

City of Phoenix, AZ  
Industrial Pretreatment Annual Report  
Supplemental Information  
2024



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To whom it may concern,

Re: **AZPDES Permit AZ0020559 – 23<sup>rd</sup> Avenue Wastewater Treatment Plant**  
**AZPDES Permit AZ0026727 – Cave Creek Water Reclamation Plant**  
**NPDES Permit AZ0020524 – 91<sup>st</sup> Avenue Wastewater Treatment Plant**  
**Industrial Pretreatment Programs Annual Report**  
**EPA Supplemental Information Submittal**

Enclosed is supplemental information as part of the new reporting format for the City of Phoenix Industrial Pretreatment (IPP) Annual Report. This report covers both 23<sup>rd</sup> Avenue and 91<sup>st</sup> Avenue Wastewater Treatment Plants as well as the Cave Creek Water Reclamation Plant for the reporting period beginning January 1, 2024, and ending December 31, 2024. This includes information required by the National Pollutant Discharge Elimination System Permit, effective May 1, 2023; and the Arizona Pollutant Discharge Elimination System Permits, effective July 1, 2024 and December 2, 2024, respectively. In addition, included in separate attachments are the City of Phoenix, Arizona Department of Environmental Quality, IPP Annual Report submittal and Certification Statement, as well as all Sub-Regional Operating Group (SROG) ADEQ Annual Report submittals excepting those who are submitting separately to the EPA and/or ADEQ.

Sincerely,

Jesse Flores  
Principal Engineering Technician

Enclosures:  
EPA & ADEQ Annual Reports (Excel Spreadsheets)  
SROG City Annual Reports

## Summary of Priority Pollutant Results

### 91st Avenue Wastewater Treatment Plant

Part II Section D.4.a. of the 91st Avenue WWTP NPDES Permit requires the following to be included within this annual report:

*A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the POTW's influent and effluent for those pollutants identified under CWA section 307(a) which are known or suspected to be discharged by nondomestic users. This will consist of an annual full priority pollutant scan, with quarterly samples analyzed only for those pollutants detected in the full scan. Influent or effluent monitoring data shall be provided for nonpriority pollutants which the Cities believe may be causing or contributing to Interferences or Pass Through. All sampling and analysis required under this paragraph must be performed using the test methods specified under 40 CFR 136. Sampling and analysis for asbestos is not required. Sludge sampling and analyses are covered elsewhere in this permit.*

As required, a summary of analytical results for influent, effluent, and biosolids samples collected from the 91<sup>st</sup> Avenue Wastewater Treatment Plants are presented in the following pages.

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# 91st Ave. Wastewater Treatment Plant

	Number of Observations	Number of Non-Detects	<sup>1</sup> Average	Maximum	Units
<b>1,1,1-Trichlorethane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,1,2,2-Tetrachloroethane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	4	4	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,1,2-Trichloroethane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,1-Dichloroethane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	4	4	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,1-Dichloroethylene</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,2,4-Trichlorobenzene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt
<b>1,2-Dichlorobenzene</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt
<b>1,2-Dichloroethane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>1,2-Dichloropropane</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**1,2-Diphenylhydrazine**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**1,2-Trans-dichloroethylene (Trans-1,2-Dichloroethene)**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**1,3-Dichlorobenzene**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	4	4	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt

**1,3-Dichloropropylene ( trans/cis-1,3-Dichloropropene)**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**1,4-Dichlorobenzene**

Influent	4	1	1.13	1.49	µg/L
Effluent	6	4	0.17	0.27	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt

**2,3,7,8-TCDD (Dioxin)**

Influent	4	4	All Non-Detect	-	pg/L
Effluent	3	3	All Non-Detect	-	pg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**2,4,6-Trichlorophenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**2,4-Dichlorophenol**

Influent	11	11	All Non-Detect	-	µg/L
Effluent	11	11	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**2,4-Dimethylphenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**2,4-Dinitrophenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2,4-Dinitrotoluene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2,6-Dinitrotoluene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2-Chloroethyl vinyl ethers**

Influent	1	1	All Non-Detect	-	µg/L
Effluent	1	1	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2-Chloronaphthalene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2-Chlorophenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **2-Nitrophenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **3,3-Dichlorobenzidine**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **4,4-DDD**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### **4,4-DDE**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L

Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>4,4-DDT</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>4,6-Dinitro-o-cresol (2-Methyl-4,6-dinitrophenol)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>4-Bromophenyl phenyl ether</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>4-Chlorophenyl phenyl ether</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>4-Nitrophenol</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Acenaphthene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Acenaphthylene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Acrolein</b>					
Influent	1	1	All Non-Detect	-	µg/L
Effluent	1	1	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Acrylonitrile</b>					
Influent	1	1	All Non-Detect	-	µg/L
Effluent	1	1	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt



**Aldrin**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Alpha-BHC**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Alpha-endosulfan (Endosulfan I)**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Anthracene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Antimony**

Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Arsenic**

Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	1	6.2	8.7	mg/kg Dry Wt

**Benzene**

Influent	4	2	0.51	0.65	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Benzidine**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Benzo(a) anthracene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Benzo(a)pyrene**

Influent	12	12	All Non-Detect	-	µg/L
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Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Benzo(b) fluoranthene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Benzo(ghi) perylene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Benzo(k) fluoranthene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Beryllium</b>					
Influent	12	5	0.00035	0.0012	mg/L
Effluent	4	1	0.00019	0.0005	mg/L
Biosolids	4	3	1.42	2.43	mg/kg Dry Wt
<b>Beta-BHC</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Beta-endosulfan (Endosulfan II)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Bis(2-chloroethoxy) methane</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Bis(2-chloroethyl) ether</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Bis(2-chloroisopropyl) ether</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt

**Bis(2-ethylhexyl) phthalate**

Influent	12	11	24.6	9.9	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Boron (Non Priority Pollutant studied for Local Limits Monitoring)**

Influent	12	0	0.324	0.392	mg/L
Effluent	12	0	0.347	0.435	mg/L
Biosolids	0	0	-	-	mg/kg Dry Wt

**Bromodichloromethane**

Influent	4	1	0.57	0.65	µg/L
Effluent	6	0	0.66	1.53	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Bromoform**

Influent	4	3	0.67	0.14	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Butyl benzyl phthalate**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Cadmium**

Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	12	All Non-Detect	-	mg/kg Dry Wt

**Carbon tetrachloride**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Chlordane**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Chlorobenzene**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Chloroethane**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	4	4	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Chloroform

Influent	4	0	4.5	6.7	µg/L
Effluent	6	0	1.7	2.2	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Chromium

Influent	12	0	0.0079	0.0141	mg/L
Effluent	4	2	0.0013	0.0023	mg/L
Biosolids	12	0	56.4	73.5	mg/kg Dry Wt

#### Chrysene

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Copper

Influent	12	0	0.116	0.239	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	0	653	791	mg/kg Dry Wt

#### Cyanide, Total (Cyanide samples are discrete samples. )

Influent	13	13	All Non-Detect	-	mg/L
Effluent	8	5	0.004	0.010	mg/L
Biosolids	4	1	2.82	3.37	mg/kg Dry Wt

#### Delta-BHC

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Dibenzo(a,h) anthracene

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Dibromochloromethane

Influent	4	3	0.52	0.39	µg/L
Effluent	6	3	0.25	0.69	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Dieldrin

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L

Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Diethyl phthalate</b>					
Influent	12	11	22.03	3.8	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Dimethyl phthalate</b>					
Influent	12	11	3.7	0.7	µg/L
Effluent	12	11	0.25	0.5	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Di-n-butyl phthalate</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Di-n-octyl phthalate</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Endosulfan sulfate</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Endrin</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	17	17	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Endrin aldehyde</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Ethylbenzene</b>					
Influent	4	2	0.56	0.6	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Fluoranthene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Fluorene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Fluoride (Non Priority Pollutant studied for Local Limits Monitoring)**

Influent	11	0	1.5	2.3	mg/L
Effluent	2	0	1.2	1.3	mg/L
Biosolids	0	0	-	-	mg/kg Dry Wt

**Gamma-BHC**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	17	17	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Heptachlor**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	17	17	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Heptachlor epoxide**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	17	17	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Hexachlorobenzene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Hexachlorobutadiene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt

**Hexachlorocyclopentadiene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Hexachloroethane**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Indeno (1,2,3-cd) pyrene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Isophorone

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Lead

Influent	12	6	0.0016	0.003	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	12	All Non-Detect	-	mg/kg Dry Wt

#### Mercury

Influent	12	10	0.00012	0.0002	mg/L
Effluent	4	0	1.32	1.5	ng/L
Biosolids	12	0	0.69	1.65	mg/kg Dry Wt

#### Methyl bromide (Bromomethane)

Influent	4	4	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Methyl chloride (Chloromethane)

Influent	4	4	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Methylene chloride (Dichloromethane)

Influent	4	2	2.5	2.6	mg/L
Effluent	6	5	0.35	0.25	mg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

#### Molybdenum (Non Priority Pollutant studied for Local Limits Monitoring)

Influent	12	0	0.0073	0.0107	mg/L
Effluent	5	0	0.0040	0.005	mg/L
Biosolids	12	8	15.5	26.7	mg/kg Dry Wt

#### Naphthalene

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	8	8	All Non-Detect	-	mg/kg Dry Wt

#### Nickel

Influent	12	0	0.009	0.011	mg/L
Effluent	4	0	0.005	0.006	mg/L

Biosolids	12	11	25.9	46.6	mg/kg Dry Wt
<b>Nitrobenzene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>N-nitrosodimethylamine</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>N-nitrosodi-n-propylamine</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>N-nitrosodiphenylamine</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Parachlorometa cresol (4-Chloro-3-methylphenol)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>PCB-1016 (Arochlor 1016)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>PCB-1221 (Arochlor 1221)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>PCB-1232 (Arochlor 1232)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>PCB-1242 (Arochlor 1242)</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt



**PCB-1248 (Arochlor 1248)**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**PCB-1254 (Arochlor 1254)**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**PCB-1260 (Arochlor 1260)**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Pentachlorophenol**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	14	14	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Phenanthrene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Phenol**

Influent	12	9	83	309	µg/L
Effluent	12	11	4.3	19.5	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Pyrene**

Influent	12	12	All Non-Detect	-	µg/L
Effluent	12	12	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt

**Selenium**

Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	0	7.7	8.1	mg/kg Dry Wt

**Silver**

Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	12	12	All Non-Detect	-	mg/kg Dry Wt

**Tetrachloroethylene**

Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Thallium</b>					
Influent	12	12	All Non-Detect	-	mg/L
Effluent	4	4	All Non-Detect	-	mg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Toluene</b>					
Influent	4	1	0.94	1.27	µg/L
Effluent	6	4	0.1	0.15	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Toxaphene</b>					
Influent	12	12	All Non-Detect	-	µg/L
Effluent	15	15	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Trichloroethylene (Trichloroethene)</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Vinyl chloride</b>					
Influent	4	4	All Non-Detect	-	µg/L
Effluent	6	6	All Non-Detect	-	µg/L
Biosolids	4	4	All Non-Detect	-	mg/kg Dry Wt
<b>Zinc</b>					
Influent	12	0	0.156	0.291	mg/L
Effluent	4	0	0.020	0.027	mg/L
Biosolids	12	0	901	1020	mg/kg Dry Wt

<sup>1</sup>Average calculations include non-detect values. Non-detect values were multiplied by 0.5. Due to varying laboratory reporting levels, the average can exceed the maximum in some cases. No average was calculated when all results were non-detects.

## Upset, Interference, and Pass Through

23rd Avenue Wastewater Treatment Plant AZPDES Permit No. AZ0020559  
91st Avenue Wastewater Treatment Plant NPDES Permit No. AZ0020524  
Cave Creek Water Reclamation Plant AZPDES Permit No. AZ0026727

The following is a discussion of Upset, Interference, or Pass-Through incidents, if any, which the Cities know or suspect, were caused by nondomestic users of the POTW system during the year ending December 31, 2024. If any incidents occurred, the reasons why, the corrective actions taken, and the nondomestic user(s) or industry sector(s) responsible are provided.

Additionally, a review of the applicable pollutant limits to determine whether any additional limitations, or changes to existing requirements may be necessary to prevent Interference, Pass Through or noncompliance with sludge disposal requirements is provided.

This information is required under Part II Section D.4.b. of the NPDES Permit and Part V Section B.4.b. as well as Part IV Section B.4 of the respective AZPDES Permits.

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Analytical results of effluent samples obtained during 2024 at the 23rd Avenue and 91st Avenue Wastewater Treatment Plants (WWTP) were compared against the federal definitions of Upset, Interference, and Pass Through.

The definition for **Upset** is found at 40 CFR 122.41(n):

*"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.*

The definition for **Interference** is found at 40 CFR 403.3(i):

*The term "interference" means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:*

- 1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and*
- 2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D or the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.*

The definition for **Pass-Through** is found at 40 CFR 403.3(n):

*The term "Pass-Through" means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).*

## **23rd Avenue WWTP**

Based upon these definitions, there were no violations due to incidents of upset, interference, or pass-through that were attributable to nondomestic users of the POTW at the 23<sup>rd</sup> Avenue WWTP during 2024.

There were multiple instances of pink, white, and black colored (slug loads) at the influent to the 23<sup>rd</sup> Avenue WWTP during 2024. One instance of a pink colored influent in January 2024 caused a decrease in dissolved oxygen at the plant aeration basins. The other instances did not result in an upset, interference, or pass-through of the plant. Emergency samples were collected and analyzed from the plant influent during the multiple slug load events. Wastewater Collections Staff assisted in the investigation of the pink influent by tracking the pink color in the City of Phoenix Collections System. The tracking of the pink color led to a business that is currently being investigated by the Industrial Pretreatment Program (IPP). The business specializes in recycling of a variety of plastic and aluminum containers that can contain liquids with dyes in them. The IPP staff issued a Cease-and-Desist Notice of Violation (NOV) and was instructed to no longer discharge liquids with dyes into the Collection System. At the time of discharge, the business was in the beginning stages of the permitting process.

There was one Aquifer Protection Permit (APP) exceedance observed during 2024 and provided here for information purposes only. In January, an exceedance of the Gross Beta parameter was observed at the Effluent Junction Box, Outfall 004. This resulted in an APP discharge limit exceedance. The Gross Beta investigation is currently ongoing, and a medical isotope has been identified as the source of exceedance. Excreta from individuals undergoing medical diagnosis or therapy with radioactive material are not subject to regulations. The isotopes identified have half-lives in the range of several hours to several weeks and do not pose a threat to human health or the environment. The City has continued to actively monitor and investigate up stream of the 91st Avenue WWTP for additional sources and has retained a contracted environmental consultant to assist in the gross beta investigation. The final report is expected in 2025.

## **91st Avenue WWTP**

Based upon these definitions, there were no violations due to incidents of upset, interference, or pass-through that were potentially attributable to nondomestic users of the POTW at the 91<sup>st</sup> Avenue Wastewater Treatment Plant (WWTP) during 2024.

There were three Aquifer Protection Permit (APP) exceedances observed during 2024 and are provided here for information purposes only. In April and October, an exceedance of the APP Alert Level limit for the Gross Beta parameter occurred at the FRW1 Influent to Tres Rios. The Gross Beta investigation is ongoing and is believed to be the result of naturally occurring nuclides from natural sources and short-lived nuclides used in nuclear medicine that

are common in wastewater from patients undergoing nuclear diagnosis. Excreta from individuals undergoing medical diagnosis or therapy with radioactive material are not subject to regulations. The isotopes identified have half-lives in the range of several hours to several weeks and do not pose a threat to human health or the environment. The City has continued to actively monitor and investigate up stream of the 91st Avenue WWTP for additional sources and has retained a contracted environmental consultant to assist in the gross beta investigation. The final report is expected in 2025.

In October, the City of Phoenix became aware of a Total Coliform exceedance at the 91st Avenue WWTP groundwater well (MW-M). The initial and verification total coliform results were above the Aquifer Quality Limit. Total coliforms may include bacteria that are found both in soil and vegetation; these coliforms are generally harmless. The E. Coli bacteria is considered to be a species of coliform bacteria that is the best indicator of fecal pollution and the possible presence of pathogens. The associated E. Coli results from October were non-detect at MW-M. Therefore, there was no threat to human health or the environment.

### **Cave Creek Water Reclamation Plant**

The Cave Creek Water Reclamation Plant was shut down for over ten years. In August of 2024 construction was started to upgrade and retrofit the facility for advanced water purification treatment. Construction will be completed in 2027 and bring the plant back into operation.

## **Review of Local Limits**

In 2002, the City retained a consultant to evaluate local limits. The consultant identified the pollutants of concern and the SROG cities participated in a local limits data collection sampling event in December 2002. The data was evaluated, and revised local limits were established. BMP development and implementation was recommended for five pollutants: beryllium, fluoride, molybdenum, selenium, and di(2-ethylhexyl) phthalate (DEHP). Each of the SROG Cities had their revised local limits approved, incorporated into the City ordinance, and accepted by City Council. The local limits changes and revised City ordinances were approved by ADEQ on December 10, 2004. The revised limits and city ordinance changes were effective January 1, 2005. Public meetings with target industries were held in March 2005 to communicate to industries and to obtain commitment from them to implement the BMPs in accordance with the May 2004 SROG Phase II Local Limits Final Report and the June 2005 SROG BMPs Technical Memorandum prepared for the SROG cities by Malcolm Pirnie an engineering and consulting firm.

The 91<sup>st</sup> Avenue WWTP NPDES Permit effective May 1, 2023 required a written technical evaluation of the need to revise local limits as part of the second annual pretreatment report required under Part II.D.4., due by February 19, 2025. In addition, the 23<sup>rd</sup> Avenue WWTP AZPDES Permit effective July 1, 2024 required an evaluation of the need to revise local limits under 40 C.F.R. section 403.5(c)(1) within 180 days following the effective date of this permit. In order to meet these requirements, the City retained a consultant to complete a written technical evaluation of the need to revise the local limits in 2024. The 91<sup>st</sup> Avenue report was completed and submitted on February 18, 2025, while the 23<sup>rd</sup> Avenue report was completed and submitted on December 26, 2024 to the U.S. Environmental Protection Agency and Arizona Department of

Environmental Quality. This 2024 review resulted in significant changes to the headworks analysis mass balance for the 91st Avenue and 23<sup>rd</sup> Avenue WWTP compared to the prior local limits study. All pollutants listed in the 91st Avenue WWTP and 23<sup>rd</sup> Avenue WWTP Aquifer Protection and NPDES/AZDPES permits were reviewed due to the significant changes since 2004. The significant headworks analysis changes include negative MAIL, potential over-allocation of pollutants, positive pollutant detection in the effluent, significant changes in the MAHL and MAIL compared to the prior local limits study, and several Pollutants Of Concern that exceed the prior local limits study screening criteria. The report recommended a full local limits study to refine the results of this review. A full local limits study should be conducted at 91st Avenue WWTP in conjunction with a local limits study at the 23rd Avenue WWTP as the service areas are interconnected. The City of Phoenix has provided a schedule to EPA and ADEQ for the local limits study implementation.

### **Permits Renewed and Amended**

Since 2002 when local limits were last developed, the following permits have been renewed or amended:

- 91st Avenue WWTP NPDES permit renewal became effective May 23, 2023, and is effective until April 30, 2028.
- 23rd Avenue WWTP AZPDES permit became effective July 1, 2024, and is effective until June 30, 2029.
- Cave Creek Water Reclamation Plant AZPDES permit became effective on December 2, 2024, and is effective until December 1, 2029.
- 91st Avenue WWTP Aquifer Protection Permit (APP) became effective on October 4, 2002, and was last amended on October 17, 2023.
- 23rd Avenue WWTP APP became effective on April 29, 1999, and was last amended on July 16, 2020.
- Cave Creek Water Reclamation Plant APP became effective on December 14, 1998, and was last amended on February 23, 2021.

Sub-Regional Operating Group,  
City of Phoenix  
Significant Non-Compliance  
Industrial User List Published in  
2024

# THE ARIZONA REPUBLIC

PO Box 194, Phoenix, Arizona 85001-0194  
Phone 1-602-444-7315 Fax 1-877-943-0443

STATE OF WISCONSIN

} SS.

AFFIDAVIT OF PUBLICATION

COUNTY OF BROWN

CITY OF PHOENIX  
200 W Washington St  
PHOENIX, AZ 85003

I, being first duly sworn, upon oath deposes and says: That I am the legal clerk of the Arizona Republic, a newspaper of general circulation in the counties of Maricopa, Coconino, Pima and Pinal, in the State of Arizona, published weekly at Phoenix, Arizona, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates indicated.

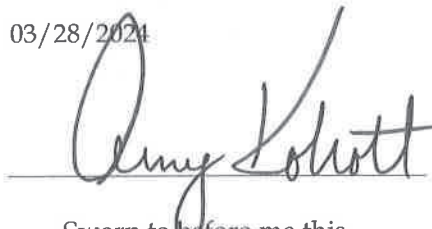
Publication: Arizona Republic

Ad number: GCI1139198

PO Field: Industrial Users - Log 13954

Published Date(s):

03/28/2024



Sworn to before me this

28<sup>th</sup> day of  
March, 2024



Notary Public  
My Commission Expires on 9/19/25

VICKY FELTY  
Notary Public  
State of Wisconsin



**Industrial Users In Significant Noncompliance with  
Applicable Pretreatment Requirements In 2023**

The Cities of Glendale, Mesa, Phoenix, Scottsdale, and Tempe, and the Town of Gilbert, Arizona<sup>1</sup> are responsible for implementing and operating industrial wastewater control (pretreatment) programs in each of their communities. Each program is designed to protect the wastewater treatment plants (POTW), the safety of personnel operating the wastewater collection system, and the environment from adverse impacts that could occur when toxic wastes are discharged into a wastewater collection system. Each municipality issues wastewater discharge permits to Significant<sup>2</sup> Industrial Users (Users) in their communities and the Users are responsible for ensuring that they comply with respective local ordinances and federal regulations.

In accordance with the Federal Clean Water Act and the public participation requirements of 40 CFR Part 25 in the enforcement of the National Pretreatment Standards as defined by 40 CFR 403.8(f)(2)(viii), the City of Phoenix<sup>1</sup>, Arizona is hereby publishing the following list of Users in Significant Noncompliance (SNC) with applicable pretreatment requirements. **This notice covers the period from January 1, 2023 through December 31, 2023.**

A Significant Industrial User, and in specific cases an Industrial User<sup>2</sup>, is in a state of SNC when violations meet one or more of the following:

- A. Chronic violations (CSNC) of wastewater discharge limits defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter.
- B. Technical Review Criteria violations (TRCSNC), defined here as those in which thirty-three percent or more of all of the measurements taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC= 1.4 for BOD, TSS, fats, oil and grease; and 1.2 for all other pollutants except pH).
- C. Any other violation of a pretreatment effluent limit (daily maximum or long term average) that the POTW determines has caused alone or in combination with other discharges interference or pass through (including endangering the health of POTW personnel or the general public);
- D. Any discharge of a pollutant that has caused imminent endangerment of human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority to halt or prevent such as discharge;
- E. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a permit or enforcement order for starting construction, completing construction, or attaining final compliance;
- F. Failure to provide within 30 (45<sup>2</sup>) days after the due date the required report such as a Baseline Monitoring Report, a 90 day compliance report, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- G. Failure to accurately report noncompliance; or
- H. Any other violation or group of violations, which the POTW determines will adversely affect the operation or implementation of the local pretreatment program.

**Public participation and cooperation are important to a successful industrial pretreatment program. If you have comments or witness a situation that you believe may involve an illegal discharge of pollutants or hazardous material into a municipality's sewer system, please immediately notify the appropriate municipality<sup>1</sup>: Gilbert (480) 503-6411, Glendale (623) 930-4758, Mesa (480) 644-2131, Phoenix (602) 495-5926, Scottsdale (480) 391-5687, or Tempe (480) 350-2678.**

Industrial User	Nature of Violation/ Type of Pollutant	Date Of Last Non-Compliance	Has User Returned to Compliant Status as of 12/31/2023?	Number of Times Published	Nature of Enforcement Action(s)	Nature of Enforcement Action(s) Comments
APS BioGroup, Inc.	Late Reporting – Self-Monitoring Report submitted 103 days late during 1 <sup>st</sup> Quarter	03/08/2023	Yes	3	Notice of Violation SNC Notification	A Show Cause Proceeding did not take place for this instance of SNC. A Pretreatment Settlement Agreement for a prior SNC occurrence went into effect in the 1 <sup>st</sup> Quarter of 2023.
Metal Finishing Solutions, Inc.	3 <sup>rd</sup> Quarter Chromium Monthly Average & Daily Maximum TRC & Chronic; 3 <sup>rd</sup> Quarter Zinc Monthly Average & Daily Chronic; 4 <sup>th</sup> Quarter Nickel Monthly Average TRC; & Late Reporting – 24-Hour Notification	01/31/2024	No	2	Notices of Violation Temporary Increase in Self-Monitoring (TISM) Show Cause Proceeding Monetary Penalty Pretreatment Settlement Agreement SNC Notifications Administrative Order	A Show Cause Proceeding took place during the 3 <sup>rd</sup> Quarter of 2023 followed by a Pretreatment Settlement Agreement imposing monetary penalties and a compliance schedule which was executed during the 3 <sup>rd</sup> Quarter. An Administrative Order imposing additional monetary penalties and a compliance schedule will be issued in the 1 <sup>st</sup> Quarter of 2024. Violations in addition to zinc, chromium, and nickel include late reporting, failure to sample, and a silver effluent violation.
United General Bakery, Inc. dba Upper Crust Bakery	Late Reporting – Self-Monitoring Report submitted 49 days late during 2 <sup>nd</sup> Quarter	04/21/2023	Yes	3	Notice of Violation SNC Notification Show Cause Proceeding Monetary Penalty Pretreatment Settlement Agreement	A Show Cause Proceeding took place during the 3 <sup>rd</sup> Quarter of 2023 following a prior Show Cause Proceeding that took place during the 1 <sup>st</sup> Quarter of 2023 for previous violations. A Pretreatment Settlement Agreement addressing both Show Cause Proceedings and imposing monetary penalties and a compliance schedule was executed during the 4 <sup>th</sup> Quarter of 2023. Additional violations include pH exceedances and permit condition violations.

<sup>1</sup>The Cities of Glendale, Mesa, Phoenix, Scottsdale, and Tempe, and the Town of Gilbert, Arizona maintain an agreement through the Sub-Regional Operating Group (SROG) to jointly own and operate the 91<sup>st</sup> Avenue Wastewater Treatment Plant (WWTP) and its interceptor systems. Each municipality will publish their own list of Users in SNC beginning with this annual publication.

<sup>2</sup>Phoenix City Code Chapter 28 was amended on October 7, 2020 to incorporate the October 14, 2005 updates to 40 CFR Part 403, resulting in a change to the definition of SNC, including applicability and reporting criteria.

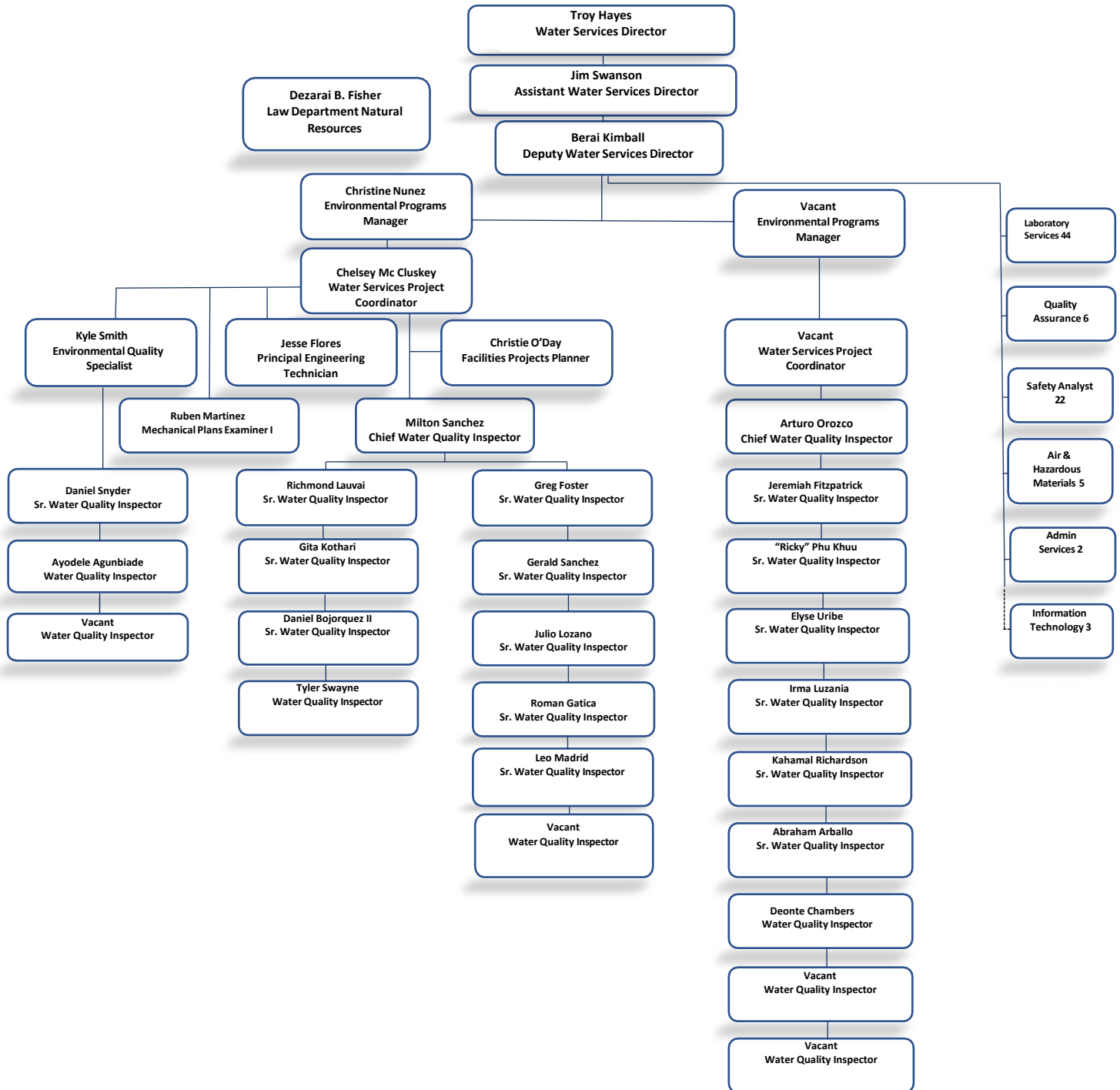
City of Phoenix  
Expenditures and Program  
Updates  
2024

# CITY OF PHOENIX

SUMMARY OF PRETREATMENT PROGRAM EXPENDITURES		
January 1, 2024 – December 31, 2024 – Total Pretreatment Expenditures    \$    4,381,610		
PRETREATMENT PROGRAM EXPENDITURES		
Personnel		\$2,855,384
Operations & Maintenance		\$315,274
Laboratory		\$1,210,953
Equipment		\$0
Vehicles		\$0
PRETREATMENT PROGRAM EQUIPMENT INVENTORY		
<u>Equipment Name</u>	<u>Purchased 2024</u>	<u>Total 2024</u>
Photo Ionization Detector	0	2
Flow Meters	0	26
Auto Samplers	0	34
Turbidimeters	0	3
pH/DO/Conductivity Meters	0	6
Chlorine Colorimeters	0	3
Air Movers	0	4
Confined Space Harnesses	0	7
Air/Gas Detectors	0	9
Cameras	0	7
Night Vision Cameras	0	1
Pole Cameras/GoPro	0	2
CCTV Sewer Camera	0	2
Computer Monitors (CH13)(C )(L0)	0	58
Computers (C9)(Ch1)(L0)	0	9
Printers	0	3
Tablets (L6)(Ch8)(C5)	0	23
PRETREATMENT PROGRAM VEHICLE INVENTORY		
<u>Equipment Name</u>	<u>Purchased 2024</u>	<u>Total 2024</u>
Sampling Passenger Vans	0	1
Sampling Pickups	0	1
Inspector Pickups	0	7
Inspector SUVs	1	1
Inspector Sedans	0	1
Sampling Vans	0	5
Vehicle Pool Sedans	0	5 (Pool) <sup>1</sup>
<sup>1</sup> Vehicle pool sedans (which are may occasionally be used for inspections of industrial facilities) are shared by all staff located on the 23rd Avenue WWTP.		

PRETREATMENT PROGRAM PERSONNEL		
<u>Title</u>	<u>FTEs 2023</u>	<u>FTEs 2024</u>
Deputy Water Services Director	1.0 <sup>3</sup>	1.0 <sup>3</sup>
Environmental Programs Manager	0.5 <sup>3</sup>	0.5 <sup>3</sup>
Water Services Project Coordinator	1.0	1.0
Assistant City Attorney IV	0.25 <sup>3</sup>	0.25 <sup>3</sup>
Mechanical Plans Examiner I	1.0	1.0
Environmental Quality Specialist	0.5	1.0
Water Services Projects Planner	1.0	1.0
Principal Engineering Technician	1.0	1.0
Chief Water Quality Inspectors	2.0	2.0
Senior Water Quality Inspectors	16.0	15.0
Water Quality Inspectors	3.0	3.0
Inspector Vacancies	2.0	4.0
Information Technology Application Programmer	0.25 <sup>3</sup>	0.25 <sup>3</sup>
III Information Technology Application	0.5 <sup>3</sup>	0.5 <sup>3</sup>
Programmer I Secretary II	0.25 <sup>3</sup>	0.25 <sup>3</sup>
<sup>3</sup> These positions dedicate time to other Water Department functions.		

CITY OF PHOENIX, WATER SERVICES DEPARTMENT, ENVIRONMENTAL & SAFETY DIVISION  
POLLUTION PREVENTION & PERMITTING 2024



## Pretreatment Program Changes

The City of Phoenix Industrial Pretreatment Program (Program) received initial Cross-Media Electronic Reporting Rule (CROMERR) approval on August 16, 2023 from the EPA confirming that the City of Phoenix GovOnline system is compliant with CROMERR. Furthermore, the Program notified ADEQ of the intent to use a Certified Off the Shelf solution on August 24, 2021 and received approval of the proposed modification on February 25, 2022. However, the Program changed databases in late 2024 and is in the process of submitting a new checklist for a different Certified Off the Shelf solution, SAMS, after discussion with the EPA. The Program intends to receive EPA-authorized program required submissions electronically from regulated facilities in lieu of paper submissions.

During 2024, the Program reorganized its administrative structure and staffing which was communicated to ADEQ and EPA during the PCI conducted in May 2024. The modifications to the pretreatment program were communicated to be non-substantial as 0.5 staff positions were added and no decreases were made. The Commercial Inspections/FOG and Industrial Pretreatment Program sections have been incorporated into a new overhead Pretreatment Program structure to allow for additional support and oversight. Several positions were modified, with one addition, to reflect higher level required skillsets, encompass additional duties or distribute workload appropriately.

## Pretreatment Program Activities

The Environmental & Safety Division within the Water Services Department is responsible for implementing the Program for the City of Phoenix. The Program continues to be organized into three sections: Wastewater Monitoring, Commercial Inspections/FOG, and the Industrial Pretreatment Program. An organizational chart is included in this report and appears on a page just after the Summary of Pretreatment Program Expenditures.

### ▪ **Wastewater Monitoring Section**

The Wastewater Monitoring Section collects wastewater, groundwater, and biosolids samples to support the following:

- NPDES and AZPDES Permit compliance for the City of Phoenix wastewater treatment plants
- Aquifer Protection Permit compliance for the City of Phoenix wastewater treatment plants and recharge facilities
- Industrial user permit compliance determination and enforcement
- Industrial user sewer rate recalculation (sewer billings)
- SROG Cities' sewer charges and compliance determination
- Special projects, studies, and emergency response.

Sampling crews frequently conduct sampling operations in hazardous locations such as confined spaces, streets where traffic conditions must be considered, and in the Salt and Gila Rivers. Sophisticated, computerized sampling and measuring equipment in addition to manual sample collection techniques are used to collect samples, which are then analyzed by the City's Water Services Laboratory.

### ▪ **Commercial Inspections / FOG Section**

The Commercial Inspections / Fats, Oils and Grease (FOG) Section inspects and enforces the City's sewer use ordinance at commercial/industrial facilities to support the following:

- Routine/educational inspections of pretreatment devices and systems to prevent POTW infrastructure damages; obstructions; Sanitary Sewer Overflows (SSOs); and WWTP upset, interference, and passthrough
- Complaint inspections
- Routine/educational stormwater inspections (in support of the City stormwater program)
- Construction inspections of pretreatment devices and compliance sampling points
- Investigation of potential illegal discharges
- Investigation of SSOs and sewer blockages

- FOG Pollution Prevention (P2) outreach to domestic users following SSOs in residential areas
- Referral of industries for permitting evaluation to the Industrial Pretreatment Section
- Implementation of the Dental Rule (Dental Office Point Source Category – 40 CFR Part 441).

Additionally, the section is responsible for examination of new and remodel commercial construction plans to determine the need for wastewater pretreatment and/or wastewater discharge permitting. A database is used by staff to systematically target geographic areas for preventative inspections, as well as to track pretreatment devices and enforcement history for a given facility.

***Commercial Inspections / FOG Section Metrics***

Routine/Educational Inspections	1500
Construction Inspections	197
SSO Investigations - Residential Areas (includes apartments)	35
SSO Investigations - Commercial/Industrial Areas	17
Routine/Educational Stormwater Inspections	1500
Notices of Violation	13
Plans Reviewed for Pretreatment	758

▪ ***Industrial Pretreatment Program Section***

The Industrial Pretreatment Program Section is responsible for the following:

- Inspections of permitted industrial users and potential permittees
- Routine/educational stormwater inspections (in support of the City stormwater program)
- Examination of industrial user construction plans with regard to industrial processes, pretreatment systems, and compliance sampling points
- Issuance of Wastewater Discharge Permits
- Evaluation of permitted industrial user compliance and file management
- Records retention
- Enforcement of permitted industrial users
- Periodic recalculation of industrial user sewer rates based on flow and loading
- Periodic revision of sewer use ordinances, standard operating procedures (SOPs), Civil Penalty Policy, and Enforcement Response Plan
- Pollution Prevention (P2) outreach to industrial and residential users
- Issuance of Temporary Discharge/Manhole Entry Permits
- Publication of industrial user escalated enforcement actions to enable public participation
- Annual publication of Significantly Noncompliant industrial users
- Coordination and writing of the Annual Report in conjunction with the SROG cities.

## Pollution Prevention Program

Part II Section D.4.h. of the National Pollutant Discharge Elimination System (NPDES) Permit № AZ0020524 including AZPDES Permits № AZ0020559 and № AZ0026727 requires the City of Phoenix (City) to submit a summary of activities to involve and inform the public of the Program. The Program includes Pollution Prevention (P2) outreach for controllable sources of pollutants within the service area of the 23rd and 91st Avenue Wastewater Treatment Plants (WWTPs) as well as the Cave Creek Water Reclamation Plant. In accordance with the City's "Implementation of Best Management Practices in the Service Area of the 23rd and 91st Avenue WWTPs Project Schedule", as revised on March 22, 1996, the City's efforts for the period January 1, 2024 through December 31, 2024 are summarized below.

▪ **General Community Outreach / Education**

**IPP and/or Commercial Staff participated in the following Community Outreach Events:**

Community Outreach Events			
Event	Organizer	Dates	Attendees
Doggie Street Festival	Jude Artenstein	01/27/2024	General Public
Chinese Cultural Week	Phoenix Chinese Week	02/02/2024 – 02/04/2024	General Public
Tres Rios Nature Festival	Tres Rios	02/24/2024 – 02/25/2024	General Public
2024 AZEHA Hybrid Spring Conference	Arizona Environmental Health Association (AZEHA)	03/06/2024 – 03/07/2024	Enviro. Health Professionals
'Slope Fest	East Sunnyslope Neighborhood Association & Block Watch	04/13/2024	General Public
602 Day	City of Phoenix Community & Economic Development Department	05/31/2024	General Public
Monsoon Safety Week	City of Phoenix Fire Department	06/12/2024	General Public
Monsoon Safety Week	City of Phoenix CIO	07/02/2024	General Public
Sunnyslope Community Center Trunk or Treat	City of Phoenix Parks & Recreation Department	10/19/2024	General Public
Nature Fest	City of Phoenix Office of Environmental Programs	10/19/2024	General Public
Arcadia Fall Festival	Arcadia Osborn Neighborhood Association	11/09/2024	General Public



Angeles del Barrio Event	Chicanos Por La Causa	12/07/2024	General Public
Christmas Tree Burn and Holiday Safety Media Event	City of Phoenix Fire Department	12/19/2024	General Public

▪ **Industrial Pretreatment Compliance Academy**

The Industrial Pretreatment Section continues to deliver the Industrial Pretreatment Compliance Academy it developed in 1995 to support a P2 education/outreach program directed at industrial and commercial facilities located in Phoenix. The Compliance Academy classes include a PowerPoint presentation, a reference handbook, and a laboratory tour. The presentation and handbook include P2 information and demonstrate ideas to specific industry sectors including metal finishers, hospitals, industrial laundries, etc. During 2024 all courses were presented in a virtual or hybrid in-person and webinar format with a .pdf booklet; class information and participation is noted below:

<b>Industrial Outreach Events: Industrial Pretreatment Compliance Academy</b>			
<b>Class Name</b>	<b>Place &amp; Date</b>	<b>Attendee Types</b>	<b>No of Attendees</b>
Wastewater Discharge Permit	Hybrid January 24, 2024	<ul style="list-style-type: none"> <li>▪ Industrial Permitted Users</li> <li>▪ Pretreatment Staff from other Municipalities</li> <li>▪ Staff from Arizona Department of Environmental Quality</li> <li>▪ Pretreatment Consulting Staff</li> </ul>	44
Wastewater Compliance Sampling	Hybrid March 27, 2024		43
Laboratory Analytical Issues	Hybrid May 22, 2024		36
Enforcement	Hybrid July 24, 2024		41
Pollution Prevention (P2)	Hybrid September 25, 2024		30

▪ **Social Media Posts**

The Water Services Department published multiple social media posts in 2024 with messaging related to Industrial Pretreatment as well as fats, oil and grease:

- Industrial Pretreatment Program Compliance Academy 2024 Class Schedule – January 19, 2024 (Facebook)
- Industrial Pretreatment Program Compliance Academy 2024 Classes – March 28, 2024 (Facebook, X)
- Industrial Pretreatment Program Compliance Academy Laboratory Analytical Class Advertisement – May 7, 2024 (Instagram)
- Industrial Pretreatment Program Compliance Academy Enforcement Class Advertisement – July 12, 2024 (Instagram, X)
- Industrial Pretreatment Program Compliance Academy Pollution Prevention Class Advertisement – September 16, 2024 (Instagram)
- Industrial Pretreatment Program Compliance Academy Pollution Prevention Class Advertisement – September 19, 2024 (LinkedIn, Facebook)
- Fats, oils, and grease best management practices on Thanksgiving – November 26, 2024 (Instagram)

- Fats, oils, and grease best management practices on Thanksgiving – November 27, 2024 (Instagram)
- Fats, oils, and grease best management practices – December 7, 2024 (Facebook, X, Instagram)
- Fats, oils, and grease best management practices – December 20, 2024 (Facebook, X, Instagram)
- Fats, oils, and grease best management practices during Christmas – December 24, 2024

▪ ***Water Cooler (Employee Newsletter)***

The Industrial Pretreatment Section and Commercial Inspections / FOG Section regularly contribute articles to the Water Cooler employee newsletter throughout the year in order to provide information on a variety of P2 topics. Specific topics and months include:

- Illegal Dumping – February 2024
- National Prescription Drug Take Back Day – March 2024
- Holiday Fats, Oils and Grease – December 2024

▪ ***Environmental & Safety Division Newsletter***

The Water Services Department, Environmental & Safety Division, continued to issue a biannual newsletter in April and November 2024. The April 2024 newsletter included information on the Industrial Pretreatment Compliance Academy as well as an article about preventing illegal dumping to the sewer or storm drain systems. Also, the November 2024 newsletter included information on fats, oils and grease messaging related to the holidays. Finally, both editions included information on environmental programs.

▪ ***Point Source Control***

- The Industrial Pretreatment Program Section actively identifies, by SIC code, categorical classification, industry practices, Safety Data Sheet review, plan review, and other existing data, those businesses located in Phoenix that were likely to use the pollutants so that onsite inspections and wastestream sampling could be conducted to determine (1) whether or not they actually used the pollutants; (2) whether or not the pollutants are actually discharged to the WWTPs and at what levels and (3) the feasibility and benefit of implementing BMPs at businesses which discharge measurable levels of pollutants of concern. Meetings with the industrial groups and annual site inspections continue to reinforce BMP practices.
- Best Management Practices (BMPs) continue to be implemented on four pollutants. These pollutants are Fluoride, Molybdenum, Selenium, and DEHP. On January 1, 2005, the SROG cities adopted and implemented revised local limits. During the local limits review process, these four pollutants were identified as candidates for BMPs. The City determined the target industries which discharge these pollutants and identified opportunities for their reduction through the control document (Permit), inspections, and the IPP Compliance Academy.
- Class B Wastewater Discharge Permits continue to be issued for special dischargers. Industrial users that do not meet the definition of an SIU, but discharge high strength BOD/TSS wastewater, remediated groundwater, or pollutants of concern (conventional pollutants) are issued Class B Wastewater Discharge Permits. Through the end of 2024, the Industrial Pretreatment Section inspected 18 Class B Permittees.

- Class C Wastewater Discharge Permits continue to replace the Class B Zero Categorical Wastewater Discharge Permit. This permit type was issued beginning in 2021 to industrial users who meet the definition of a non-significant categorical industrial user (NSCIU). They include industrial users who perform manufacturing or service processes from one of the federal point source categories but do not discharge wastewater generated from those processes. Through the end of 2024, the Industrial Pretreatment Section inspected 51 Class B Zero and/or C Permittees. The City is in the process of recategorizing 4 of these facilities to Class A Significant Industrial User Permits with a discharge prohibition due to categorical pretreatment standards prohibiting discharge for 40 CFR Part 446 and 455 facilities.

## **Training and Participation in Conferences and Workshops**

### **▪ *Individual Training:***

WSD/ESD Staff continue to enhance professional growth by enrolling in courses from various educational and training resources. To broaden their education, some inspectors take self-study courses through American Water College and obtain certifications through ADEQ. Operator Certifications include Water Distribution, Water Treatment, Wastewater Collection, and Wastewater Treatment.

On March 6-7, 2024, staff attended, volunteered, and provided outreach at the Arizona Environmental Health Association (AZEHA) 2024 Spring Conference. The conference provides a forum for environmental health professionals to network, learn and discuss the latest topics including drinking water and wastewater as well as food safety and pest management. Staff sponsored a booth and provided outreach on fats, oils and grease (FOG) as well as grey water disposal for mobile food trucks, sanitary sewer overflow prevention and stormwater management.

### **▪ *Group Training:***

On February 1, 2024, staff attended and hosted the in-person Pollution Prevention and Resource Center (PPRC) and Western States Alliance technical training workshop covering FOG abatement for new and existing programs, and dealing with emerging pollutants like PFAS/PFOS. Attendees included regulators from other municipalities and organizations.

On April 23-25, 2024, staff attended and presented at the AZ Water Annual Conference & Exhibition hosted in-person at the Phoenix Convention Center. The three-day program provides professional development, continuing education, and technology transfer to support the vision of “a vibrant Arizona through resilient, reliable and safe water.” The event attracts over 3,000 attendees from throughout the state and nation. Staff learned about a variety of topics during the Conference & Exhibition including: case studies, regulatory updates, reuse, resource planning, drought, wastewater treatment, stormwater topics, conservation, energy, and more.

On November 5-6, 2024, staff attended, volunteered and presented at the AZ Water Pretreatment/FOG Workshop held at the Desert Willow Conference Center and hosted by the AZ Water Pretreatment Committee. The workshop helps to inform, educate, and train water and wastewater professional technicians, regulatory inspectors, managers, policymakers, and others on the latest developments in wastewater, (industrial) pretreatment and FOG program management. Topics of discussion and education included starting a FOG program, FOG inspections, local limits, sample collection, industrial user inspections, pretreatment plans review, wastewater treatment, regulatory updates and more.

## Other Activities

### ▪ ***Coordination with Other Pretreatment Programs***

Phoenix continued to provide counsel and guidance to the Pretreatment Programs of the contributing jurisdictions and Programs throughout the state during 2024. Multi-city coordination for purposes of encouraging compliance with federal requirements and consistency of implementation was accomplished through periodic multi-city meetings attended by representatives from each Program, as well as through periodic meetings with individual Program staff.

Phoenix personnel along with members from the other SROG cities continue the monthly sampling program at all 14 Metering Stations. This sampling program provides representative information about the quality of wastewater discharged to the 91st Avenue WWTP.

### ▪ ***Enforcement Activities to Involve and Inform the Public***

In addition to publication of Industrial Users having a status of Significant Noncompliance during the reporting year, the City used several types of legal instruments designed to bring industrial users back into compliance. The City continued to conduct Show Cause Meetings and to collect monetary penalties from industrial users which violated pretreatment requirements during the year. A summary of these enforcement activities which identify the permittees, the nature of the violations, published Pretreatment Settlement Agreements, and any monetary penalties associated with those actions is included in the attached spreadsheets.

### ▪ ***NEFAP Accreditation***

The City of Phoenix Environmental & Safety Division achieved ISO/IEC 17025:2005 International Standard and the Field Sampling and Measurement Organizations (FSMO) Accreditation. The Certificate of Accreditation includes demonstration of technical competence in the fields defined by the Divisions scope of sampling and field tests. The Water and Wastewater Monitoring groups are one of eleven having this accreditation in the United States and the only accredited entities in Arizona.