# City of Phoenix

## Sanitary Sewer Discharge Prohibitions & Limitations*

| SUBSTANCE NAME | LIMIT VALUE | LIMIT UNIT | PCC CH. 28 SECTION[0] | LIMIT SET TYPE |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | 1550 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,1,2-Trichloroethane | 1150 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,1-Dichloroethane | 1685 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| 1,1-Dichloroethylene | 3 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,2,4-Trichlorobenzene | 390 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,2-Dichlorobenzene | 3750 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,2-Dichloroethane | 168 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| 1,2-Dichloroethylene | 85000 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| *trans* -1,2-Dichloroethylene | 14000 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| 1,2-Dichloropropane | 3620 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,3-Dichlorobenzene | 90000 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| 1,3-Dichloropropane | 80 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 1,4-Dichlorobenzene | 3550 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 2,4,5-TP (Silvex) | 1000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 2,4,5-Trichlorophenol | 400000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 2,4,6-Trichlorophenol | 2000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 2,4-D | 10000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 2,4-Dinitrotoluene | 130 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 2-Methyl-4,6-Dinitrophenol | 10780 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| 3-Methylphenol | 200000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| 4,4'-DDE | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| 4,4'-DDT | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| a-BHC | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Acrolein | 47 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| Acrylonitrile | 1190 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Aldrin | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Arsenic | 0.13 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Barium | 100.0 | mg/L | 28-8(k) | TCLP Limit Set[6] |
| b-BHC | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Benzene | 35 | µg/L | 28-8(l) | Local Limits-2005 Phoenix & SROG Cities |
| Bis(2-chloroethyl)ether | 140 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Bromoethane | 4700 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| Bromoform | 0.5 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Cadmium | 0.047 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Carbon Disulfide | 60 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Carbon Tetrachloride | 11 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| Chlordane | 30 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Chlorobenzene | 2290 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| Chloroethane | 1600 | µg/L | 28-8(b) & (d) | Explosivity- Discharge Limit Set[3] & GVT Limit Set[4] |
| Chloroform | 2000 | µg/L | 28-8(l) | Local Limits-2005 Phoenix & SROG Cities |
| Chloromethane | 1100 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| Chromium | 5.0 | mg/L | 28-8(k) | TCLP Limit Set[6] |
| Copper | 1.5 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Cyanide | 2.0 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Dichlorodifluoromethane | 40 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Dieldrin | 13000 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Diethylhexylphthalate | BMPs (76) | µg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities[1] |
| Endrin | 20 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Ethylbenzene | 1590 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |

# City of Phoenix

# Sanitary Sewer Discharge Prohibitions & Limitations*

| SUBSTANCE NAME | LIMIT VALUE | LIMIT UNIT | PCC CH. 28 SECTION[0] | LIMIT SET TYPE |
|---|---|---|---|---|
| Flash Point | 60 | Deg. C | 28-8(b) | Local Limits-2005 Phoenix & SROG Cities |
| Fluoride | BMPs (33.0) | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities[1] |
| Formaldehyde | 60 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| g-BHC (Lindane) | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Heptachlor | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Heptachlor epoxide | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Hexachlorobenzene | 130 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Hexachlorobutadiene | 0.2 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Hexachlorocyclopentadiene | 658000 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Hexachloroethane | 930 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Lead | 0.41 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| m & p-Cresol | 200000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Mercury | 0.0023 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Methoxychlor | 10000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Methyl bromide | 2 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Methyl chloride | 60 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Methyl ethyl ketone | 200000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Methyl isobutyl ketone | 101000 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Methylene chloride | 2060 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Molybdenum | BMPs (0.38) | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities[1] |
| Naphthalene | 2650 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Nitrobenzene | 2000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| o-Cresol | 200000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| PCBs (Total) | 0.0 | µg/L | 28-8(m) | Prohibited Substances Limit Set |
| Pentachlorophenol | 100000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| pH - Maximum | ≤ 10.5 | SU | 28-8(e) | Local Limits-2005 Phoenix & SROG Cities |
| pH - Minimum | ≥ 5.0 | SU | 28-8(e) | Local Limits-2005 Phoenix & SROG Cities |
| Pyridine | 5000 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Selenium | 0.10 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Silver | 1.2 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Sulfide, Total | 2 | mg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Temperature | 66 | Deg. C | 28-8(f) | Local Limits-2005 Phoenix & SROG Cities |
| Tetrachloroethane | 1847 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| Tetrachloroethylene | 0.0 | µg/L | 28-8(j) | Pervasive Pollutant[7] |
| Toluene | 1360 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Toxaphene | 500 | µg/L | 28-8(k) | TCLP Limit Set[6] |
| Trichloroethylene | 26 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Screening Limit Set[5] |
| Trichlorofluoromethane | 1230 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Vinyl chloride | 0.3 | µg/L | 28-8(d) | Gas Vapor Toxicity (GVT) - Discharge Limit Set[4] |
| Vinylidene chloride | 3300 | µg/L | 28-8(b) | Explosivity- Discharge Limit Set[3] |
| Zinc | 3.5 | mg/L | 28-45(b) | Local Limits-2005 Phoenix & SROG Cities |
| Federal Point Source Category Limit Sets specified in the Code of Federal Regulations Title 40 → Chapter I → Subchapter N→ Parts 405 through 471 | | | 28-8(h) | Federal Point Source Category Limit Sets specified in the Code of Federal Regulations Title 40 → Chapter I → Subchapter N→ Parts 405 through 471 |

# City of Phoenix

# Sanitary Sewer Discharge Prohibitions & Limitations*

* Where available, quantified limits using the sources below have been listed for the narrative prohibitions and limiitations detailed in Phoenix City Code Chapter 28. The most stringent of the available limits are used for compliance determination. Please see Phoenix City Code Chapter 28 for additional narrative prohibitions and limitations, e.g., stormwater, solid/viscous pollutants, fats-oils-grease, radioactive pollutants, gas/vapor toxic pollutants, dilution of waters or wastes, hazardous wastes, hauled wastes, etc. There currently are no Local Limits for BOD, COD, and TSS; however, specific industries can be limited for these parameters on a case by case basis should discharges exceed the rated treatment capacity or interfere with the POTW or WWTP operations. In February 2005 the Sub-regional Operating Group (SROG) cities adopted Local Limits implementation of Best Management Practices (BMPs) for Fluoride, Molybdenum, Selenium, and DEHP either in lieu of establishing a Local Limit or in addition to the Local Limit (as is the case for Selenium). The goal is to establish SROG-wide BMPs to prevent the increase and/or reduce the current influent loadings into the wastewater treatment plants to minimize the risk of effluent or biosolids violations, while allowing industrial growth. If BMPs are not successful, numerical limits will be established when Local Limits are recalculated.

**SOURCES**

0 Phoenix City Code Chapter 28 - Sewers

1 Target Local Limit - Best Management Practices (BMPs) were established in lieu of establishing the calculated Local Limit. See Final Report 2004 Local Limits Update SROG Phase II Local Limits Assistance, Malcom Pirnie Inc.

2 Local Limits Development Guidance Appendix I - Discharge Screening Levels Based on Explosivity

3 Table C-1 of EPA's Guidance to Protect POTW Workers From Toxic and Reactive Gases and Vapors, screening levels based on gas/vapors toxicity and explosivity. June 1992

4 Tables 4-2 and B-1 of EPA's Guidance to Protect POTW Workers From Toxic and Reactive Gases and Vapors, screening levels based on gas/vapors toxicity and explosivity. June 1992

5 Local Limits Development Guidance Appendix I - Discharge Screening Levels Based on Fume Toxicity

6 Toxicity Characteristic Leaching Procedure (TCLP) Limits from 40 CFR 261.24 Table 1—Maximum Concentration of Contaminants for the Toxicity Characteristic

7 Pervasive Pollutant: No allowable amount from CERCLA or WQARF remediation sites into the POTW due to possible vapor intrusion through clay pipes.[8]

8 EXERPT from Guide to Discharging CERCLA Aqueous Wastes to Publicly Owned Treatment Works (POTWs)
*There also may be liability issues associated with a POTW's accepting Superfund wastes. Section 107 of CERCLA states that whenever there is a release or a threatened release of a hazardous substance, the responsible parties can be held liable for the costs of cleanup of that release. Potentially responsible parties (PRPs) include current owners and operators of the facility, those who owned and operated the facility at the time of the release, persons who transported the substances and selected the disposal facility, the generators of the waste, and the persons who arranged for disposal or treatment of the hazardous substances. Under CERCLA Section 107(j), federally permitted releases as defined in Section 101 (10) are not subject to such liabilities. These releases include discharges covered by an NPDES permit, permit application, or permit administrative record. These releases also include the introduction of any pollutant into a POTW when such pollutant is specified in (and in compliance with) pretreatment standards, and a pretreatment program has been submitted to EPA for approval. Therefore, local limits should be established for all of the pollutants that exist in the CERCLA wastewater to eliminate the possibility of the POTW's being held liable for the release of hazardous wastes.*
http://www.epa.gov/superfund/policy/remedy/pdfs/93-30213fs-s.pdf