JOHN COOPER MAYOR

METROPOLITAN GOVERNME

**WLLE AND DAVIDSON COUNTY** 

DEPARTMENT OF WATER AND SEWERAGE SERVICES Operations Division – Environmental Compliance 1360 County Hospital Road NASHVILLE, TENNESSEE 37218

**Operational Division Policy No. 2008 - 01** 

## **Metro Water Services Industrial Pretreatment Program Local Limits and** Wastewater Treatment Plant Protection Criteria Policy

Filed with Metropolitan Clerk November 13, 2019 Copy on file

## **RATIONALE:**

- 1. MWS is required by the Tennessee Department of Environment & Conservation and by Title 40 of the Code of Federal *Regulations* (CFR), specifically 403.5(c) & (d), to develop industrial user local limits, and to continue to develop those limits as necessary to meet the federal and state pretreatment regulations.
- The MWS Local Limits and Wastewater Treatment Plant Protection Criteria Policy must be technically reviewed 2. periodically, and may be modified by MWS, due to either changes in the State of Tennessee regulations, changes in the U.S. EPA regulations or CFR, changes to the wastewater treatment plant effluent standards, changes in receiving stream water quality standards, changes in the industrial wastewater contributions or characteristics to a wastewater treatment plant, or changes in the operation of the wastewater treatment plant.
- 3. Metro Code of Laws 15.60.070- Wastewater pollutants-Maximum concentration references this policy in that no person or user shall discharge wastewater in excess of the concentration limits set forth in this policy.
- Metro Code of Laws 15.60.090- Treatment plant influent pollutants-Maximum concentration references this policy in that no 4. person or user shall discharge wastewater that will cause the influent concentration at any Metro Wastewater Treatment Plant to exceed the pollutant levels identified by this policy.

#### **RECOMMENDATION:**

- 1 MWS will implement the Industrial Pretreatment Program Local Limits and Wastewater Treatment Plant Protection Criteria Policy as part of its industrial pretreatment program.
- This policy will be official documentation of the industrial user local limits and wastewater treatment plant protection criteria 2. referenced in the Metro Code of Laws 15.60.070 and 15.60.090.

#### Policy:

1. The attached Industrial Pretreatment Program Local Limits and Wastewater Treatment Plant Protection Criteria Policy are adopted for Metro Water Services.



If you need assistance or an accommodation, please contact Metro Water Services, at 615-862-4862, 1600 Second Avenue North, Nashville, Tennessee 37208.

## <u>PART I</u>

# A. WASTEWATER POLLUTANTS – MAXIMUM CONCENTRATIONS

No person or user shall discharge wastewater in excess of the concentration set forth in TABLE A below unless: (1) an exception has been granted to the user under the provisions of *Ordinance Number BL-2010-678* or (2) the wastewater discharge permit of the user provides, as a special permit condition, higher interim concentration level in conjunction with the requirement that the user construct a pretreatment facility or institute changes in the operation and maintenance procedures to reduce the concentration of pollutants to levels not exceeding the standards set forth in the table within a fixed period of time.

# (1.) TABLE A

All pollutant concentration limits are expressed as milligrams per liter (mg/L), with the exception of pH

<u>Pollutant</u>	24 Hour Flow Proportional* Concentration Limit (mg/L) {Daily Maximum}	Comments (see page 3)	Grab Sample Limits <u>(mg/L)</u>
Biochemical Oxygen Demand Suspended Solids Oil & Grease Ammonia Arsenic Cadmium Chromium, VI Copper Lead Mercury Molybdenum Nickel Selenium Silver Zinc	Not Applicable Not Applicable 300 1.0 0.253 3.5 2.2 5.0 1.5 0.0055 1.4 5.0 1.0 0.065 5.0	*1 *1 *1 *2 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5 *5	Not Applicable Not Applicable Not Applicable 600.0 2.0 0.506 7.0 4.4 10.0 3.0 0.011 2.8 10.0 2.0 0.13 10.0
<u>Parameter</u> pH Cyanide	Not Applicable Not Applicable	*4 *5	Grab Sample Limit (mg/L) 5.0-10.0 2.0
Toluene Benzene 1,1,1 Trichloroethane Ethylbenzene Carbon Tetrachloride Chloroform Tetrachloroethylene	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	*5 *5 *5 *5 *5 *5 *5	0.82 0.27 3.81 0.53 0.35 4.76 2.30
Trichloroethylene 1,2 trans dichloroethylene Methylene Chloride Total Phenol Naphthalene Total Phthalates Xylene Hydrogen Sulfide	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable	*5 *5 *5 *5 *3,5 *5 *5	1.72 0.069 2.02 3.05 0.069 5.41 0.27 0.50



(2)

If you need assistance or an accommodation, please contact Metro Water Services, at 615-862-4862, 1600 Second Avenue North, Nashville, Tennessee 37208.

Comments:

\*Metro Water Services may allow a 24-hour timed composite to be collected

\*1: The surcharge threshold for Biochemical Oxygen Demand is 300 mg/L and 325 mg/L for Suspended Solids for a composite sample. The surcharge threshold is 100 mg/L for Oil & Grease grab sample. A maximum limit for these compatible pollutants may be established by Metro.

\*2: The surcharge threshold for Ammonia is 30 mg/L, with a maximum limit of 300 mg/L.

\*3: Total Phthalates is the sum of bis (2-ethylhexyl) phthalate, benzyl butyl phthalate, di-n-butyl phthalate and diethyl phthalate.

\*4: pH is expressed in Standard Units (S.U.). Any time the pH is outside the 5.0 to 10.0 range it is considered a violation unless a specific variance is granted by Metro Water Services. Samples must be a grab sample that is tested within fifteen (15) minutes of collection.

\*5: Local Limit.

## (a.) Any discharge of the following compounds or materials is prohibited (\*1):

- (I.) Polychlorinated Biphenyls (PCBs)
- (II.) Herbicides and Pesticides, including, but not limited to:

Heptachlor epoxide
Hexachlorocyclo-hexane
Hexachlorocyclopentadiene
Lindane
Methoxychlor
Mirex
Tetrachlorodiphenylethane (TDE)
Toxaphene
Parathion
4,4-DDD
4,4-DDE
4,4-DDT

(III.) Organic compounds that include:

Acetone	Phenanthrene
Dioxin (TCDD)	2-butanone (MEK)
Hexane	4-methyl-2-pentanone (MIBK)

(b.) No Person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public, or private sewer, or treatment works in a quantity that will cause acute or chronic worker health and safety problems, or danger to the life and health of the public; or will cause Any impact to the Metro sewer collection system or any Metro Wastewater Treatment Plant. Organic pollutants subject to this restriction include but are not limited to: Any organic compound listed in 40 Code of Federal Regulations 433.11(e) – Total Toxic Organics (TTO) list.

(\*1) "Prohibited" means that these compounds shall not be discharged to the POTW. Any wastewater sample that detects these compounds will be considered a violation of the Metro Water Services' Local Limits



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## TABLE B

## Metro Water Services Wastewater Treatment Plant Protection Criteria

Influent Limits for each WWTP are expressed in mg/L.

CentralWhites CreekDry CreekWWTPWWTPWWTP24 Hour Flow24 Hour Flow24 Hour FlowProportionalProportionalProportionalCompositeSample LimitSample LimitSample Limit(mg/L)*(mg/L)*Ammonia33.333.0Arsenic (As)0.100.054Chromium, Total (Cr)0.3330.167Chromium, Total (Cr)0.3200.325Copper0.3200.325Copper0.120.11Mercury (Hg)0.00100.0010Molybdenum (Mo)0.2560.055Nickel (Ni)0.3100.183Silver (Ag)0.0150.008Outs0.0150.008Outs0.0150.008Outs0.0150.008Outs0.0150.008Outs0.0150.008
24 Hour Flow Proportional Composite24 Hour Flow Proportional Composite24 Hour Flow Proportional CompositePollutantComposite Sample Limit (mg/L)*Composite Sample Limit (mg/L)*Composite Sample Limit (mg/L)*Ammonia33.333.033.0Arsenic (As)0.100.0540.10Cadmium (Cd)0.0120.0110.015Chromium, Total (Cr)0.3330.1670.191Chromium, VI0.0590.0590.059Copper0.3200.3250.490Lead (Pb)0.120.120.12Mercury (Hg)0.00100.00100.0005Molybdenum (Mo)0.2560.0550.176Nickel (Ni)0.3100.1830.310Selenium (Se)0.0150.0080.008
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Composite Sample Limit (mg/L)* Composite Sample Limit (mg/L)* Composite Sample Limit (mg/L)* Composite Sample Limit (mg/L)*   Ammonia 33.3 33.0 33.0   Arsenic (As) 0.10 0.054 0.10   Cadmium (Cd) 0.012 0.011 0.015   Chromium, Total (Cr) 0.333 0.167 0.191   Chromium, VI 0.059 0.059 0.059   Copper 0.320 0.325 0.490   Lead (Pb) 0.12 0.12 0.12   Mercury (Hg) 0.0010 0.0010 0.0005   Molybdenum (Mo) 0.256 0.055 0.176   Nickel (Ni) 0.538 0.422 0.435   Silver (Ag) 0.015 0.008 0.008
Sample Limit (mg/L)* Sample Limit (mg/L)* Sample Limit (mg/L)* Sample Limit (mg/L)*   Ammonia 33.3 33.0 33.0   Arsenic (As) 0.10 0.054 0.10   Cadmium (Cd) 0.012 0.011 0.015   Chromium, Total (Cr) 0.333 0.167 0.191   Chromium, VI 0.059 0.059 0.059   Copper 0.320 0.325 0.490   Lead (Pb) 0.12 0.12 0.12   Mercury (Hg) 0.0010 0.0010 0.0005   Molybdenum (Mo) 0.256 0.055 0.176   Nickel (Ni) 0.310 0.183 0.310   Selenium (Se) 0.538 0.422 0.435   Silver (Ag) 0.015 0.008 0.008
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Zinc (Zn) 0.50 0.48 0.50
Grab Sample Grab Sample Limit Grab Sample
Pollutant Limit (mg/L) (mg/L) Limit (mg/L)
Naphthalene 0.005 0.005
Total phthalates *1 0.230 0.219 0.230
Cyanide 0.064 0.060 0.324
Toluene 0.036 0.063 0.081
Benzene 0.015 0.015 0.015
1,1,1 Trichloroethane 0.200 0.200 0.200
Ethylbenzene 0.029 0.029 0.029
Carbon Tetrachloride 0.021 0.039 0.019
Chloroform 0.258 0.258 0.258
Tetrachloroethylene 0.125 0.125 0.125
Trichloroethylene 0.091 0.091 0.091
1,2 trans dichloroethylene 0.005 0.005 0.005
Methylene chloride 0.132 0.132 0.132
Total Phenol 0.258 0.190 0.163
Xylene 0.015 0.015 0.015
Hydrogen sulfide 0.5 0.5 0.5

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\*1: Total Phthalates is the sum of bis(2-ethylhexyl)phthalate, benzyl butyl phthalate, di-n-butyl phthalate, & diethyl phthalate.



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