch	Flow	(GPD)

c. Waste characteristic at point of discharge:

BOD	_mg/L	рН
COD	_mg/L	NH3-N
TSS	_mg/L	TKN

Priority Pollutants shown in Section C.4.

Pollutants	Concentration (mg/L)

Flow	at	time	sample	Collected		MGD
------	----	------	--------	-----------	--	-----

Priority Pollutants at each regulated process:

Process #	Pollutants	Concentration (mg/L)

- E.4. Does the wastewater discharged:
 - a) Create a fire or explosion hazard?
 - b) Have a pH lower than 5.0?
 - c) Contain a substance that can obstruct the flow in the collection system?

TABLE I

PRIORITY POLLUTANTS

COMPOUND NAME

- 1. *acenaphthene
- 2. *acrolein
- 3. *acrylonitrile
- 4. *benzene
- 5. *benzidine
- 6. *carbon tetrachloride (tetrachloromethane)

*chlorinated benzenes (other than dichlorobenzenes)

- 7. chlorobenzene
- 8. 1, 2, 4-trichlorobenzene
- 9. hexachlorobenzene

*chlorinated ethane (including 1, 2-dichloroethane, 1, 1, 1-trichloroethane and hexachloroethane)

- 10. 1, 2-dichloroethane
- 11. 1, 1, 1-trichloroethane
- 12. hexachloroethane
- 13. 1, 1-dichloroethane
- 14. 1, 1, 2-trichloroethane
- 15. 1, 1, 2, 2-tetrachloroethane
- 16. chloroethane

*chloroalkyl ethers (chloromethyl, chloroethyl and mixed ethers)

17. bis (2-chloroethyl) ether

18. 2-chloroethyl vinyl ether (mixed)

*chlorinated naphthalene

19. 2-chloronaphthalene

*chlorinated phenols (other than those listed elsewhere: includes trichlorophenols and chlorinated cresols)

- 20. 2, 4, 6-trichlorophenol
- 21. parachlorometa cresol
- 22. *chloroform (trichloromethane)
- 23. *2-chlorophenol

*dichlorobenzene

- 24. 1, 2-dichlorobenzene
- 25. 1, 3-dichlorobenzene
- 26. 1, 4-dichlorobenzene
 *dichlorobenzidine
- 27. 3, 3-dichlorobenzidine
 *dichloroethylenes (1,1-dichloroethylene and 1, 2-dichloroethylene)
- 28. 1, 1-dichloroethylene
- 29. 1, 2-trans-dichloroethylene
- 30. *2, 4-dichlorophenol

*dichloropropane and dichloropropene

- 31. 1, 2-dichloropropane
- 32. 1, 2-dichloropropylene (1, 3-dichloropropene)
- 33. *2, 4-dimethylphenol

*dinitrotoluene

- 34. 2, 4-dinitrotoluene
- 35. 2, 6-dinitrotoluene
- 36. *1, 2-diphenylhydrazine

- 37. *ethylbenzene
- 38. *fluoranthene

*haloethers (other than those listed elsewhere)

- 39. 4-chlorophenyl phenyl ether
- 40. 4-bromophenyl phenyl ether
- 43. bis (2-chloroisopropyl) ethers
- 44. bis (2-chloroethoxy) methane

*halomethanes (other than those listed elsewhere)

- 45. methylene chloride (dichloromethane)
- 46. methyl chloride (chloromethane)
- 47. methyl bromide (bromomethane)
- 48. bromoform (tribromomethane)
- 49. dichlorobromomethane
- 50. chlorodibromomethane
- 51. *hexachlorobutadiene
- 52. *hexachlorocyclopentadiene
- 53. *isophorone
- 54. *naphtalene
- 55. *nitrobenzene

*nitrophenols (including 2, 4-dinitrophenol and dinitrocresol)

- 56. 2-nitrophenol
- 57. 4-nitrophenol
- 58. *2, 4-dinitrophenol
- 59. 4, 6-dinitro-o-cresol

*nitrosamines

- 60. N-nitrosodimethylamine
- 61. N-nitrosodiphenylamine
- 62. N-nitrosodi-n-propylamine
- 63. *pentachlorophenol
- 64. *phenol

*phthalate esters

- 65. bis (2-ethylhexyl) phthalate
- 66. butyl benzyl phthalate
- 67. di-n-butyl phthalate
- 68. di-n-octyl phthalate
- 69. diethyl phthalate
- 70. dimethyl phthalate

*polynuclear aromatic hydrocarbons

- 71. benzo(a) anthracene (1, 2-benzanthracene)
- 72. benzo(a) pyrene (3, 4-benzopyrene)
- 73. benzo(b) fluoranthene (3, 4-benzofluoranthene)
- 74. benzo(k) fluoranthane (11, 12-benzofluoranthene)
- 75. chrysene
- 76. acenaphthylene
- 77. anthracene
- 78. benzo(ghi)perylene (1, 12-benzoperylene)
- 79. fluorene
- 80. phenanthrene
- 81. dibenzo(ah)anthracene (1, 2, 5, 6-dibenzanthracene)
- 82. indeno (1, 2, 3-cd)pyrene (2, 3-o-phenylenepyrene)
- 83. pyrene

- 84. *tetrachloroethylene
- 85. *toluene
- 86. *trichloroethylene
- 87. *vinyl chloride (chloroethylene) pesticides and metabolites
- 88. *aldrin
- 89. *dieldrin
- 90. *chlordane (technical mixture & metabolites)

*DDT and metabolites

- 91. 4, 4'-DDT
- 92. 4, 4'-DDE (p, p'-DDX)
- 93. 4, 4'-DDD (p, p'-TDE)

*endosulfan and metabolites

- 94. alpha-endosulfan
- 95. beta-endosulfan
- 96. endosulfan sulfate
 *endrin and metabolites
- 97. endrin
- 98. endrin aldehyde

*heptachlor and metabolites

- 99. heptachlor
- 101. alpha-BHC
- 102. beta-BHC
- 104. gamma-BHC (lindane)

105. delta-BHC

*polychlorinated biphenyls (PCB's)

- 106. PCB-1242 (arochlor 1242)
- 107. PCB-1254 (arochlor 1254)
- 108. PCB-1221 (arochlor 1221)
- 109. PCB-1232 (arochlor 1232)
- 110. PCB-1248 (arochlor 1248)
- 111. PCB-1260 (arochlor 1260)
- 112. PCB-1016 (arochlor 1016)
- 113. toxaphene
- 114. antimony
- 115. arsenic
- 116. asbestos
- 117. beryllium
- 118. cadmium
- 119. chromium
- 120. copper
- 121. cyanide, total
- 122. lead
- 123. mercury
- 124. nickel
- 125. selenium
- 126. silver
- 127. thallium
- 128. zinc
- 129. 2, 3, 7, 8-tetrachloro-dibenzo-p-dioxin (TCDD)

TABLE II INDUSTRIAL CATEGORIES

INDUSTRY

- 1. Adhesive
- 2. Leather Tanning and Finishing
- 3. Soaps & Detergents
- 4. Aluminum Forming
- 5. Battery Manufacturing
- 6. Coil Coating
- 7. Copper Forming
- 8. Electroplating
- 9. Foundries
- 10. Iron & Steel
- 11. Nonferrous Metals
- 12. Photographic Supplies
- 13. Plastic Processing
- 14. Porcelain Enamel
- 15. Gun & Wood Chemicals
- 16. Paint & Ink
- 17. Printing & Publishing

INDUSTRY

- 18. Pulp & paper
- 19. Textile Mills
- 20. Timber
- 21. Coal Mining
- 22. Ore Mining
- 23. Petroleum Refining
- 24. Steam Electric
- 25. Organic Chemicals
- 26. Pesticides
- 27. Pharmaceutical
- 28. Pesticides Materials
- 29. Rubber
- 30. Auto & Other Laundries
- 31. Mechanical Products
- 32. Electric & Electronic Components
- 33. Explosives Manufacturing
- 34. Inorganic Chemicals