

THE CITY OF CRANSTON

**ORDINANCE OF THE CITY COUNCIL**

**IN AMENDMENT OF CHAPTER 13.08 OF THE CITY OF CRANSTON, 2005, ENTITLED  
'PUBLIC SERVICES (Sewer Services System)'**

**No. 2021-17**

***Passed:***  
**July 26, 2021**

*/s/ Christopher G. Paplauskas, Council President*

***Approved:***  
**July 30, 2021**

*/s/ Kenneth J. Hopkins, Mayor*

***It is ordained by the City Council of the City of Cranston as follows:***

**Section 1. Chapter 13** is hereby amended as follows:

13.08.260 - Restrictions on kinds of wastes.

- A. No person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewers:
1. Pollutants which create a fire or explosive hazard in the POTW including, but not limited to waste streams with a closed-cup flash point of less than one hundred forty (140) degrees Fahrenheit (sixty (60) degrees Celsius) using test methods specified in 40 CFR 261.21.
  2. Any waters or wastes containing toxic or poisonous solids, liquids or gases in sufficient quantity, either singly or by interaction with other wastes, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a public nuisance or create any hazard in the receiving waters of the wastewater facilities.
  3. Any waters or wastes having a pH lower than 5.5 or greater than 10.5, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the wastewater facilities.
  4. Solid or viscous substances in quantities or of such size capable of causing obstruction to the flow in sewers, or other interference with the proper operation of the wastewater facilities such as, but not limited to, hypodermic needles, ash, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, unground garbage, whole

blood, paunch manure, hair and fleshings, entrails, paper dishes and cups, milk containers, etc., either whole or ground by garbage grinders.

5. Wastewaters whose theoretical equilibrium fume concentration exceeds limits of explosivity or fume toxicity based on criteria and procedures for determining flammability, TLV-TWA fume toxicity limits, and combined effects (synergism), as given in latest publications of the ACGIH and where necessary, supplementary scientific information.

6. Medical wastes, except as specifically authorized by the director in a discharge permit.

B. No person shall discharge or cause to be discharged the following described substances, materials, waters, or wastes if it appears likely in the opinion of the director that such wastes can harm either the sewers, wastewater treatment process, or equipment, have an adverse effect on the receiving stream, or can otherwise endanger life, limb, public property or constitute a nuisance. In forming his or her opinion as the acceptability of these wastes, the director will give consideration to such factors as the quantities of subject wastes in relation to flows and velocities in sewers, materials of construction of the sewers, nature of the wastewater treatment process capacity of the wastewater treatment works, degree of treatability of wastes in the wastewater treatment works, and other pertinent factors. The substances prohibited are:

1. Any liquid or vapor having a temperature higher than one hundred fifty (150) degrees Fahrenheit (65.9 degrees Celsius) or contributing to a treatment plant influent temperature above one hundred four (104) degrees Fahrenheit (forty (40) degrees Celsius).

2. Any water or waste containing (more than one hundred (100) milligrams per liter, (mg/l) of oil or grease of animal or vegetable origin, containing more than twenty five (25) mg/l of oil or grease of mineral or petroleum origin or containing) substances which may solidify or become viscous at temperatures between thirty-two (32) and one hundred fifty (150) degrees Fahrenheit (0 and 65.9 degrees Celsius).

3. Any waters or wastes containing strong acid iron pickling wastes, or concentrated plating solutions whether neutralized or not.

4. Any waters or wastes containing objectionable or toxic substances, or wastes exerting an excessive chlorine requirement, to such degree that any such discharge exceeds limits established by this chapter at the point of discharge into the public sewer.

5. Any waters or wastes containing phenols or other taste or odor producing substances, in such concentrations exceeding limits which may be established by this chapter as necessary, to meet the requirements of state, federal or other public agencies.

6. Any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by this chapter in compliance with applicable state or federal regulations.

(7. Any waters or wastes having a pH in excess of 10.5)

(8) 7. Materials which exert or cause:

- a. Unusual concentrations of inert suspended solids (such as, but not limited to, fuller's earth, lime slurries, and lime residues) or of dissolved solids (such as, but not limited to, sodium chloride and sodium sulfate).
  - b. Excessive discoloration (such as, but not limited to, dye wastes and vegetable tanning solutions).
  - c. Unusual BOD, CBOD<sub>5</sub>, chemical oxygen demand, nitrogen compounds, phosphorus or chlorine requirements in such quantities as to constitute a significant load on the wastewater treatment works.
  - d. Unusual volume of flow or concentration of wastes constituting "slugs" as defined herein.
  - e. Excessive flows containing any of the above listed constituents and/or constituents which may cause or contribute to POTW interference.
  - f. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test.
- (9)8. Waters or wastes containing substances which are not amenable to treatment or reduction by the wastewater treatment process employed, or are amenable to treatment only to such degree that the wastewater treatment works effluent cannot meet the requirements of state, federal or other agencies having jurisdiction over discharge to the receiving waters.
- (10)9. Waters or wastes that may interfere with any of the treatment works or processes of the wastewater collection and treatment system.
- (11)10. Trucked or hauled wastes, except at discharge points designated by the superintendent in accordance with this chapter.

#### 13.08.340 Wastewater discharge limits:

- A. Except as otherwise provided in a written permit issued by the director of public works, no person shall discharge wastewater containing in excess of the allowable discharge concentrations:

#### **(TABLE AND SUBSCRIPTS TO BE DELETED IN FULL AND REPLACED)**

Chemicals	Allowable Discharge Concentrations (mg/l except where noted)	Background Concentrations (mg/l)
Arsenic, Total	0.022	0.003
Cadmium, Total	0.0063	<0.0009

5-Day Carbonaceous Biochemical Oxygen Demand (CBOD <sub>5</sub> )	2,396 lbs/day <sup>1</sup> 1,198 lbs/day <sup>2</sup> 334 lbs/day <sup>3</sup> 50 lbs/day <sup>4</sup> 25 lbs/day <sup>5</sup> (monthly average)	230 mg/L
Chromium, Total	2.6	0.05
Copper, Total	0.57	0.04
Lead, Total	0.30	0.0064
Mercury, Total	0.0009	0.0001
Nickel, Total	0.77	<0.005
Silver, Total	0.12	0.0002
Zinc, Total	0.71	0.06
Cyanide, Total	0.26	<0.010
PCBs, Total	<0.001	<0.001
Total Nitrogen (Ammonia-N + Nitrite-N + Nitrate-N + Organic N)	50	27
Total Phosphorus	7.3	3.58
Total Toxic Organics	2.13	0.009

<sup>1</sup> Applicable to Significant Industrial Users (SIU) in SIC category of 2086.

<sup>2</sup> Applicable to Significant Industrial Users (SIU) in SIC categories of 7213, 7218, 2086, and 4953.

<sup>3</sup> Applicable to SIUs in all food processing industries except SIU's classified under SIC code 2086.

<sup>4</sup> Applicable to SIUs having SIC category of 4911.

<sup>5</sup> Applicable to SIUs having SICs other than 7213, 7218, 2086, 4953, 4911 and not in a food processing industry.

The above allowable discharge concentrations (with exception to CBOD<sub>5</sub>) are considered instantaneous maximum concentrations for each pollutant, that may not be exceeded at any time, regardless of duration of monitoring. These limits unless otherwise noted apply to all users of the sewer system and treatment works and will be used to determine compliance with all process wastewater discharges at the end-of-pipe following pretreatment, if applicable, and prior to dilution with other waste streams.

Total toxic organics shall mean the summation of all quantifiable values equal to or greater than 0.001 milligrams per liter of toxic organics as compiled in the most recent USEPA List of Priority Pollutants. )

**(REPLACEMENT TABLE AND SUBSCRIPTS)**

<u>Chemicals</u>	<u>Allowable Discharge Concentrations <sup>(12)</sup></u> <u>(mg/L except where noted)</u>						<u>Background Concentrations</u> <u>(mg/L)</u>
<u>Arsenic, Total</u>	<u>0.022</u>						<u>0.003</u>
<u>Cadmium, Total</u>	<u>0.001</u>		<u>0.012 <sup>(1)</sup></u>				<u>&lt;0.0009</u>
<u>Chromium, Total</u>	<u>1.82</u>						<u>0.05</u>
<u>Copper, Total</u>	<u>0.66</u>						<u>0.04</u>
<u>Cyanide, Total</u>	<u>0.35</u>						<u>&lt;0.010</u>
<u>Lead, Total</u>	<u>0.30</u>						<u>0.0064</u>
<u>Mercury, Total</u>	<u>0.0009</u>						<u>0.0001</u>
<u>Nickel, Total</u>	<u>0.77</u>						<u>&lt;0.005</u>
<u>Silver, Total</u>	<u>0.13</u>						<u>0.0002</u>
<u>Selenium, Total</u>	<u>0.001</u>		<u>0.10 <sup>(1)</sup></u>				<u>0.001</u>
<u>Zinc, Total</u>	<u>0.71</u>						<u>0.06</u>
<u>PCBs, Total</u>	<u>&lt;0.001</u>						<u>&lt;0.001</u>
<u>Total Toxic Organics</u>	<u>2.13 <sup>(2)</sup></u>						<u>0.009</u>
<u>Carbonaceous BOD<sub>5</sub> (monthly average)</u> <u>(lbs/day)</u>	<u>2,800 <sup>(3)</sup></u>	<u>3,600 <sup>(4)</sup></u>	<u>850 <sup>(5a)</sup></u> <u>200 <sup>(5b)</sup></u> <u>50 <sup>(5c)</sup></u>	<u>500 <sup>(6a)</sup></u> <u>250 <sup>(6b)</sup></u> <u>125 <sup>(6c)</sup></u>	<u>200 <sup>(7)</sup></u>	<u>50 <sup>(8)</sup></u> <u>25 <sup>(9)</sup></u>	<u>230 mg/L</u>
<u>Total Nitrogen (as N)</u> <u>(Ammonia-N + Nitrite-N + Nitrate-N + Organic N)</u>	<u>500 lbs/day <sup>(5a)</sup></u>						<u>40 mg/L</u>
	<u>250 lbs/day <sup>(5b)</sup></u>						
	<u>125 lbs/day <sup>(5c)</sup></u>						
	<u>94 mg/L</u>						
<u>Ammonia</u>	<u>90 lbs/day <sup>(5a)</sup></u>						<u>---</u>
	<u>30 lbs/day <sup>(5b)</sup></u>						
	<u>15 lbs/day <sup>(5c)</sup></u>						

	<u>57 mg/L</u>			
<u>Total Phosphorus</u>	<u>15 lbs/day <sup>(3)</sup></u>	<u>15 lbs/day <sup>(5a)</sup></u>	<u>5 lbs/day <sup>(6a)</sup></u>	<u>5 mg/L</u>
		<u>10 lbs/day <sup>(5b)</sup></u>	<u>2 lbs/day <sup>(6b)</sup></u>	
		<u>5 lbs/day <sup>(5c)</sup></u>	<u>1 lbs/day <sup>(6c)</sup></u>	
	<u>9.56 mg/L</u>			
<u>Oil and Grease (Animal and/or Vegetable Origin)</u>	<u>100</u>	<u>700 <sup>(10)</sup></u>		<u>---</u>
<u>Oil and Grease (Mineral and/or Petroleum Origin)</u>	<u>25</u>			
<u>pH (standard units, s.u.)</u>	<u>5.5 to 10.5 <sup>(11)</sup></u>			<u>---</u>

The established local limits, except for those based on loading, are instantaneous maximum allowable discharge concentrations that cannot be exceeded regardless of the duration of monitoring. These limits unless otherwise noted apply to all users of the sewer system and treatment works and will be used to determine compliance with all process wastewater discharges at the end-of-pipe following pretreatment, if applicable, and prior to dilution with other waste streams.

(1) Applicable to SIUs, in all SIC categories.

(2) Total Toxic Organics (TTOs) are defined as “the summation of all quantifiable values equal to or greater than 0.001 mg/L of toxic organics as compiled in the most recent United States Environmental Protection Agency (USEPA) List of Priority Pollutants”

(3) Applicable to Significant Industrial Users (SIU) in Standard Industrial Classification (SIC) categories of 2086- Bottle and Canned Soft Drinks

(4) Applicable to SIUs in SIC categories of 7213-Linen Supply; 7218-Industrial Launderers

(5) Applicable to SIUs in all food processing industries (SIC 2099), but not applicable to SIC 2086 (Process Wastewater Discharge Flows only)

5a Large Food Processing Industries (Average Daily Flow-ADF > 25,000 Gallons Per Day-GPD)

5b Medium Food Processing Industries (1,000 GPD < ADF ≤ 25,000 GPD)

5c All Other Food Processing Industries (ADF < 1,000 GPD)

(6) Applicable to SIUs in SIC category of 2082-Malt Beverages (Process Wastewater Discharge Flows only)

6a Large Malt Beverage Industries (ADF > 4,000 GPD)

6b Medium Malt Beverage Industries (2,000 GPD < ADF < 4,000 GPD)

6c All Other Malt Beverage Industries (ADF < 2,000 GPD)

(7) Applicable to SIUs having SIC category of 4953-Refuse Systems

(8) Applicable to SIUs having SIC category of 4911-Electric Services

(9) Applicable to SIUs having SICs other than 7213, 7218, 2086, 4953, 4911 and not in a food processing industry (2099)

(10) This specific limit is applicable only to SIUs in SIC categories of 7213 and 7218, based on the Total Oil and Grease concentration (includes animal, vegetable, mineral, and/or petroleum origins)

(11) Wastewaters may not be discharged with pH of less than 5.5 s.u. or greater than 10.5 s.u. at any time regardless of the duration of monitoring

(12) All loadings will be calculated based on the Daily Flow for the day corresponding to the determination of the pollutant parameter concentrations of CBOD5, Total Nitrogen, Ammonia, and Total Phosphorus, as applicable. However, a determination of an industrial user's relevance to a specific SIC 2099 or SIC 2082 category will be based on their ADF. The ADF for SIU's will be the annual average daily flow as reported by the most current Municipal Industrial Pretreatment Program.

#### 13.08.670 Payments:

##### L. Pretreatment Charges

All businesses having a sewer use classification codes of (L1, L2, L3, L4, U1, U2, U3, U4) shall be subject to pretreatment charges. For all industries discharging any priority pollutant at a concentration in excess of the background concentration given in Section 13.08.340 of the chapter. That surcharge shall be calculated by first determining the difference between the industry's permitted concentration and the background concentration, then multiplying that difference by the gallonage of flow (in million gallons) associated with the priority pollutant multiplied by a conversion factor to determine the annual pound loading of priority pollutant, then multiplying that pound loading by a rate in dollars per pound loading established by the director for that priority pollutant. The rate for each priority pollutant shall be determined annually based on an equitable proportioning, as determined by the director, of fifty (50) percent of the actual costs to the city of administering the pretreatment program. The remaining costs of administering the pretreatment program shall be incorporated in the charges levied under sewer use classification codes of (L1, L2, L3, L4, U1, U2, U3, U4). At the option of the director (or the building owner if the director does not exercise the option), each industry within a building housing more than one industry shall or need not have its own flow meter and monitoring facilities for industrial wastewaters. A violation of the permit concentration during the billing year shall cause the billing to be based on the highest measured concentration in excess of the permit value and an increase in the dollar per pound rate for that priority pollutant by a factor of two. That factor will serve the purpose of defraying costs of additional monitoring required for industries in violation of permit limits. The additional charges resulting

from such violation shall be separate from and in addition to any fines or penalties levied as a result of such violation. The industry shall have the right to appeal to the director for a negotiated price in lieu of such additional cost. Based on the actual cost to the city of the additional monitoring. Any further appeal process shall be in accordance with Section 13.08.510 of this chapter.

To the above charges, any non-domestic user whose discharge contains concentrations of carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>) in excess of two hundred thirty (230) mg/L, concentrations of Total Nitrogen as N (TN) in excess of forty (40) mg/L, or concentrations of Total Phosphorus (TP) in excess of five (5) mg/L shall be surcharged for the loadings in excess of the above defined limits for CBOD<sub>5</sub>, TN, and TP. Notwithstanding, surcharges levied under this section does not relieve the user from any fines and penalties that may be imposed under Sections 13.08.540, 13.08.560, and 13.08.570. Notwithstanding, surcharges levied under this section does not relieve the user of any related discharge limits as defined under section 13.08.340 or 13.08.260 (B)(8)(c). The surcharge shall be calculated as follows:

#### CONVENTIONAL POLLUTANTS SURCHARGE

##### PARAMETER

##### SURCHARGE LOAD LIMIT (mg/L)

CBOD <sub>5</sub>	Carbonaceous Biochemical Oxygen Demand	230
TN	Total Nitrogen as N	40
TP	Total Phosphorus as P	5

Conventional pollutant levels which exceed their respective surcharge concentrations are subject to a surcharge fee. Surcharge fees are calculated using the following formulas:

##### The Sewer Surcharge Calculation for TN

$$\text{FEE} = \frac{(\text{Average User Concentration} - \text{Surcharge Limit}) \times (\text{Annual Flow in gal}) \times (8.34 \text{ lb./gal}) \times (\text{Rate})}{1,000,000}$$

$$\text{Rate} = \$0.499 / \text{lb TN}$$

##### The Sewer Surcharge Calculation for CBOD

$$\text{FEE} = \frac{(\text{Average User Concentration} - \text{Surcharge Limit}) \times (\text{Annual Flow in gal}) \times (8.34 \text{ lb./gal}) \times (\text{Rate})}{1,000,000}$$

$$\text{Rate} = \$0.114 / \text{lb CBOD}_5$$

##### The Sewer Surcharge Calculation for TP



FEE = (Average User Concentration - Surcharge Limit) x (Annual Flow in gal) x (8.34lb./gal) x (Rate)

1,000,000

Rate = \$2.12 / lb TP

**Section 2.** This ordinance shall take effect upon its final adoption.

Positive Endorsement: Negative Endorsement: (Attach reasons)

7/26/2021

/s/ Christopher Millea, City Solicitor

Date

City Solicitor

Date

Sponsored by Council President Paplauskas

Referred to Public Works Committee June 17, 2021