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| **City of Phoenix**WATER SERVICES DEPARTMENTENVIRONMENTAL SERVICES DIVISIONQuality Reliability Value**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. **For new Permittees, an ORIGINAL SIGNED HARD-COPY** **of the completed and signed application and ALL supplementary materials are to be received by IPP 180-days prior to your projected date to commence discharge OR as otherwise specified in writing.**

|  |  |
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| **DUE DATE:** |  |

**SUBMIT ORIGINAL SIGNED HARD-COPY APPLICATION TO:**City of Phoenix Water Services DepartmentIndustrial Pretreatment Program (IPP)2474 South 22nd Avenue, Building 31Phoenix, Arizona 85009-6918 | ***FOR CITY USE ONLY***This application is for:[x] New Permit [ ] Permit Renewal[ ] Permit RevisionDetermination:[ ] Permit Not Required[ ] Class A SIU Permit[ ] Class B Permit:[ ] Zero Categorical Discharge[ ] High Strength[ ] Groundwater Remediation[ ] Pollution Prevention/BMP[ ] OtheriPACS ID №  |
|  |
|  **ATTN**: | **Chelsey Weaver** |  |
| **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 |
| 1. PROPERTY INFORMATION
 |
| Property Address: |       |
| Property Owner: |       |
| Mailing Address: |       |
| Property Owner Telephone №: |       |
| 1. Date that operations commenced at current location:
 |  |

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| **SECTION B. PRODUCT OR SERVICE INFORMATION** |
| 1. Attach an inventory of raw materials and/or chemicals used at the facility:

[ ]  **Raw Materials and/or Chemicals Inventory Attached** |
| 1. List or attach a brief description of manufacturing or service activity conducted at the facility. List ***all*** processes and production rates.

[ ]  **Description of Processes Attached** |
|  |       |
|  |       |
|  |       |
|  |       |
| 1. Indicate applicable Standard Industrial Classification (SIC) Codes(s) for all activities.

(If more than one applies, list in descending order of importance with a. as the primary SIC code) |
| a. |       | b. |       | c. |       | d. |       | e. |       |
|  |
| **SECTION C. FACILITY OPERATIONAL CHARACTERISTICS** |
|  |
| 1. SHIFT INFORMATION
 |
| Shift Start/End Times: | 1st  |       | 2nd  |       | 3rd  |       |
| Average number of employees per shift per day: |
|  | SUN | MON | TUE | WED | THUR | FRI | SAT |
| 1st  |       |  |       |  |       |  |       |  |       |  |       |  |       |  |
| 2nd  |       |  |       |  |       |  |       |  |       |  |       |  |       |  |
| 3rd  |       |  |       |  |       |  |       |  |       |  |       |  |       |  |
|  |
| 1. Is production seasonal or intermittent? [ ] **YES** [ ] **NO**
 |
|  |
| 1. Describe monthly manufacturing, service activities, and shutdowns (maintenance, vacation, etc.) below:
 |
|  |
|       |
|       |
|  |
| 1. Manufacturing processes which generate wastewater or have the potential to generate wastewater:
 |
|  |
|  |  Is The Wastewater Discharge? |
| Process Description: |  | Batch |  | Continuous |  | Both |  | % Batch |  | % Continuous |
|  |  |  |  |  |  |  |  |  |  |  |
|  |       |  | [ ]  |  | [ ]  |  | [ ]  |  |       |  |       |
|  |       |  | [ ]  |  | [ ]  |  | [ ]  |  |       |  |       |
|  |       |  | [ ]  |  | [ ]  |  | [ ]  |  |       |  |       |

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| **SECTION C. FACILITY OPERATIONAL CHARACTERISTICS - continued** |
|  |
| 1. 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-6) |
|  |
| 1. Describe these changes and their effects on the wastewater volume and characteristics:

 (Attach additional sheet(s) if necessary.) |
|  |       |
|  |       |
|  |       |
|  |
| 1. Are any water reclamation or conservation systems, material recovery or recycling systems in use or planned?
 |
|  **[ ] YES [ ] NO** | (If “NO”, skip item C-8) |
|  |
| 1. 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.)
 |
|  |       |
|  |       |
|  |       |
|  |
| 1. Have any material substitutions, for the purpose of eliminating or reducing wastes, been implemented, or planned?
 |
|  **[ ] YES [ ] NO** | (If “NO”, skip item C-10) |
|  |
| 1. Briefly describe the material substitution and the manufacturing process in which the substitution material is used. 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.)
 |
|  |       |
|  |       |
|  |       |
|  |
| 1. Has a State of Arizona required Pollution Prevention Plan been implemented? **[ ] YES [ ] NO**
 |

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| **SECTION D. INCOMING WATER USAGE** |
| 1. Is water used in manufacturing or for any industrial process?
 |  **[ ]  YES [ ]  NO** |
| 1. Does the facility receive water from a private well?
 |  **[ ]  YES [ ]  NO** |
| 1. Describe in detail any water treatment processes used for incoming raw water and which industrial process this treated water is used for:
 |
|  |       |
|  |       |
|  |       |
| 1. List the sources and process use for any liquids used in industrial processes onsite that are discharged to sewer and the average daily volume of the discharge.
 |
|  | Liquid Description |  | Source |  | Process Use |  | Volume Incoming |
|  |       |  |       |  |       |  |       |
|  |       |  |       |  |       |  |       |
|  |       |  |       |  |       |  |       |
|  |       |  |       |  |       |  |       |
|  |
| 1. List water consumption in facility 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 |
|  | ManufacturingProcess*/* 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 |
|  |
| 1. **Provide a Water Balance Diagram** 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 (refer to Appendix 4-5)** |
| **SECTION E. OUTGOING WASTEWATER DISCHARGE** |
| 1. List average volume ofwater discharged to*:* (For a new facility provide the best engineering estimate.)
 |
|  | City sanitary sewer |  |       | gallons per day |
|  | City storm sewer |  |       | gallons per day |
|  | Waste hauler |  |       | gallons per day |
|  | Other (     ) |  |       | gallons per day |
|  | TOTAL |  |       | gallons per day |
| **SECTION E. OUTGOING WASTEWATER DISCHARGE - continued**Is the discharge to sewer: [ ]  Intermittent? [ ]  Continuous? |
|  |
| 1. 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 |
| 1. List the flows from individual manufacturing/service processes in gallons per day (GPD) (including boiler blowdown, RO reject, non-contact cooling, etc.):
 |
|  |
|  | Process Description | Avg Flow (gallons/day) | Max Flow (gallons/day) | Type of DischargeBatch, Continuous, None |
|  |       |       |       |       |
|  |       |       |       |       |
|  |       |       |       |       |
|  |       |       |       |       |
|  |       |       |       |       |
|  |
| 1. **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 (refer to Appendix 7 for Plan Review)** |
|  |
| 1. 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 (refer to Appendix 7 for Plan Review)** |
| 1. Do 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. |
|       |
|       |
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| **SECTION F. WASTEWATER TREATMENT** |
| 1. For all waste streams which are treated before discharge, describe the wastestream and the types of pretreatment.

|  |  |
| --- | --- |
| Wastestream Description | Type of Pretreatment |
|            |            |
|            |            |
|            |            |
|            |            |
|            |            |

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|  |
| 1. 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) |       |
|  |
| 1. Provide a separate schematic for all pretreatment systems or equipment. Include flow paths, directional arrows, flow capacity ratings, retention times, and location(s) of City sewer tap into which the pretreatment system is connected.
 |
|  | **[ ] Schematic attached as required (refer to Appendix 7 for Plan Review)** |
|  |
| 1. 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: |       |  |
|  |

| **SECTION G. DISCHARGE CHARACTERISTICS** |
| --- |
| 1. **Per Appendix** **3, please provide sampling data as required.**
2. 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; NUMERICAL VALUES ARE REQUIRED.** |

| **Priority Pollutants** | **Amount Of Chemicals Onsite** **Specify Units** | **Amount To Sanitary Sewer** **Gallons/Year** | **Amount To Waste Hauler****Gallons/Year** | **Amount To Other (****)****Gallons/Year** |
| --- | --- | --- | --- | --- |
|  | Acenaphthene |       |       |       |       |
|  | Acrolein |       |       |       |       |
|  | Acrylonitrile |       |       |       |       |
|  | Benzene |       |       |       |       |
|  | Benzidine |       |       |       |       |
|  | Carbon Tetrachloride (Tetrachloromethane) |       |       |       |       |
|  | Cholorbenezene |       |       |       |       |
|  | 1,2,4-trichlorobenzene |       |       |       |       |
|  | Hexacholorobenzene |       |       |       |       |
|  | 1,2-dichloroethane  |       |       |       |       |
|  | 1,1,1-trichloroethane |       |       |       |       |
|  | Hexachloroethane |       |       |       |       |
|  | 1,1-dichloroethane |       |       |       |       |
|  | 1,1,2-trichloroethane |       |       |       |       |
|  | 1,1,2,2-tetrachloroethane |       |       |       |       |
|  | Bis(2-chloroethyl) ether |       |       |       |       |
|  | 2-chloroethyl vinyl ether (mixed) |       |       |       |       |
|  | 2-chloronaphtalene |       |       |       |       |
|  | 2,4,6-trichlorophenol |       |       |       |       |
|  | Parachlorometa cresol |       |       |       |       |
|  | Chloroform (Trichloromethane) |       |       |       |       |
|  | 2-chlorophenol |       |       |       |       |
|  | 1,2-dichlorobenzene |       |       |       |       |
|  | 1,3-dichlorobenzene |       |       |       |       |
|  | 1,4-dichlorobenzene |       |       |       |       |
|  | 3,3-dichlorobenzidine |       |       |       |       |
|  | 1,1-dichloroethylene |       |       |       |       |
|  | 1,2-trans-dichloro-ethylene |       |       |       |       |
|  | 2,4-dichlorophenol |       |       |       |       |
|  | 1,2-dichloropropene (1,3-dichloropropene) |       |       |       |       |
|  | 2,4-dimethylphenol |       |       |       |       |
|  | 2,4-dinitrotoluene |       |       |       |       |
|  | 2,6-dinitrotoluene |       |       |       |       |
|  | 1,2-diphenylhydrazine |       |       |       |       |
|  | Ethylbenzene |       |       |       |       |
|  | Fluoranthene |       |       |       |       |
|  | 4-chlorophenyl phenyl ether |       |       |       |       |
|  | 4-bromophenyl phenyl ether |       |       |       |       |
|  | Bis (2-chloroisopropyl) ether |       |       |       |       |
|  | Bis (2-chloroethoxy) methane  |       |       |       |       |
|  | Methylene chloride (dichloromethane) |       |       |       |       |
|  | Methyl chloride (dichloromethane) |       |       |       |       |
|  | Methyl bromide (bromomethane) |       |       |       |       |
|  | Bromoform (Tribromomethane) |       |       |       |       |
|  | Dichlorobromomethane |       |       |       |       |
|  | Chlorodibromomethane |       |       |       |       |
|  | Hexachlorobutadiene |       |       |       |       |
|  | Hexachlorocyclopentadiene |       |       |       |       |
|  | Isophorone |       |       |       |       |
|  | Naphthalene |       |       |       |       |
|  | Nitrobenzene |       |       |       |       |
|  | 2-nitrophenol |       |       |       |       |
|  | 4-nitrophenol |       |       |       |       |
|  | 2,4-dinitrophenol |       |       |       |       |
|  | 4,6-dinitro-o-cresol |       |       |       |       |
|  | N-nitrosodimethylamine |       |       |       |       |
|  | N-nitrosodiphenylamine |       |       |       |       |
|  | Pentachlorophenol |       |       |       |       |
|  | Phenol |       |       |       |       |
|  | Bis (2-ethylhexyl) phthalate |       |       |       |       |
|  | Butyl benzyl phthalate |       |       |       |       |
|  | Di-N-butyl Phthalate |       |       |       |       |
|  | Di-N-octyl Phthalate |       |       |       |       |
|  | Diethyl Phthalate |       |       |       |       |
|  | Dimethyl Phthalate |       |       |       |       |
|  | 1,2-benzanthracene (Benzo(a)anthracene) |       |       |       |       |
|  | Benzo(a)pyrene (3,4-benzo-pyrene) |       |       |       |       |
|  | 3,4-benzofluoranthene (benzo(b)fluoranthene) |       |       |       |       |
|  | 11,12-benzofluoranthene (benzo(k)fluoranthene) |       |       |       |       |
|  | Chrysene |       |       |       |       |
|  | Acenaphthylene |       |       |       |       |
|  | Anthracene |       |       |       |       |
|  | 1,12-benzoperylene (benzo(ghi)perylene) |       |       |       |       |
|  | Fluorene |       |       |       |       |
|  | Phenanthrene |       |       |       |       |
|  | 1,2,5,6-dibenzanthracene (dibenz(a,h)anthracene) |       |       |       |       |
|  | Ideno(1,2,3-cd--pyrene(2-3-o-phenylene pyrene) |       |       |       |       |
|  | Pyrene |       |       |       |       |
|  | Tetrachloroethylene |       |       |       |       |
|  | Toluene |       |       |       |       |
|  | Trichloroethylene |       |       |       |       |
|  | Vinyl Chloride (chloroethylene) |       |       |       |       |
|  | Aldrin |       |       |       |       |
|  | Dieldrin |       |       |       |       |
|  | Chlordane (technical mixture & metabolites) |       |       |       |       |
|  | 4,4-DDT |       |       |       |       |
|  | 4,4-DDE (p,p-DDX) |       |       |       |       |
|  | 4,4-DDD(p,p-TDE) |       |       |       |       |
|  | Alpha-endosulfan |       |       |       |       |
|  | Beta-endosulfan |       |       |       |       |
|  | Endosulfan sulfate |       |       |       |       |
|  | Endrin |       |       |       |       |
|  | Endrin Aldehyde |       |       |       |       |
|  | Heptachlor |       |       |       |       |
|  | Heptachlor epoxide (BHC-hexachlorocyclohexane) |       |       |       |       |
|  | Alpha -BHC |       |       |       |       |
|  | Beta-BHC |       |       |       |       |
|  | Gamma-BHC (Lindane)  |       |       |       |       |
|  | Delta-BHC (Delta-Hexachlorocyclohexane) |       |       |       |       |
|  | PCB-1242 (Arochlor 1242) |       |       |       |       |
|  | PCB-1254 (Arochlor 1254) |       |       |       |       |
|  | PCB-1221 (Arochlor 1221) |       |       |       |       |
|  | PCB-1232 (Arochlor 1232) |       |       |       |       |
|  | PCB-1248 (Arochlor 1248) |       |       |       |       |
|  | PCB-1260 (Arochlor 1260) |       |       |       |       |
|  | PCB-1016 (Arochlor 1016) |       |       |       |       |
|  | Toxaphene |       |       |       |       |
|  | Antimony (Total)  |       |       |       |       |
|  | Arsenic (Total) and Arsenic Compounds (list) |       |       |       |       |
|  | Asbestos (Fibrous) |       |       |       |       |
|  | Barium |       |       |       |       |
|  | Beryllium (Total) and Beryllium Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Cadmium (Total) and Cadmium Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Chromium (Total) and Chromium Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
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|  |       |       |       |       |       |
|  | Copper (Total) and Copper Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Cyanide(Total) and Cyanide Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
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|  |       |       |       |       |       |
|  | Lead (Total) and Lead Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Mercury (Total) and Mercury Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Molybdenum (Total) and Molybdenum Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Nickel (Total) and Nickel Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
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|  |       |       |       |       |       |
|  | Selenium (Total) and Selenium Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Silver (Total) and Silver Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Thallium (Total) and Thallium Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | Zinc (Total) and Zinc Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  | 2,3,7,8-Tetrachloro-dibenzo-p-dioxin(TCDD) |       |       |       |       |
|  | Sulfides (Total) and Sulfur Compounds (list) |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |
|  |       |       |       |       |       |

**SECTION G. DISCHARGE CHARACTERISTICS – continued**

|  |
| --- |
| 1. 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 Month(indicate units) | Disposal Method (i.e., landfill, recycle, sale, evaporation, incineration, etc.) |
|  | Waste solvent |       |       |
|  | Oil/Grease/Lubricants |       |       |
|  | Process baths |       |       |
|  | Pretreatment sludge |       |       |
|  | Filter Press Cake |       |       |
|  | Inks/Dyes |       |       |
|  | Paints/Thinner |       |       |
|  | Acids and Alkalis |       |       |
|  | Left over or extra product |       |       |
|  | Pesticides |       |       |
|  | Used Oil/Coolant |       |       |
|  | Other (specify): |       |       |
|  |
| 1. 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. |       | 2. |       |   |
|  |       |  |       |
|  |       |  |       |
|  |       |  |       |
|  | **Permit №** |       |  | **Permit №** |       |
|  |
| 1. 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** |
| 1. List all environmental control permits issued for this facility.
 |
| PERMIT TITLE | PERMIT NUMBER | ISSUING AGENCY | EXPIRATION DATE |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|  |
| 1. Has a Phoenix Fire Department Hazardous Materials Application, Inventory, and Drawing been required for this facility? **[ ] YES [ ] NO** **(If YES provide a copy with this Application)**
 |
|  |
| **SECTION I. LOCAL AND FEDERAL CATEGORICAL LIMITS** |
| 1. Is the facility performing any processes described in Appendix 1?
 |
|  |  **[ ] YES [ ] NO** |
| **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**

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| **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 | PSESPSNS | Limits are production-based daily maximums and monthly averages. Subpart C prohibits discharges from certain operations.  |
| 2 | Battery Manufacturing | 461 | A–G | PSESPSNS | 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 | PSESPSNS | Limits are concentration-based daily maximums and monthly averages.  |
| 5 | Coil Coating | 465 | A–D | PSESPSNS | 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 | PSESPSNS | Limits are production-based daily maximums and monthly averages.  |
| 8 | Electrical and Electronic Components | 469 | A–D | PSESPSNS | 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.  |
| 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,AQAR,AU,AXBB,BC,BHBK–BO | PSNS |
| 15 | Iron and Steel Manufacturing | 420 | A–F, H–J, L | PSESPSNS | Limits are production-based daily maximums and 30-day averages.  |
| 16 | Leather Tanning and Finishing | 425 | A–I | PSESPSNS | Limits are concentration-based daily maximums and monthly averages. In certain instances, applicability of pretreatment standards is dictated by volume of production.  |
| 17 | Metal Finishing | 433 | A | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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.  |
| 26 | Petroleum Refining | 419 | A–E | PSESPSNS | Limits are concentration-based (or mass-based equivalent) daily maximums.  |
| 27 | Pharmaceutical Manufacturing | 439 | A–D | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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)/BOD7 ratio exceeds 10.0 and the COD concentrations exceed subcategory specific concentrations.  |
| 32 | Steam Electric Power Generating | 423 | — | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | 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 | PSESPSNS | Limits are concentration-based daily  |

**APPENDIX 2**

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| 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. |

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| **APPENDIX 3 SAMPLING PLAN ADDENDUM** |
| **REQ?** | **Sample Description** | **Analysis Method** | **Collection Method** | **Total Number** | **Frequency** |
| **[ ]**  | pH Study | EPA 150.2 | Continuous | 5-Consecutive Days | Continuous (Reported in 1 minute intervals via MS Excel) |
| **[ ]**  | Flow Study | Electronic Flow Meter | Continuous | 5-Consecutive Days | Continuous(Reported in 1 minute intervals via MS Excel) |
| **[ ]**  | Asbestos | EPA 100.2 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | BOD1 | SM 5210B | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | TSS2 | SM 2540D | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Cyanide | SM 4500-CN− B-1999 or C-1999 | Grab | 1 | 1 per Day |
| **[ ]**  | Metals3 | EPA 200.7 or EPA 200.8 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Mercury | EPA 245.1 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Volatile Organics4 | EPA 624 | Grab – Lab Composite | 3 Total | 1 vial from Beginning, Middle, & End of the Process Discharge Day |
| **[ ]**  | Semi-Volatile Organics5 | EPA 625 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Pesticides/PCBs6 | EPA 608 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Carbamates8 | EPA 630/630.1/632 | Process Day Composite | 1 | 1 per Day |
| **[ ]**  | Oil & Grease9 | EPA 1664 HEM  | Grab | 3 Total | 1 jar from Beginning, Middle, & End of the Process Discharge Day |
| **[ ]**  | Oil & Grease – Non-polar10 | EPA 1664 SGT-HEM | Grab | 3 Total | 1 jar from Beginning, Middle, & End of the Process Discharge Day |
| ***Notes:*** |
| *1* | *BOD – Biological Oxygen Demand* |
| *2* | *TSS – Total Suspended Solids* |
| *3* | *Metals – All Priority Pollutant Metals or as otherwise checked* |
| *4* | *VOCs – All Volatile Organic Compounds or as otherwise checked* |
| *5* | *Semi- VOCs – All Semi – Volatile Organic Compounds or as otherwise checked* |
| *6* | *Pesticides/PCBs – All Pesticides and Polychlorinated Biphenyls or as otherwise checked* |
| *7* | *CN - Cyanide* |
| *8* | *Carbamates – All Carbamates or as otherwise checked*  |
| *9* | *O&G – Oil and Grease; HEM -n-Hexane Extractable Material* |
| *10* | *O&G* *SGT-HEM – Oil and Grease -Silica Gel Treated n-Hexane Extractable Material* |

|  |
| --- |
| **[ ]  PRIORITY POLLUTANT METALS** |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Antimony (Total) Arsenic (Total) Asbestos (Fibrous)BariumBeryllium (Total) Cadmium (Total) Chromium (Total) Copper (Total)  | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Lead (Total) Mercury (TotalMolybdenum (TotalNickel (Total) Selenium (Total) Silver (Total) Thallium (Total) Zinc (Total) |
| **[ ]  VOLATILE ORGANIC COMPOUNDS** |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | 1,1 – Dichloroethane1,1 – Dichloroethylene1,1,1 - Trichloroethane 1,1,2 - Trichloroethane 1,1,2,2 - Tetrachloroethane 1,2 – Dichloroethane1,2 - Dichloropropane 1,2 - Dichloropropylene 1,2 - Trans - Dichloroethylene 2-Chloroethylvinyl Ether AcroleinAcrylonitrileBenzeneBromoform | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Carbon TetrachlorideChlorobenzeneChlorodibromoethaneChloroethaneChloroformDichlorobromomethaneEthylbenzene Methyl Bromide Methyl Chloride Methylene Chloride Tetrachloroethylene Toluene Trichloroethylene Vinyl Chloride |
| **[ ]  SEMI-VOLATILE ORGANIC COMPOUNDS** |
|  **ACID EXTRACTABLES** |
| [ ] [ ] [ ] [ ] [ ] [ ]  | 2,4,6-trichlorophenol2,4-dichlorophenol2,4-dimethylphenol2,4-dinitrophenol2-chlorophenol2-nitrophenol | [ ] [ ] [ ] [ ] [ ]  | 4,6-dinitro-o-cresol4-nitrophenolp-chloro-m-cresolPentachlorophenolPhenol |
|  **BASE NEUTRALS** |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | 1,12-benzoperylene (benzo(ghi)perylene)1,2,4-trichlorobenzene1,2,5,6-dibenzanthracene (dibenz(a,h)anthracene)1,2-benzanthracene (Benzo(a)anthracene)1,2-dichlorobenzene1,2-diphenylhydrazine1,3-dichlorobenzene1,4-dichlorobenzene11,12-benzofluoranthene (benzo(k)fluoranthene)2,4-dinitrotoluene2,6-dinitrotoluene2-chloronaphtalene3,3-dichlorobenzidine3,4-benzofluoranthene (benzo(b)fluoranthene)4-bromophenyl phenyl ether4-chlorophenyl phenyl etherAcenaphtheneAcenaphthyleneAnthraceneBenzidineBenzo(a)pyrene (3,4-benzo-pyrene)Bis (2-chloroethoxy) methane Bis (2-chloroisopropyl) ether | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Bis (2-ethylhexyl) phthalateBis(2-chloroethyl) etherButyl benzyl phthalateChryseneDiethyl PhthalateDimethyl PhthalateDi-N-butyl PhthalateDi-N-octyl PhthalateFluorantheneFluoreneHexachlorobutadieneHexachlorocyclopentadieneHexachloroethaneHexacholorobenzeneIdeno(1,2,3-cd--pyrene(2-3-o-phenylene pyrene)IsophoroneNaphthaleneNitrobenzeneN-nitrosodimethylamineN-nitrosodiphenylaminePhenanthrenePyrene |

|  |
| --- |
| **[ ]  PESTICIDES/PCBs** |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Aldrin Alpha – BHCBeta - BHC Gamma - BHC (Lindane) Delta - BHC Chlordane 4,4 - DDT 4,4 - DDE 4,4 - DDD Dieldrin Alpha-Endosulfan Beta-Endosulfan Endosulfsan Sulfate | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | EndrinEndrin AldehydeHeptachlorHeptachlor EpoxidePCB - 1242PCB - 1254PCB - 1221PCB - 1232PCB - 1248PCB - 1260PCB - 1016Toxaphene |
| **[ ]  CARBAMATES** (All Metal Finishing and Iron & Steel Manufacturing facilities) |
| [ ] [ ] [ ] [ ]  | Busan 85 [Potassium dimethyldithiocarbamateBusan 40 [Potassium N-hydroxymethyl-N-methyldithiocarbamate] KN Methyl [Potassium N-methyl-dithiocarbamate] Nabonate [Disodium cyanodithio-imidocarbonate] | [ ] [ ] [ ]  | Carbam-S [Sodium dimethyldithio-carbamate]Vapam [Sodium methyldithiocarbamate]Ziram [Zinc dimethyldithiocarbamate] |

**APPENDIX 4**

EXAMPLE 1



~ ?? gpd or per batch

Employee Sanitary Usage

~ ?? gpd or per batch

Total Out as

Sanitary Sewage

~ ?? gpd or

per batch

~ ?? gpd or per batch

~ ?? gpd or per batch

~ ?? gpd or per batch

~ ?? gpd or per batch

Evap Loss

~ ?? gpd or per batch

Total In as

City Water

~ ?? gpd or per batch

Other Processes

???

Evaporative Coolers, Boilers, Water Softeners, etc.

EXAMPLE 2



The design of pretreatment equipment and systems, whether for a new installation or for

renovations or upgrade of an existing system, will require the production of engineering

drawings and specification documents to meet construction, wastewater discharge

permitting, and other regulatory requirements. In general, engineering design documents

include:

* Facility and pretreatment system layout drawings
* Piping & instrumentation diagrams
* Equipment foundation drawings and support system details
* Mechanical, piping, electrical, instrumentation, controls, and operational drawings and
* specifications
* Specifications for installation coordination, testing, and demonstration of system performance.

Construction drawings and engineering design manuals for industrial manufacturing or industrial servicing facilities must be submitted for review and approval by the City of Phoenix Industrial Pretreatment Program (IPP) **prior** **to submittal to the City of Phoenix Planning Development Department**.

All submissions must first be received at:

**City of Phoenix Industrial Pretreatment Program**

**23rd Avenue Wastewater Treatment Plant**

**2474 South 22nd Avenue, Building 31**

**Phoenix, Arizona 85009**

Note - Installation inspections by City of Phoenix IPP staff of the pretreatment system and/or the compliance sampling point and/or vault are required prior to final approval. Pretreatment systems must be approved prior to discharge when possible. Compliance sampling points and vault inspections must be scheduled prior to pouring of concrete and upon final competion. Call the Principal Engineering Technician at 602-534-7588 and/or the Chief Water Quality Inspector at 602-495-5926, not less than 2-working days in advance to request inspection.

Pursuant to Phoenix City Code Chapter 28, Section 28-10, And Title 40 of the Code of Federal

Regulations Part 403, the following minimum details must be shown within industrial wastewater drawings and included engineering design manual (as requested) for industrial manufacturing or industrial servicing facilities:

**Site Plans** - Sealed by an architect or engineer in the State of Arizona (as required)

*The following requirements for the site plan do not cover or include Site Planning Requirements as required by City of*

*Phoenix Planning and Development (P&D).*

 **Y N N/A**

[ ] [ ] [ ]  Legal business name and physical address of the facility (suite number and floor number if applicable)

[ ] [ ] [ ]  Show the size and shape of the site

[ ] [ ] [ ]  Identify the property lines with dimensions

[ ] [ ] [ ]  Show all buildings and structures (delineate existing vs. proposed)

[ ] [ ] [ ]  Show the streets and alleys

**Y N N/A**

[ ] [ ] [ ]  Indicate the North direction

[ ] [ ] [ ]  Show complete floor layout including equipment

[ ] [ ] [ ]  Provide complete equipment schedule

[ ] [ ] [ ]  Show location of chemical storage area(s).

[ ] [ ] [ ]  Show location of waste storage and holding area(s).

[ ] [ ] [ ]  Show secondary containment structures with dimensions and calculations demonstrating containment of 110% of the largest tank or container within the structure or otherwise in compliance with City of Phoenix Fire Code requirements.

[ ] [ ] [ ]  Show location of berms and other spill control devices.

[ ] [ ] [ ]  Identify the use or industrial process within each room, area, or structure

[ ] [ ] [ ]  Show site grading with spot elevations and flow arrows

[ ] [ ] [ ]  Show slopes and heights of berming and depth of stormwater retention areas or structures

[ ] [ ] [ ]  Show location of storm sewers or drains, stormwater retention areas, dry wells, private wells, abandoned wells.

[ ] [ ] [ ]  Show location of each wastewater treatment system and/or devices including interceptors, traps (grease, sand/oil, grit, or other); ion exchange, filtration, neutralization systems; or any other wastewater treatment device in use.

[ ] [ ] [ ]  Show location of wastewater sampling point(s) and respective conveyance into City sewer tap(s)

[ ] [ ] [ ]  Show location(s) of City sewer tap and sewer main into which the pretreatment system(s) and/or wastewater sampling point(s) are connected

**Plumbing Plans** - Sealed by a registered mechanical engineer in State of Arizona (as required)

*The following requirements for the plumbing plan do not cover or include Plumbing Planning Requirements as*

*required by City of Phoenix Planning and Development (P&D).*

 **Y N N/A**

[ ] [ ] [ ]  Show complete on-site water & sewer plans for the entire facility (segregation of process/industrial and non-process/domestic should be included)

[ ] [ ] [ ]  Show complete plumbing floor plan and roof drainage systems for the entire facility

[ ] [ ] [ ]  Show all waste plumbing, fixtures, flow directions, and flow rates related to industrial

manufacturing or service operations, including wet air scrubbers, the wastewater

pretreatment system, the compliance sampling point, and the final discharge point (or

plumbing fixture)

[ ] [ ] [ ]  Show waste minimum plumbing fixture analysis

[ ] [ ] [ ]  Show waste plumbing fixture specifications

[ ] [ ] [ ]  Show waste plumbing fixture connection schedule

[ ] [ ] [ ]  Show drain, waste, and vent sizing isometrics

[ ] [ ] [ ]  Show backflow devices [as required] – Type(s) and Location(s).

[ ] [ ] [ ]  Show expansion tanks [as required] -- Size(s) and Location(s).

**Compliance Sampling Point & Vault Plans** - Sealed by a registered mechanical engineer in State of Arizona (as required)

 Provide cut sheet of open channel flow primary measuring device (flume, weir box, etc.)

**Y N N/A** showing:

[ ] [ ] [ ]  A. Type (Parshall, Trapezoidal, H, V-notch, etc.)

**Y N N/A**

[ ] [ ] [ ]  B. Model (Tracom, etc.)

[ ] [ ] [ ]  C. Size (based on expected minimum and maximum flow rates and velocities to ensure correct measurements, free flow conditions, and an adequate level to obtain samples)

[ ] [ ] [ ]  D. Material of molded fiberglass, reinforced polyester or other City approved material

[ ] [ ] [ ]  E. Constructed of one piece with ample wall thickness and reinforcing ribs to prevent distortion during shipment, installation and operation

[ ] [ ] [ ]  F. Ability to support itself and require no external supporting structure in order to maintain its dimensional integrity and prevent sagging, deformation, or dislodgement

[ ] [ ] [ ]  G. Conditions of gravity flow, wave free, non-turbulent, symmetrical and uniform velocity of wastewater discharge; upstream floor elevation of the device shall be high enough relative to downstream conditions to prevent submergence or submerged flow condition

[ ] [ ] [ ]  H. An approach channel length of at minimum 10 times the diameter of the upstream sewer pipe

[ ] [ ] [ ]  I. A cover or enclosure for devices installed above ground and/or in areas exposed to inflow of stormwater, precipitation, particulates and/or pollutants

[ ] [ ] [ ]  Flow monitoring equipment with data logging capability and +/- 10 percent accuracy

[ ] [ ] [ ]  Continuous pH monitoring equipment (if required) with data logging capability and +/- 10 percent accuracy

[ ] [ ] [ ]  Show the height from the surface of the finished floor to the top of the open flow channel

measuring device

 **Y N N/A** Provide cut sheet of alternate compliance sampling point (tank with spigot, utility sink):

[ ] [ ] [ ]  Showing tank size and/or sink setup with valves and location for sample collection

[ ] [ ] [ ]  Showing demarcations on holding tank for flow-proportional sampling

 **Y N N/A** Provide a sampling vault cutsheet and detail showing:

[ ] [ ] [ ]  A. Material, make and model

[ ] [ ] [ ]  B. Inner and outer dimensions (minimum interior length of no less than 8-feet and minimum interior width of no less than 5-feet)

[ ] [ ] [ ]  C. Positioning of the open flow channel device within the vault (must be positioned off center and opposite the vault entry/exit ladder to maximize working space for sample collection)

[ ] [ ] [ ]  D. Depth of vault from the finished floor to the top of the finished opening (critical

dimension for eliminating permit required confined space entry is < 48-inches)

[ ] [ ] [ ]  E. Ladder detail (rungs positioned 12-inches apart, clearance of 12-inches from flume minimum, stainless steel corrosion resistant hardware and mounting brackets)

[ ] [ ] [ ]  F. Safety pole detail (high strength aluminum, corrosion resistant, vertically fixed in position or extendable, no less than 42-inches above top of vault door frame or landing; telescoping post or pole weighing no more than 25 pounds provided with a pull up loop at the upper end to facilitate raising, a safety locking mechanism when fully extended, and a release level for disengagement and return to lowered position)

[ ] [ ] [ ]  G. Locking double-leaf door detail (aluminum/stainless steel corrosion resistant with torsion or compression spring assist, automatic lock-open safety arm, exterior lock or hasp with loops, and frame opening dimensions of no less than 3-feet by 5-feet)

[ ] [ ] [ ]  Sampling vaults should be installed as close to the IU sewer tap as feasible and the location shall be approved in writing by the IPP Section

**Y N N/A**

[ ] [ ] [ ]  Show lineal footage between the outlet of the final wastewater pretreatment system

component and the inlet for the open flow channel measuring device (must show there are no bends in pipe for 25-pipe diameters upstream of device). If minimum lineal footage requirement cannot be met, provide Froude number with all calculations demonstrating that laminar flow velocity of 1 to 3 feet per second can be achieved.

[ ] [ ] [ ]  Show lineal footage between the outlet of the open flow channel measuring device and any downstream bends of components (must show there are no bends in pipe for 10-pipe diameters downstream of device)

**Wastewater Pretreatment System Plans** - Sealed by a registered mechanical engineer in State of Arizona (as required)

 **Y N N/A** Show ALL wastewater pretreatment system component details including:

[ ] [ ] [ ]  A. Pretreatment system components (manufacturers’ specifications, detail, anticipated pollutant reduction rates with engineering citations)

[ ] [ ] [ ]  B. Tanks, tank sizes and heights, tank material, tank cutsheets

[ ] [ ] [ ]  C. Tank influent, effluent, overflow heights (bypasses are prohibited)

[ ] [ ] [ ]  D. Flow capacity ratings and flow directions between components

[ ] [ ] [ ]  E. Pumps, mixers, float switches

[ ] [ ] [ ]  F. Chemical dosing equipment

[ ] [ ] [ ]  G. pH monitoring equipment (in-process will have data logging capability of +/- 0.1 standard unit accuracy and 0.01 standard unit resolution)

[ ] [ ] [ ]  H. Alarms

[ ] [ ] [ ]  Show itemized schedule of drainage fixture units for all industrial process drainage fixtures and equipment with pretreatment component or device sizing calculations demonstrating achievement of industry standard hydraulic retention times

[ ] [ ] [ ]  Show secondary containment structures with dimensions and calculations demonstrating containment of 110% of the largest tank or container within the structure or otherwise in compliance with City of Phoenix Fire Code requirements.

[ ] [ ] [ ]  Show roofs, awnings, or other structures preventing the inflow of stormwater into outdoor waste plumbing fixtures, the wastewater sampling point, and the sanitary sewer

[ ] [ ] [ ]  Provide a raw materials, chemicals, and bulk chemical storage tank inventory with full

identification of raw materials and chemicals – not product names (If City of Phoenix Fire

Prevention required it, provide a copy of the Hazardous Materials Application, the Hazardous Material Inventory Statement, and the Site Plan Worksheet).

**All Plans**

 **Y N N/A**

[ ] [ ] [ ]  All construction shall conform to City of Phoenix Supplements to the Maricopa Association of Governments (MAG) Specifications and Details. Modifications to City of Phoenix MAG Specifications may be requested and require IPP written approval.