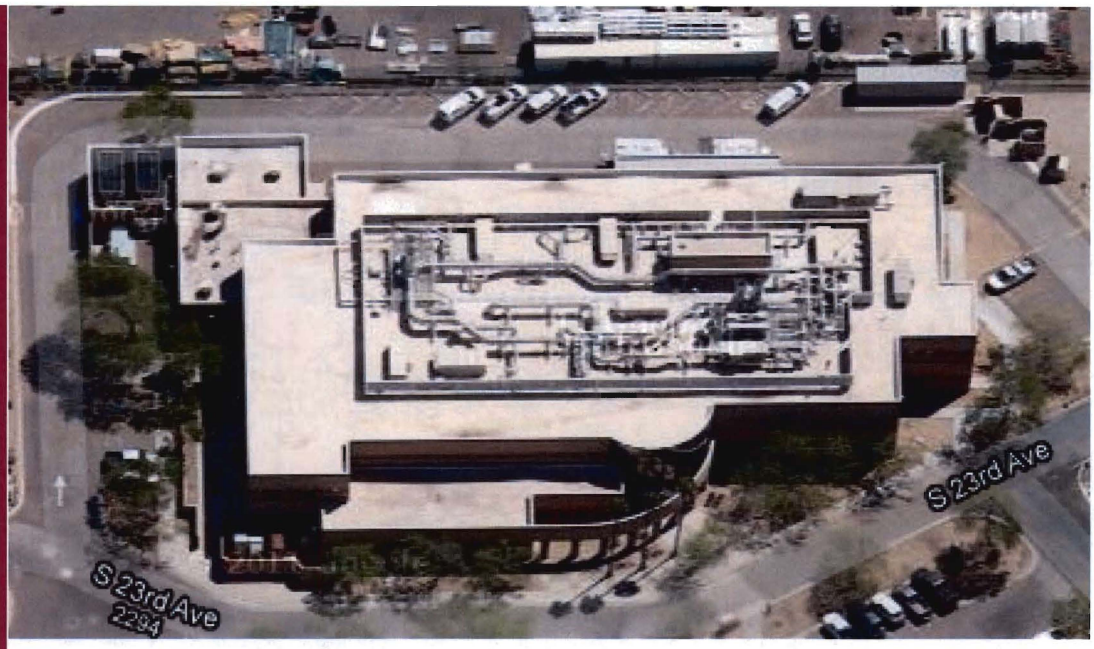
Industrial Pretreatment Program



Industrial Wastewater Permit Application

City of Phoenix
Water Services Department
Environmental Services Division
2474 South 22nd Avenue, Building 31
Phoenix, Arizona 85009-6918
Phone № 602-262-1859
Fax № 602-534-7151
Website **www.phoenix.gov/ESD**

City of Phoenix

WATER SERVICES DEPARTMENT
Environmental Services DIVISION

INDUSTRIAL WASTEWATER PERMIT APPLICATION

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 permit application 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.

DUE DATE **For new permittees, an original hard-copy of the completed and signed application and all supplementary materials must be received by ESD 180-days prior to the projected date requested to commence discharging OR as otherwise specified in writing.**

City of Phoenix Water Services Department
Environmental Services Division
2474 South 22nd Avenue, Building 31
Phoenix, Arizona 85009-6918

ATTN: _____

FOR CITY USE ONLY

- ☐ Permit Not Required
- ☐ Class A SIU Permit
- ☐ Class B Permit:
  - ☐ Zero Categorical Discharge
  - ☐ High Strength
  - ☐ Groundwater Remediation
  - ☐ Pollution Prevention/BMP
  - ☐ Other
- ☐ Interim Permit

This application is for:
☐ New Permit ☐ Permit Renewal

SECTION A. GENERAL INFORMATION

Please type or print:

1. BUSINESS INFORMATION

Legal Business Name: _____

Mailing Address: _____

Business Owner: _____

Mailing Address: _____

Facility Name: _____

Facility Address: _____

Facility Contact/Title: _____

Contact Telephone №: _____ Contact E-mail: _____

Name of Signing Official: _____
Pursuant to 40 § 403.12(l)

Title of Signing Official _____

2. PROPERTY INFORMATION

Property Address: _____

Property Owner: _____

Mailing Address: _____

Property Owner Telephone №: _____

SECTION B. PRODUCT OR SERVICE INFORMATION

1. List raw materials used:

_____

_____

_____

_____

2. Brief description of manufacturing or service activity conducted on premises. List ***all*** processes and production rates.

_____

_____

_____

_____

3. Indicate applicable Standard Industrial Classification (SIC) Codes(s) for all activities. (If more than one applies, list in descending order of importance.)

a. _____ b. _____ c. _____ d. _____ e. _____

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. SHIFT INFORMATION

Shift Start Times: 1st _____ 2nd _____ 3rd _____

Average number of employees per shift per day:

	SUN	MON	TUE	WED	THUR	FRI	SAT
1st							
2nd							
3rd							

Is production seasonal or intermittent? ☐**YES** ☐**NO**

Do operation(s) shut down for vacation, maintenance or other reasons? ☐**YES** ☐**NO**

If Yes, describe monthly manufacturing, service activities, and shutdowns below.

January	February	March	April
May	June	July	August
September	October	November	December

3. Manufacturing processes which generate wastewater or have the potential to generate wastewater:

Process Description:	Is The Wastewater Discharge? Batch	Continuous	Both	% Batch	% Continuous
_____	☐	☐	☐	_____	_____
_____	☐	☐	☐	_____	_____
_____	☐	☐	☐	_____	_____

4. Are any process changes or expansions planned during the next five (5) years that would alter wastewater volumes or characteristics?
Consider production, manufacturing, water reuse or conservation, wastewater treatment changes or any other change which would effect the volume or type of discharge.
☐**YES** ☐**NO** (If "NO", skip item C-5)

5. Describe these changes and their effects on the wastewater volume and characteristics:
(Attach additional sheets if needed.)

_____

_____

_____

6. Are any water reclamation or conservation systems, material recovery or recycling systems in use or planned?
☐**YES** ☐**NO** (If "NO", skip item C-7)

7. Briefly describe conservation, recovery or recycling process(es); substance recovered or recycled; percent recovered, recycled or conserved; and the remaining concentration in the spent solution. Submit flow diagram for each process: (Attach additional sheets if needed.)

_____

_____

_____

8. Have any material substitutions, for the purpose of eliminating or reducing wastes, been implemented, or planned?
☐**YES** ☐**NO** (If "NO", skip item C-9)

9. Briefly describe the material substitution and the manufacturing process the substitution material is used in. Include the economic and environmental benefits (i.e., dollars saved, amount of waste eliminated, waste handling modifications, etc.) derived from this substitution. (Attach additional sheets if needed.)

_____

_____

_____

10. Has a Pollution Prevention Plan been implemented? **(If YES provide a copy with this Application)**
☐**YES** ☐**NO**

SECTION D. INCOMING WATER USAGE

1. Is water used in manufacturing or for an industrial process? ☐ **YES** ☐ **NO**

Water sources (check all appropriate)	Public Supply	Private Well	Other: _____
Metered	☐	☐	☐
Unmetered	☐	☐	☐

2. List all water account numbers:

1) _____ 2) _____ 3) _____

4) _____ 5) _____ 6) _____

3. Describe in detail any treatment processes used for incoming raw water and which manufacturing process this treated water is used for:

_____

_____

_____

_____

4. List the sources and mode of entry for any liquids used in the manufacturing process that are discharged to sewer and the average daily volume of the discharge.

Liquid Description	Source	Mode of Entry	Process Use	Volume Discharged

5. List water consumption in plant processes: (Daily average based on 12 months of City water bills. For a new facility, provide the best engineering estimate.)

Non Contact Cooling Water	_____	gallons per day
Boiler Feed	_____	gallons per day
Manufacturing Process/ Business Operations	_____	gallons per day
Personnel Sanitary Use	_____	gallons per day
Contained in product	_____	gallons per day
Landscaping/Other	_____	gallons per day
TOTAL	_____	gallons per day

6. **Provide a Water Balance Diagram (See Example on Page 17)** showing average per day volumes for ALL (1) Sources of incoming water, (2) Water purification or treatment processes, (3) Processes for which water is used or becomes product, (4) Water evaporation or losses, (5) Wastewater generated from each process, (6) Wastewater wastestreams sent to pretreatment, (7) Wastewater wastestreams evaporated, (8) Wastewater wastestreams shipped offsite for treatment and disposal.

☐ **Water Balance Diagram attached as required**

SECTION E. OUTGOING WASTEWATER DISCHARGE

1. List average volume of water discharged to: (For a new facility provide the best engineering estimate.)

City sanitary sewer	_____	gallons per day
City storm sewer	_____	gallons per day
Natural outlet (see glossary)	_____	gallons per day
Waste hauler	_____	gallons per day
TOTAL	_____	gallons per day

Is the discharge to sewer: ☐Intermittent? ☐Steady?

2. List average volume of water lost (not discharged) to:

Food Preparation	_____	gallons per day
Evaporation	_____	gallons per day
Contained in product	_____	gallons per day
Irrigation	_____	gallons per day
Other	_____	gallons per day
TOTAL	_____	gallons per day

What size is the sewer tap to be used for the process discharge? _____

Where does this tap connect to the City sewer main? (Distance and direction to the nearest City manhole)

_____

3. List the flows from individual manufacturing/service processes in gallons per day (GPD):

Process Description	Avg Flow (gallons/day)	Max Flow (gallons/day)	Type of Discharge Batch, Continuous, None

4. **Provide on a separate sheet(s) a schematic drawing showing the following:**
(1) All wastewater flows and types. (2) Location of all wastewater treatment system(s) and devices including interceptors, traps (grease, sand/oil, grit, or other); ion exchange, filtration, neutralization systems; or any other wastewater treatment device in use. (3) Sampling locations. (4) Connection(s) to the sanitary sewer. (5) Location of all floor drains. (6) Location of chemical storage area(s). (7) Location of berms and other spill control devices. (8) Location of waste holding area(s). (9) Include construction drawings if available.

☐**Schematic attached as required**

5. Are any of the following located on the property?

Storm sewers	☐YES ☐NO	Dry wells	☐YES ☐NO
Private wells	☐YES ☐NO	Abandoned water wells	☐YES ☐NO

If YES to any of the above, please provide a separate schematic indicating the location(s) of each in relationship to the building(s) and the process (es) conducted on the premises.

☐**Schematic attached as required.**

6. Does the manufacturing or service process(es) ever generate any unused liquid product(s) (i.e., bad batches, production over runs, product returned from customers, etc.)?

☐**YES** ☐**NO**

If YES, describe process, product, average volume per day and the disposal method.

_____

_____

SECTION F. WASTEWATER TREATMENT

1. For all waste streams which are treated before discharge, describe the wastestream and the types of pretreatment.

_____

_____

_____

_____

2. Does the facility have *any of* the following pretreatment devices:

☐Grease interceptor	☐ Silver recovery	☐ Ion Exchange	☐ Ultra filtration
☐Sand/oil interceptor	☐ Acid neutralization	☐ Reverse Osmosis	☐
☐ Solids interceptor	☐ Evaporator	☐Other (list)	_____

3. Provide a separate schematic, with flow paths and manufacturer's flow capacity ratings, for all pretreatment systems or equipment. Include the sewer tap used by the treatment system and the location of the sewer main where the tap connects.

☐**Schematic attached as required**

4. If any form of new or additional ***wastewater*** pretreatment is planned for this facility within the next five (5) years, describe the process waste stream the type of treatment.

_____

_____

_____

Expected operational date: _____

5. Is there a Slug Control (SCP) in effect for this facility? ☐**YES** ☐**NO** **(If YES, please attach)**

6. Is there a Toxic Organics Management Plan in effect at this facility?

☐**YES** ☐**NO** **(If YES, please attach)**

SECTION G. DISCHARGE CHARACTERISTICS

1. Indicate the priority pollutants listed below being used, stored, and/or discharged from this facility. Provide the information below and note whether the discharge is to the sanitary sewer, waste hauler, or other. **DO NOT LEAVE SECTION G BLANK OR USE N/A; A NUMERICAL VALUE IS REQUIRED.**

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
1. Acenaphthene					
2. Acrolein					
3. Acrylonitrile					
4. Benzene					
5. Benzidine					
6. Carbon Tetrachloride (Tetrachloromethane)					
7. Cholorbenezene					
8. 1,2,4-trichlorobenzene					
9. Hexacholorobenzene					
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. Bis(2-chloroethyl) ether					
17. 2-chloroethyl vinyl ether (mixed)					
18. 2-chloronaphtalene					
19. 2,4,6-trichlorophenol					
20. Parachlorometa cresol					
21. Chloroform (Trichloromethane)					
22. 2-chlorophenol					
23. 1,2-dichlorobenzene					
24. 1,3-dichlorobenzene					
25. 1,4-dichlorobenzene					
26. 3,3-dichlorobenzidine					

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
27. 1,1-dichloroethylene					
28. 1,2-trans-dichloro-ethylene					
29. 2,4-dichlorophenol					
30. 1,2-dichloropropene (1,3-dichloropropene)					
31. 2,4-dimethylphenol					
32. 2,4-dinitrotoluene					
33. 2,6-dinitrotoluene					
34. 1,2-diphenylhydrazine					
35. Ethylbenzene					
36. Fluoranthene					
37. 4-chlorophenyl phenyl ether					
38. 4-bromophenyl phenyl ether					
39. Bis (2-chloroisopropyl) ether					
40. Bis (2-chloroethoxy) methane					
41. Methylene chloride (dichloromethane)					
42. Methyl chloride (dichloromethane)					
43. Methyl bromide (bromomethane)					
44. Bromoform (Tribromomethane)					
45. Dichlorobromomethane					
46. Chlorodibromomethane					
47. Hexachlorobutadiene					
48. Hexachlorocyclopentadiene					
49. Isophorone					
50. Naphthalene					
51. Nitrobenzene					
52. 2-nitrophenol					
53. 4-nitrophenol					
54. 2,4-dinitrophenol					
55. 4,6-dinitro-o-cresol					
56. N-nitrosodimethylamine					

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
57. N-nitrosodiphenylamine					
58. Pentachlorophenol					
59. Phenol					
60. Bis (2-ethylhexyl) phthalate					
61. Butyl benzyl phthalate					
62. Di-N-butyl Phthalate					
63. Di-N-octyl Phthalate					
64. Diethyl Phthalate					
65. Dimethyl Phthalate					
66. 1,2-benzanthracene (Benzo(a)anthracene)					
67. Benzo(a)pyrene (3,4-benzo-pyrene)					
68. 3,4-benzofluoranthene (benzo(b)fluoranthene)					
69. 2-benzofluoranthene (benzo(k)fluoranthene)					
70. Chrysene					
71. Acenaphthylene					
72. Anthracene					
73. 1,12-benzoperylene (benzo(ghi)perylene)					
74. Fluorene					
75. Phenanthrene					
76. 1,2,5,6-dibenzanthracene (dibenz(a,h)anthracene)					
77. Ideno(1,2,3-cd--pyrene(2-3-o-phenylene pyrene)					
78. Pyrene					
79. Tetrachloroethylene					
80. Toluene					
81. Trichloroethylene					
82. Vinyl Chloride (chloroethylene)					
83. Aldrin					
84. Dieldrin					
85. Chlordane (technical mixture & metabolites)					

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
86. 4,4-DDT					
87. 4,4-DDE (p,p-DDX)					
88. 4,4-DDD(p,p-TDE)					
89. Alpha-endosulfan					
90. Beta-endosulfan					
91. Endosulfan sulfate					
92. Endrin					
93. Endrin Aldehyde					
94. Heptachlor					
95. Heptachlor epoxide (BHC-hexachlorocyclohexane)					
96. Alpha -BHC					
97. Beta-BHC					
98. Gamma-BHC (Lindane)					
99. Delta-BHC (Delta-Hexachlorocyclohexane)					
100. PCB-1242 (Arochlor 1242)					
101. PCB-1254 (Arochlor 1254)					
102. PCB-1221 (Arochlor 1221)					
103. PCB-1232 (Arochlor 1232)					
104. PCB-1248 (Arochlor 1248)					
105. PCB-1260 (Arochlor 1260)					
106. PCB-1016 (Arochlor 1016)					
107. Toxaphene					
108. Antimony (Total)					
109. Arsenic (Total) and Arsenic Compounds (list)					
110. Asbestos (Fibrous)					
111. Barium					
112. Beryllium (Total) and Beryllium Compounds (list)					

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
113. Cadmium (Total) and Cadmium Compounds (list)					
114. Chromium (Total) and Chromium Compounds (list)					
115. Copper (Total) and Copper Compounds (list)					
116. Cyanide(Total) and Cyanide Compounds (list)					
117. Lead (Total) and Lead Compounds (list)					
118. Mercury (Total) and Mercury Compounds (list)					
119. Molybdenum (Total) and Molybdenum Compounds (list)					

PRIORITY POLLUTANTS	AMOUNT OF CHEMICALS ONSITE LBS/GALS	TOTAL AMOUNT DISCHARGED LB/GALS/DAY	AMOUNT TO SANITARY SEWER	AMOUNT TO WASTE HAULER	AMOUNT TO OTHER (DESCRIBE)
120. Nickel (Total) and Nickel Compounds (list)					
121. Selenium (Total) and Selenium Compounds (list)					
122. Silver (Total) and Silver Compounds (list)					
123. Thallium (Total) and Thallium Compounds (list)					
124. Zinc (Total) and Zinc Compounds (list)					
125. 2,3,7,8-Tetrachloro-dibenzo-p-dioxin(TCDD)					
126. Sulfides					

SECTION G. DISCHARGE CHARACTERISTICS – continued

2. Are any wastes or sludges generated and **not** disposed of in the sanitary sewer system?

☐ **YES**⟶ Complete the following for all wastes **not disposed of in the sanitary sewer.**

☐ **NO** ⟶ Skip the remainder of Section G.

Wastes	Estimated Quantity Per Year (indicate units)	Disposal Method (i.e., landfill, recycle, sale, evaporation, incineration, etc.)
Waste solvent		
Oil/Grease		
Process baths		
Pretreatment sludge		
Inks/Dyes		
Thinner		
Paints		
Acids and Alkalis		
Left over or extra product		
Pesticides		
Other (specify):		

3. If an outside firm removes any of the above checked wastes, give the names(s), address(es), and permit numbers of all waste haulers:

1. _____

_____

_____

_____

Permit № _____

2. _____

_____

_____

_____

Permit № _____

4. Do any of the wastes require Resource Conservation and Recovery Act permits? ☐**YES** ☐**NO**

If "Yes", please specify which wastes and provide the permit number and issuing authority name:

_____

_____

SECTION H. ENVIRONMENTAL CONTROL PERMITS

List all environmental control permits issued for this facility.

PERMIT TITLE	PERMIT NUMBER	ISSUING AGENCY	EXPIRATION DATE

SECTION I. LOCAL AND FEDERAL CATEGORICAL LIMITS

1. Is the facility meeting applicable federal categorical pretreatment and local discharge standards **99 %** of the time?

   ☐**YES** ☐**NO**

   A. If "Yes", provide rationale, such as a description of methods used to achieve and maintain compliance, and the analytical results of recent effluent sampling.

   B. If "No", how does the facility plan to meet the requirements?

   Are additional operation and maintenance (O&M) procedures required to achieve compliance?

   ☐**YES** ☐**NO**

   If "Yes", describe the changes which will be made to achieve the standards.

2. Are new or additional pretreatment facilities required to achieve compliance?

   ☐**YES** ☐**NO**

   If "Yes", describe the facilities or equipment which will be installed:

3. Is this an application for a permit renewal? ☐**YES** ☐**NO** If "Yes", answer the following question:

   Within the last year, has your business made any changes in its operation that have increased or will increase the concentration, volume, or other characteristics of your discharge into the City sanitary sewer?

   ☐**YES** ☐**NO** If "Yes", describe

SECTION J. 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.

Name of Company Official: _____

Title of Company Official: _____

Signature of Company Official: _____

Signature Pursuant to 40 § 403.12(l) Signatory Requirements

Date: _____

Mailing Address, e-mail Address, and Phone Number of Company Official:

_____

_____

_____

_____

_____

_____

_____

APPENDIX 1

SUMMARY OF CATEGORICAL PRETREATMENT STANDARDS

EPA has established categorical pretreatment standards (for indirect dischargers) for 35 categories. Plans for EPA's expansion and modification of the list are detailed in the *Effluent Guidelines Plan*, published in the *Federal Register* biennially as required at CWA section 304(m). The list of the industrial categories that have categorical pretreatment standards—Pretreatment Standards for Existing Sources (PSES) and Pretreatment Standards for New Sources (PSNS)—as of March 2011 are provided below.

№	CATEGORY	40 CFR PART	SUBPARTS	TYPE OF STANDARD	OVERVIEW OF PRETREATMENT STANDARD
1	Aluminum Forming	467	A–F	PSES PSNS	Limits are production-based daily maximums and monthly averages. Subpart C prohibits discharges from certain operations.
2	Battery Manufacturing	461	A–G	PSES PSNS	Limits are production-based daily maximums and monthly averages. No discharge is allowed from any process not specifically identified in the regulations.
3	Carbon Black Manufacturing	458	A–D	PSNS	Limits are for oil and grease only (no duration specified).
4	Centralized Waste Treatment	437	A–D	PSES PSNS	Limits are concentration-based daily maximums and monthly averages.
5	Coil Coating	465	A–D	PSES PSNS	Limits are production-based daily maximums and monthly averages.
6	Concentrated Animal Feeding Operations (CAFO)	412	B	PSNS	Discharge of process wastewater is prohibited, except when there is an overflow resulting from a chronic or catastrophic rainfall event.
7	Copper Forming	468	A	PSES PSNS	Limits are production-based daily maximums and monthly averages.
8	Electrical and Electronic Components	469	A–D	PSES PSNS	Limits are concentration-based daily maximums and 30-day averages or monthly averages (varies per subpart and pollutant parameter). Certification is allowed in lieu of monitoring for certain pollutants when a management plan is approved and implemented.

№	CATEGORY	40 CFR PART	SUBPARTS	TYPE OF STANDARD	OVERVIEW OF PRETREATMENT STANDARD
9	Electroplating	413	A,B,D–H	PSES	Limits are concentration-based (or alternative mass-based equivalents) daily maximums and four-consecutive-monitoring-days averages. Two sets of limits exist, depending on whether facility is discharging more or less than 10,000 gpd of process wastewater. Certification is allowed in lieu of monitoring for certain pollutants when a management plan is approved and implemented.
10	Fertilizer Manufacturing	418	A–G	PSNS	Limits may specify zero discharge of wastewater pollutants (Subpart A), production-based daily maximums, and 30-day averages (Subparts B–E), or may be concentration-based (Subparts F–G), with no duration of limit specified.
11	Glass Manufacturing	426	H, K–M	PSNS	Limits are concentration- or production-based daily maximums and monthly averages.
12	Grain Mills	406	A	PSNS	Discharge of process wastewater is prohibited at a flow rate or mass loading rate (BOD5 and TSS) that is excessive during periods when a POTW is receiving peak loads.
13	Ink Formulating	447	A	PSNS	Regulations specify no discharge of process wastewater pollutants to a POTW.
14	Inorganic Chemicals Manufacturing	415	A,B,F,L, AH,AJ,AL, AR,AU,BC BL,BM,BO	PSES	Limits vary for each subpart with a majority of the limits concentration-based, daily maximums, and 30-day averages, or they may specify no discharge of wastewater pollutants.
			B–F, H, K–N,P,Q, T,V,AA, AC,AE,AH AI,AJ,AL, AN,AP,AQ AR,AU,AX BB,BC,BH BK–BO	PSNS	
15	Iron and Steel Manufacturing	420	A–F, H–J, L	PSES PSNS	Limits are production-based daily maximums and 30-day averages.
16	Leather Tanning and Finishing	425	A–I	PSES PSNS	Limits are concentration-based daily maximums and monthly averages. In certain instances, applicability of pretreatment standards is dictated by volume of production.

№	CATEGORY	40 CFR PART	SUBPARTS	TYPE OF STANDARD	OVERVIEW OF PRETREATMENT STANDARD
17	Metal Finishing	433	A	PSES PSNS	Limits are concentration-based daily maximums and monthly averages. Certification is allowed for certain pollutants where a management plan is approved and implemented.
18	Metal Molding and Casting	464	A–D	PSES PSNS	Limits are primarily production-based daily maximums and monthly averages. Discharges from certain processes are prohibited (Subparts A–C).
19	Nonferrous Metals Forming and Metal Powders	471	A–J	PSES PSNS	Limits are production-based daily maximums and monthly averages. In some instances, the discharge of wastewater pollutants is prohibited.
20	Nonferrous Metals Manufacturing	421	C,F–M,P, Q,V,X,Y, AA–AC	PSES	Limits are production-based daily maximums and monthly averages. PSES (Subpart F) specify no discharge from existing facilities of process wastewater pollutants to the POTW except for some stormwater events.
			A–Z, AA–AE	PSNS	Limits are production-based daily maximums and monthly averages. PSNS (Subparts D and F) specify no discharge from existing facilities of process wastewater pollutants to the POTW.
21	Oil and Gas Extraction	435	D	PSES PSNS	Regulations specify no discharge of wastes (e.g., produced water, drill cuttings) to a POTW.
22	Organic Chemicals, Plastics, and Synthetic Fibers	414	B–H, K	PSES PSNS	Limits are mass-based (concentration-based standards multiplied by process flow) daily maximums and monthly averages. Standards for metals and cyanide apply only to metal- or cyanide-bearing wastestreams.
23	Paint Formulating	446	A	PSNS	Regulations specify no discharge of process wastewater pollutants to the POTW.
24	Paving and Roofing Materials (Tars and Asphalt)	443	A–D	PSNS	Limits are for oil and grease only (no limit duration specified).
25	Pesticide Chemicals	455	A, C, E	PSES PSNS	Limits are mass-based (concentration-based standards multiplied by process flow) daily maximums and monthly averages. Subpart C specifies no discharge of process wastewater pollutants but provides for pollution-prevention alternatives. Subpart E specifies no discharge of process wastewater pollutants.

№	Category	40 CFR Part	Subparts	Type of Standard	Overview of Pretreatment Standard
26	Petroleum Refining	419	A–E	PSES PSNS	Limits are concentration-based (or mass-based equivalent) daily maximums.
27	Pharmaceutical Manufacturing	439	A–D	PSES PSNS	Limits are concentration-based daily maximums and monthly averages. Such facilities may certify that they do not use or generate cyanide in lieu of performing monitoring to demonstrate compliance.
28	Porcelain Enameling	466	A–D	PSES PSNS	Limits are concentration-based (or alternative production-based) daily maximums and monthly averages. Subpart B prohibits discharges from certain operations.
29	Pulp, Paper, and Paperboard	430	A–G, I–L	PSES PSNS	Limits are production-based daily maximums and monthly averages. Such facilities may certify that they do not use certain compounds in lieu of performing monitoring to demonstrate compliance. Facilities subject to Subparts B and E must also implement BMPs as identified.
30	Rubber Manufacturing	428	E–K	PSNS	Limits are concentration- or production-based daily maximums and monthly averages.
31	Soap and Detergent Manufacturing	417	O–R	PSNS	Regulations specify no discharge of process wastewater pollutants to a POTW when the wastewater chemical oxygen demand (COD)/BOD_7 ratio exceeds 10.0 and the COD concentrations exceed subcategory specific concentrations.
32	Steam Electric Power Generating	423	—	PSES PSNS	Limits are concentration-based daily maximums, or *maximums for any time*, or compliance may be demonstrated through engineering calculations.
33	Timber Products Processing	429	F–H	PSES PSNS	All PSNS (and PSES for Subpart F) prohibit the discharge of wastewater pollutants. PSES for Subparts G and H are concentration-based daily maximums (with production-based alternatives).
34	Transportation Equipment Cleaning	442	A–C	PSES PSNS	Operators subject to effluent guidelines in subparts A–B must either meet concentration-based daily maximum standards or develop a Pollutant Management Plan. Operators subject to effluent guidelines in subpart C must meet concentration-based daily maximum standards.
35	Waste Combustors	444	A	PSES PSNS	Limits are concentration-based daily

APPENDIX 2

GLOSSARY OF TERMS

Batch - The quantity produced as a result of an operation.

Categorical Standards - (National/Federal Categorical Pretreatment Standards) - Those standards promulgated by the U.S. Environmental Protection Agency (EPA) under the authority of Section 307(b) and (c) of the Clean Water Act (33 U.S.C. 1317) which apply to a specific category or industrial user and which are published in 40 CFR Chapter I, subchapter N (Parts 405-471).

Continuous - extended or prolonged production without interruption or cessation.

Cooling water - The clean wastewater discharged from any heat transfer system such as condensation, air conditioning, cooling or refrigeration.

Industrial User - Any POTW user generating or having the potential to generate commercial or industrial wastewater discharges to the POTW.

Discharge - The disposal of any sewage, pollutant(s), water, or any liquid from any sewer user into the sewerage system.

Drywell - Also referred to as a shallow drainage well, is any shallow hole dug or bored in the ground to allow surface storm water runoff, excess irrigation flow, or other drainage to percolate into the ground. It is typically constructed as a 10 to 20 feet deep boring of 2 to 4 feet diameter filled with cobbles and rocks and lined with a perforated corrugated metal pipe. They may be found in parking lots or other areas where drainage of storm water is required.

Natural outlet - Any outlet into a watercourse, ditch, or other body of surface or ground water.

POTW – Publicly Owned Treatment Works and connecting sewer collection system which are owned and/or operated, in whole or in part, by the City and which provide the City with wastewater collection and disposal services.

Pretreatment - The physical, chemical, biological or other treatment of any industrial discharge prior to discharge to the sewer, for the purpose of:

(a) Reducing the amount or concentration of any pollutant; or
(b) Eliminating the discharge or any pollutant; or
(c) Altering the nature of any pollutant characteristic to a less harmful state.

Process Wastewater - Any water which, during manufacturing or processing, comes into direct contact with or results from the production of or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Regulated Wastestream - An industrial process wastestream regulated by a national categorical pretreatment standard and/or the Phoenix City Code, Chapter 28.

Sanitary sewer - A sewer which carries sewage and to which storm, surface and groundwaters are not intentionally admitted.

Slug Control Plan - A plan prepared by an industrial user to minimize the likelihood of a spill or slug discharge and to expedite control and cleanup activities should a spill occur.

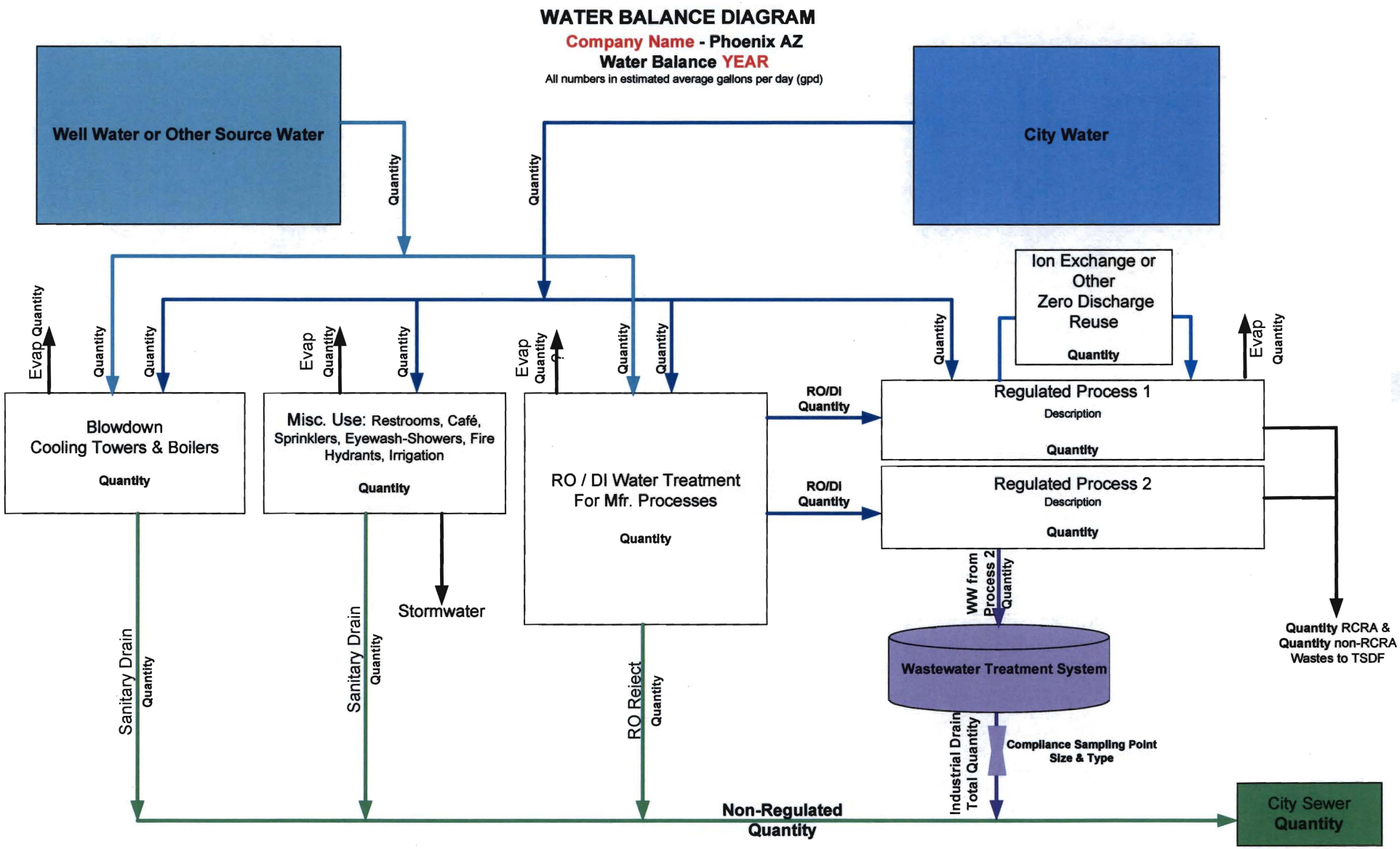
Storm sewer or storm drain - A sewer which carries storm and surface waters and drainage, but excludes sewage and polluted industrial wastes.

Toxic Organic Management Plan - Written plan submitted by industrial users in accordance with some categorical pretreatment standards as an alternative to TTO monitoring which specifies the toxic organic compounds used, the method of disposal used, and procedures for assuring that toxic organics do not routinely spill or leak into wastewater discharged to the POTW.

Unregulated Wastestream - A wastestream that is not regulated by a national categorical pretreatment standard and is not considered a dilute wastestream.

Wastewater - Any liquid or water-carried pollutant, including an industrial discharge, which is introduced into the sewer from any source.

Example 1


WATER BALANCE DIAGRAM
Company Name - Phoenix AZ
Water Balance YEAR
All numbers in estimated average gallons per day (gpd)
Well Water or Other Source Water
City Water
Quantity
Quantity
Ion Exchange or Other Zero Discharge Reuse
Quantity
Evap Quantity
Evap Quantity
Evap Quantity
Evap Quantity
Blowdown Cooling Towers & Boilers
Quantity
Misc. Use: Restrooms, Café, Sprinklers, Eyewash-Showers, Fire Hydrants, Irrigation
Quantity
RO / DI Water Treatment For Mfr. Processes
Quantity
RO/DI Quantity
RO/DI Quantity
Regulated Process 1
Description
Quantity
Regulated Process 2
Description
Quantity
WW from Process 2 Quantity
Wastewater Treatment System
Quantity RCRA & Quantity non-RCRA Wastes to TSDF
Stormwater
Sanitary Drain Quantity
Sanitary Drain Quantity
RO Reject Quantity
Industrial Drain Total Quantity
Compliance Sampling Point Size & Type
Non-Regulated Quantity
City Sewer Quantity